Pressing Restart 2.0.1
A Video Game Preservation Curatorial Project

by

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This thesis is dedicated to *Harvest Moon: A Wonderful Life*. My love for the game has grown into more than just my experiences playing the game. This Gamecube game has shown me that video games and the world around them have a cultural heritage that is necessary to preserve. I want to give thanks to *Harvest Moon* for showing me that.

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v. 1.0.0 Introduction

Preface

In order to read through this thesis, the reader should understand aesthetic decisions for the table of contents and the formatting of my sections. To make this thesis familiar to game enthusiasts as well as teach non-gamers global gaming vocabulary, the decision was made to section off each part into "versioning". Versioning is a common occurrence in video games, especially in digital video games (like the games you find on the Nintendo Switch). One could find versions of the game via the start of a game somewhere in either four corners. The structure of versioning is x1.x2.x3.x4, where:

x1 indicates a major milestone in the game; this changes when going from beta to release or from release to major updates.

X2 indicates feature updates or large bug fixes and more semi-major changes.

X3 indicates minor alterations on existing features, and small bug fixes

X4 is optional and indicates external library changes or asset file updates, but the code stays the same.

As for the formatting of the thesis, there is an introduction to the idea behind the conference project as well as an argument for the conference. Second, there is a review of three areas of video game preservation and how it has changed (or not changed) over the years since the last Pressing Restart conference. Then, the curation of the conference is written out, which includes the decisions for speakers and venues and

more. The reflection will conclude the thesis with any pertinent information in regards to the future hosting of Pressing Restart 2.0.1.

Premise of Thesis

As stated in, "Can Video Games Be Humanities Scholarship?" by James Coltrain and Stephen Ramsay, "With revenues that exceed those of Hollywood, and a growing and diversifying world market, one might argue that video games are among the most important imaginative human artifacts to develop in the past several decades".[1] The statement gives one of many reasons why video games should be preserved. There are other reasons such as the cultural impact of video games that one should consider as well. To emphasize the cultural importance of video game preservation, my thesis will burrow deeper into particular topics that shape video game preservation. My thesis will also carve out a curatorial planning project for a video game preservation conference with the particular topics in mind. Drawing inspiration from a previous MIAP-led video game preservation conference, my thesis will advocate and organize the next edition of this event, Pressing Restart 2.0.1.

"Pressing Restart: Community Discussions on Video Game Preservation", a conference held in 2013, was one of few pursuits to support video game archiving and preservation. With the support from Moving Image Archiving and Preservation program, New York University's Cinema Studies department, the AMIA Chapter at New York University and New York University's Game Center, this conference was a contemporary discussion on how to save video games in the long term. Because it was a community discussion, this event was not restricted to scholars and professionals in the archive world and the video game realm. The

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[1] Gold, Matthew K. and Lauren F. Klein. "Can Video Games be Humanities Scholarship?" In *Debates in the Digital Humanities 2019*, edited by Coltrain, James and Stephen Ramsay: University of Minnesota Press.

take away from having this conference includes creating a network between game enthusiasts and cultural heritage professionals. In addition participants will extend their knowledge on the current cultural impact of video games. Video games and archiving separately have changed since then, thus video game archiving has drastically changed as well.

What would the event look like in 2022, nearly ten years after the inception of Pressing Restart? Would there be similar conversations from the 2013 conference? Or has the situation changed and are cultural heritage professionals concerned about different ideas of video game archiving? The curatorial project will be an extension of the Pressing Restart conference and its community discussions; the project will explore how discussions around video game preservation have changed in nearly a decade. Another purpose of the curatorial project is to keep video game archiving discussion accessible to people outside of the archiving and preservation profession. The conference will cater to not only GLAMS (galleries, libraries, archives, and museums), but also the gaming industry and gaming enthusiasts.

Argument for Pressing Restart 2.0.1

Curating and organizing Pressing Restart 2.0.1 will be concerned with highlighting continuing and new conversations in video game preservation; in addition, Pressing Restart 2.0.1 will continue the purpose of the first edition of Pressing Restart: creating an open community to share resources on video game preservation and beyond. According to what Laura U. Marks mentioned in her writing, *The Ethical Presenter: Or How to Have Good Arguments over Dinner,* curation is not linked to physical venues and is driven by concepts rather than development in a specific area.[2] In the case of Pressing Restart 2.0.1, the driving

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[2] Marks, Laura U. "The Ethical Presenter: Or How to Have Good Arguments over Dinner." *The Moving Image* 4, no. 1 (2004): 36. doi:10.1353/mov.2004.0016.

concepts of the next iteration is to keep the knowledge of video game preservation open and to hold a space for more recent video game preservation conversations to happen with the community.[3]

As for the curating process of the conference, there will be a compiled list of 1980s computer games that attendees of the conference could play as well as a list of emulators that can play these games if the original systems are not available for use. The idea of 1980s computer games originated from a class I attended on the history and design of United States-distributed 1980s computer games. Before taking the class, computer games from the 1980s era were not commonly mentioned when it came to video game preservation. There are questions unanswered on how video game enthusiasts and cultural heritage workers perceived the preservation of these games. Did most people think as long as the games are playable in some form or another, that it is preserved, or is there more preservation that needs to be done? This era of games should be a part of major video game preservation projects with 1990s games and contemporary games.

Pressing Restart's development portion will be in the form of panels that attendees could listen and participate in. There has been a good length of time since the last Pressing Restart conference and in between those years, video game preservation has changed, whether by how we perceive video game preservation, how to preserve video games, or by video game preservation ideologies. There are three major topics of conversation in video game preservation that have changed in the past several years: copyright, documentation, and representation. Pressing Restart 2.0.1 will have panels that will go in depth of these three major ideas; the panels will not only discuss what has changed, but also how video game

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[3] In the case of the term community, community includes but is not limited to cultural heritage workers (archivists, art conservators, etc.), video game enthusiasts, video game researchers, and anyone who has interest in the safekeeping and preservation of video games.

preservation can further improve by centering these three topics of discussion. Copyright will always and forever be a major topic in preservation of video games. Documentation of video games has taken a new shape throughout the years. Representation includes not only what video games are represented in a collection, but also the representation of who is caring for the games in the collection.

Justification

Pressing Restart 2.0.1 hopes to contribute to both the GLAM world and the video game industry. Pressing Restart hopes to foster community between individuals who have roles within both video game creation and video game preservation. The conference will promote and nurture an environment where enthusiasts to established professionals can network and share parts of their video game knowledge. After conducting long-term research, there has not been a conference on a university level so inclusive of the stakeholders of video game preservation. There has not been a series of conferences or stand-alone conferences that are specifically catered to only video game preservation (excluding Pressing Restart).

There have been conferences in collaboration with multiple organizations that focused on digital preservation which included discussions on video games being preserved. One example of a conference series discussing video game preservation is the Born Digital Cultural Heritage conference. Starting on February 15, 2022, the virtual conference was hosted by the Play It Again project. The Play It Again project "documents, preserves and exhibits digital cultural heritage by recovering the history of Australian made videogames of the 1990s; preserving significant local digital game artifacts currently at risk; and investigating how these can be exhibited as playable software using the newest emulation techniques."[4] This virtual

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[4] Play It Again, "Home". https://playitagainproject.com/

conference is a four day conference that brings together cultural heritage professionals globally to further discuss the challenges and opportunities for preserving specifically born-digital artifacts. The conference's sessions looked into the history of video games, emulation as a way of preserving video games, preserving video games through different lenses, as well as other significant topics of discussion. From a keynote about the institution's video game collecting practices, to a couple panels about emulation of video games, this conference iteration seeks to find answers for cultural heritage professionals working in digital preservation. Although this conference is solely on video game preservation, the other iterations of the conference series are not solely focused on video game preservation. In addition, Play It Again is a collaborative project between institutions Swinburne and RMIT Universities, The Australian Centre for the Moving Image and AARNET (Australia's national research and education network). Due to the institutions being mainly Australian institutions, there is an emphasis on Australian video games in the conference as well.

Rutgers University hosted a video game conference in 2016 called Extending Play 3, where the premise of this iteration of the conference was to question the temporalities of play from an emerging scholarly perspective.[5] From the content published on the call for papers webpage, interested individuals would experience a conference that is fixated on the media archaeology aspect of video games, rather than just on the collection and preservation of video games in a GLAM institution. There is very little information existing on the internet about Extending Play and its first and second iteration; it is assumed that Extending Play was a university-organized video game studies conference, but not necessarily a video game preservation conference.[6] Even though Extending Play has not had an iteration of the

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[5] "CFP: Extending Play 3." . Accessed April 18, 2022. https://dh.rutgers.edu/cfp-extending-play-3/.
[6] "Register Now for the Extending Play 3 Conference at Rutgers University (Sept 30-October 1)." . Accessed April 18, 2022.

conference in recent years, I imagine that Pressing Restart could be similar- a series of conferences held regularly.

Pressing Restart could be considered a one-time event in 2013, but the growth of the video game preservation field has shown otherwise. The conference has a duty of continually updating the mass of how video game archiving has advanced throughout the years. Each Pressing Restart conference may or may not have a theme (like this conference's theme, computer games of the 1980s), but there will always be several topics that touch on the current vision(s) of video game archiving and preservation. For Pressing Restart 2.0.1, there is a theme, but the conversations and topics mentioned will not solely focus on the theme; the theme was announced as a way to initiate conversations and address issues that may not have been on the radar.

Even though I was not participating or involved with the first Pressing Restart iteration, I believe the significance of having another iteration of the conference dedicated to promoting conversations and new ideas is as important as it was almost ten years ago. With the advancement of video games and their platforms, the continued diversification of video game genres, changing realities of libraries, archives and museums, and the existing COVID-19 pandemic altering how we perceive hobbies such as playing video games, preserving video games still is an important practice to this day. After many years of being unrecognized as documents of cultural heritage and part of a global culture, video games are now an important artifact that several collecting institutions are acquiring for cultural heritage (such as the Library of Congress).

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https://www.hastac.org/opportunities/register-now-extending-play-3-conference-rutgers-university-sept-30-october -1.

v. 2.0.0 Curation of Pressing Restart 2.0.1

Curating the next Pressing Restart conference would need to include topics that have been ongoing within the video game preservation community, as well as new ideas and topics that seldomly come up in these conversations. Copyright has been a major topic since the beginning of video game preservation. Supplemental documentation has been discussed, but not as the cultural heritage community moves to open source and looking outside of the normal range of supplemental documentation. As for the third topic, representation in the archive and in video games rarely gets the attention in discussions when talking about video game preservation; how could representation change how we preserve video games?

DMCA and Video Game Circumvention

It is important to point out how essential it is to discuss copyright and its effect on video game preservation and circumvention. Considering the center focus of copyright discussions in video game preservation, the U.S. Copyright panel at Pressing Restart 2.0.1 will be a summary of the latest Digital Millennium Copyright Act (DMCA) 1201 Triennial Ruling and how the new ruling will affect video game preservation in libraries, archives, and museums in the future. In addition, the panel will devote time for participants to discuss how they and others could be advocates via amending copyright policies that support the preservation of video games. The previous 2018 ruling included many people and organizations in favor of relieving the restrictions on video game circumvention.

The Digital Millennium Copyright Act was enacted in 1998 by the United States Congress which was to apply services from the World Intellectual Property Organization (WIPO) Copyright Treaty. With the DMCA, a new section to U.S. copyright (also known as title

17 of the United States Code) was created- Section 1201. Section 1201(a)(1) simply states that no one should "circumvent" technology which controls a work that is protected by copyright law.[7] In this case, "circumvent" means to alter some type of technology without the permission or authorization from the copyright owner. Triennial proceedings are unique events where the Librarian of Congress may adopt temporary exceptions to the Section 1201(a)(1) law. Users will not be infringing on copyright, and would not face consequences as long as there is a specific exemption for that user.

This poses a dilemma for libraries, archives, and other cultural heritage institutions. When there is a need to preserve some technology, there may be some alterations that must be made in order to preserve the original technology or preserve its initial intention. For instance, preserving a web-based work of art would mean that institutions would need to get permission from the artist. Another example would be that video game publishers would have to grant libraries permission to have access to encrypted video game works in order to collect and save the original video game environment. In 2018, supporters of circumvention of video games filed a petition to expand a circumvention exemption to libraries, archives and museums so that these institutions could do further preservation of online and born-digital video games. Most of the support came from institutions that archive video games in their collection. Around the end of 2018, the proceedings ruled in favor of these institutions, granting them the permission to circumvent, or alter, video games for the use of preservation.[8]

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[7] 17 U.S.C. § 1201(a)(1)
[8] U.S. Copyright Office. "Final Rule." www.govinfo.gov/content/pkg/FR-2018-10-26/pdf/2018-23241.pdf.

Introduction to Section 1201 of Copyright Law

To understand the triennial proceedings, it is important to summarize Section 1201. In United States copyright law, there are specific rules that apply to the protection of copyright, including circumvention of copyright protection systems (Section 1201). For this paper, there will be emphasis on Section 1201. Section 1201(a)(1)(A) states,

> *"No person shall circumvent a technological measure that effectively controls access to a work protected under this title. The prohibition contained in the preceding sentence shall take effect at the end of the 2-year period beginning on the date of the enactment of this chapter."[9]*

To simplify, no one should alter a work that is under copyright protection. The law goes on further to describe a situation where non-profit libraries, archives, and educational institutions are exempt from what was written for Section 1201(a)(1)(A). Section 1201(d) explains that these non-profit institutions previously stated are not in violation of Section 1201(a)(1)(A). However, for it to not be in violation:

- The copyrighted work may not be retained longer than necessary

- The copyrighted work may not be used for any other purpose other than the sole purpose of "engaging in conduct permitted under the title"

- And the copyrighted work may not be used for commercial purposes [10]

What this means for libraries, archives, and educational institutions is that as long as the purpose to alter copyrighted materials is not in violation or for commercial purposes, then it is possible to circumvent the "technological measure". Libraries, archives, and educational institutions have the privilege of this exemption as long as they are open to the public, and to

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[9] 17 U.S.C. § 1201(a)(1)(A)
[10] 17 U.S.C. § 1201(d)

researchers outside of the institution's researchers.[11] Even though there is an exception for these institutions, the law does not allow flexibility which will cause future problems with educational institutions. Without the flexibility, it will be much more difficult to preserve a complex medium. The law does not say anything along the lines of what to do when the exempted institutions wanted to circumvent for the reason of preservation. This brings up the question- why circumvent if the technological work is not going to be preserved? One way libraries and archives preserve complex mediums is by changing servers of these technological measures.

Many archivists and librarians and their supporters go to the United States Copyright Office's Triennial Proceedings to make a case on these nuances that are not directly discussed or written in Section 12 or in the DMCA. The reason for these triennial proceedings is to find a balance between copyright and digital technologies.[12]

Seventh Triennial Ruling Arguments: Video Games Requiring Server Communication—for Continued Individual Play and Preservation of Games by Libraries, Archives, and Museums

The Museum of Art and Digital Entertainment (MADE) filed an exemption petition during the seventh triennial process. The Museum of Art and Digital Entertainment's mission is to preserve "digital heritage in playable form, and to inspire the next generation of game developers".[13] Within their petition, they asked for the circumvention of video games (specifically "online games") and also asked to broaden the class of users of this specific exemption. Currently, the class of users only goes as far as employees of libraries, archives,

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[11] 17 U.S.C. § 1201(d)(5)
[12] U.S. Copyright Office, "Section 1201 Rulemaking:Seventh Triennial Proceeding to Determine Exemptions to the Prohibition on Circumvention"
https://cdn.loc.gov/copyright/1201/2018/2018_Section_1201_Acting_Registers_Recommendation.pdf pg 1
[13] "The Museum of Art and Digital Entertainment.", www.themade.org/.

and museums. MADE wanted the class of users to include volunteer affiliate archivists (who would be under the supervision of an employee in a library, archive, or museum).[14] MADE also proposed some changes to the exemption language.[15] Consumers Union, FSF, Public Knowledge and forty-seven individuals supported the proposed exemption and proposed amendments from MADE.[16] However, the Entertainment Software Association (ESA) and Joint Creators II opposed this exemption.

The Museum of Art and Digital Entertainment believes that the current exemption on video game preservation is "helpful", yet it does not acknowledge the need for preservation of the increasing number of online video games.[17] The museum goes on to say that cultural heritage institutions cannot preserve these online games or online gameplay without duplicating a game's server code or reconstructing the server.

In a YouTube video, Alex Handy from Museum of Art and Digital Entertainment explains to Cory Doctorow from Electronic Frontier Foundation about the issues he and others from MADE found when making the video game Habitat accessible and playable online. Alex states,

> "After working on this game, we sort of discovered you know there's some issues
> that we have to address if we want to continue to preserve virtual worlds and we
> also looked around and saw that nobody really is preserving virtual worlds in any
> institutional fashion."[18]

It took about a year and a half for MADE to negotiate with AOL on the code for the obsolete service so that the museum could properly revive the 1985 MMORPG game. In the

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[14] U.S. Copyright Office, "Section 1201 Rulemaking:Seventh Triennial Proceeding to Determine Exemptions to the Prohibition on Circumvention"
https://cdn.loc.gov/copyright/1201/2018/2018_Section_1201_Acting_Registers_Recommendation.pdf. pg 256
[15] Ibid. pg 256
[16] Ibid. pg 258.
[17] Ibid. pg 259.
[18] *DMCA 1201 Hearings 2018: The MADE's Alex Handy Talks about how DMCA Impacts Video Game Preservation.* Directed by EFForg. 2018.

interview, Alex Handy then clarifies one possible reason why the Entertainment Software Alliance was in opposition to the circumvention of video games. He explains that most people's understanding of preservation is putting something in a box and putting it in a room; however when it comes to preserving software, preservation looks more complex.[19]

The organizations that oppose this expansion of the exemption believe that the current methods to preserve video games are "sufficient to address any legitimate preservation needs".[20] Other opponents of this exemption explained that the exemption was not solely for preservation, but for recreational purposes.

Final Ruling

In the Final Rule for Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, it states:

> Multiple organizations petitioned to renew the exemption for video games for which outside server support has been discontinued. The petitions stated that individuals still need the exemption to engage in continued play and libraries and museums continue to need the exemption to preserve and curate video games in playable form. In addition, the petitioners demonstrated personal knowledge and experience with regard to this exemption through past participation in the 1201 triennial rulemaking relating to access controls on video games and consoles,

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[19] *DMCA 1201 Hearings 2018: The MADE's Alex Handy Talks about how DMCA Impacts Video Game Preservation.* Directed by EFForg. 2018.
[20] U.S. Copyright Office, "Section 1201 Rulemaking:Seventh Triennial Proceeding to Determine Exemptions to the Prohibition on Circumvention"
https://cdn.loc.gov/copyright/1201/2018/2018_Section_1201_Acting_Registers_Recommendation.pdf. pg 262.

and/or representing major library associations with members that have relied on this exemption.[21]

After listening to both the supporters' and opponents' views on preserving video game exemption, the Acting Register recommended an exemption for server-dependent games. The Acting Register also recommended an exemption for complete games but amended the language so that it included both server-dependent games and complete games. Server-dependent games were defined as "video games that can be played by users who lawfully possess both a copy of a game intended for a personal computer or video game console and a copy of the game's code that is stored or was previously stored on an external computer server."[22] The adopted exemption's language is lengthy, but one could find the exact language in the "2018 Final Rule" file on the U.S. Copyright website.[23] [24]

Future endeavors to maintain this ruling

For this particular 2018 exemption and due to the current COVID-19 pandemic, the United States Copyright Office transferred this proposal of video game preservation to the Eighth Triennial Proceeding. No petition was needed for the proposal to be heard in this next proceeding. Anyone who is so inclined would be able to make arguments and comments for or against the exemption through the Copyright.gov website. Entities who supported and fought for this exemption before are possibly going to argue for the renewal of this exemption again. Because this particular exemption has been renewed before, there is a great chance that it will be renewed once again. However, even though a renewal is a win for cultural heritage

[21] U.S. Copyright Office. "Final Rule." www.govinfo.gov/content/pkg/FR-2018-10-26/pdf/2018-23241.pdf. pg 54014.
[22] Ibid.pg 54024.
[23] Ibid. pg 54024-54025.
[24] U.S. Copyright Office. "Rulemaking Proceedings Under Section 1201 of Title 17". www.copyright.gov/1201/

institutions with video game collections, the process of getting proposals renewed is very

exhausting for the libraries and other institutions. For the future, exemptions that are granted

during the triennial proceedings should be extended for a longer period of time, or more

favorable, should be permanent exemptions.

2021 Eighth Triennial Proceeding Final Rule

The Final Rule for the Eighth Triennial Proceeding was released on October 28, 2021.

Within the document, there was a final ruling on how video game circumvention shall be done

from then until the Ninth Triennial Proceeding. During the Eighth Triennial Proceeding, it was

proposed to amend the existing video game preservation exemptions for libraries, archives

and museums. What was proposed was that the requirement to have the video game must not

be distributed or made available outside of the physical premises of the organization. This

proposal stems from the COVID-19 pandemic and how the structure and environment of

libraries, archives, and museums have drastically changed. The pandemic altered how

employees are to conduct work- currently, many people who work are working from home and

staying off the physical premises of the organization or institution. Having remote access to the

games to be preserved has been deemed to be fair use according to the proponents.[25]

However, the Register recommended to the Librarian to not grant this exemption of allowing

access off the premises due to the proponents "failing to show" how having off-the-premises

access would be non-infringing.[26]

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[25] U.S. Copyright Office. "Final Rule." www.govinfo.gov/content/pkg/FR-2021-10-28/pdf/2021-23311.pdf pg 59635.
[26] U.S. Copyright Office. "Final Rule." www.govinfo.gov/content/pkg/FR-2021-10-28/pdf/2021-23311.pdf pg 59635.

With the latest ruling on video game circumvention, the U.S. Copyright panel at Pressing Restart 2.0.1 will summarize and discuss the ruling. Panelists for this discussion would be individuals who are continually researching and analyzing the DMCA and how video game preservation fits into the ruling. They would potentially discuss how the DMCA and the proceedings could broaden how video game preservation can be conducted in relation to game modding and circumventing video games off of physical organization premises. U.S. Copyright's effect on video game playthroughs via platforms like YouTube and Twitch will also be discussed.

Current Video Game Documentation and Supporting Elements

Whether or not it is a controversial topic, video game documentation and video game supporting elements is hardly a conversation brought up when it comes to preserving video games. It can be argued that there is too much emphasis on the software of video games, and less on supporting elements such as strategy guides, let's plays, or the consoles that make the game playable. Extensive research on field-programmable gate arrays (FPGAs) and its use in emulating video game devices and hardware has occurred as well. On a related note, it is also essential to have a discussion on open source software and its effects on preserving video games; of course, this relates to copyright, but it also relates to how conservators and archivists perceive the preservation of games.

Panelists for this topic would include video game community members who have worked or currently work on hardware emulation such as modding, as well as scholars who are currently researching how video game hardware preservation has slipped through the cracks of video game preservation. The aim for this panel's discussion is to discuss how attributes

such as open-source and game modding could shape how archivists and conservators approach video game preservation in the future.

Open Source and Customization in Video Game Preservation

Open source is this concept that code, software, and other tools to make the code or element work is equally distributed and open to anyone to use and if they would like to, modify. The use of the term open source has changed dramatically to where the word "open" varies depending on the situation. For this thesis, open source is defined as the code, software, and/or tools that are fully accessible for anyone to utilize and/or modify.

What does open source mean for those seeking video game preservation? There are advantages and disadvantages of using the open source concept for video game preservation; I will argue that more open source within video games will lead to more supporting elements for preserving video games. The challenges with using open source is that it may be easy for the creator of the code or software to access and utilize the code for any reason, but people external to the creator may need serious and lengthy training on how to use the code. There is an expectation that the person with the code has the expertise; for archivists and other cultural heritage workers, this may be a hindrance to preserving the code or object in mention. Not every archivist or conservator will have the expertise let alone experience in coding unless they have a background in computer science.

Another challenge Annet Dekker has pointed out about open source is that there is not enough documentation about the code itself.[27] Sometimes, creators of all kinds do not keep up

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[27] Dekker, Annet. "The Challenge of Open Source for Conservation." *Revista De Historia Da Arte* 04, no. Performing Documentation in the Conservation of Contemporary Art (: 128. http://revistaharte.fcsh.unl.pt/rhaw4/RHAw4.pdf.

with documentation on their creative process, which in the end becomes difficult for cultural

heritage workers to perceive and support the creator's vision of the work. For video games,

lack of documentation could lead to missing information on how to preserve the code of the

video game's software as well as how the game should function. Cultural heritage workers

must compile all sorts of metadata even before saving source code of a video game in order to

attach the historical context to the "object".[28]

     The argument for open source in video game preservation starts with creating a space

for source code sharing as well as a space to train and educate those who work in digital

preservation. Shared knowledge is the key for many types of preservation and it is especially

true for digital preservation and video game preservation. It is possible that monetary gain

hinders digital preservation and video game preservation to expand and learn new ways of

preserving video games. However it may be, supporting documentation of video games will

allow cultural heritage workers to fulfill preservation needs.

     So how does a cultural heritage worker compile supporting documentation for a video

game? In the context of this thesis, video games share similar aspects to time-based media

art. Time-based media art in this case is defined as any piece of work that is confined to a

durational element. Time-based media artwork includes but is not limited to performance art,

video art, digital art, audio and film. It can be argued that video games are time-based media

artworks due to their time component element and the electronic nature of video games.

Time-based media artwork differs from traditional forms of artistic mediums, but arguably the

most striking difference between traditional and time-based media art is this concept of

autographic works and allographic works. Autographic works are when the authenticity is

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[28] "Object" in this case is the video game's source code.

directly linked to the physical matter of the object while allographic works have authenticity that

is not directly linked to the physical matter of the object in mind.

In Pip Laurenson's piece, "Authenticity, Change and Loss in the Conservation of

Time-Based Media Installations", Laurenson explains that in contemporary art conservation

theory, "art works are commonly conceived as unique physical objects".[29] Laurenson also

adds,

> "In conservation the prevalent notion of authenticity is based on physical integrity
>
> and this generally guides judgments about loss. For the majority of traditional art
>
> objects, minimising change to the physical work means minimising loss, where
>
> loss is understood as compromising the (physical) integrity of a unique object."[30]

In the traditional sense, art conservation has seen artworks as one unique and

distinctive object, where authenticity is given because there is this idea that there is only one

original object. This is where the concept of autographic comes in; autographic art is usually

attached to traditional mediums of art such as paintings and sculptures. Autographic can be

viewed as the authenticity and originality of the artwork are fastened to the physical object

itself.

However, time-based media artwork goes beyond the physical object when it comes to

originality and authenticity thus the idea of autographic does not apply to time-based artworks.

Allographic (or non-autographic) works of art can be applied to time-based media artworks;

Tiziana Caianiello believes that specifically for media art it "falls within a grey area between

autographic and allographic arts…".[31] In the case of video games, these time-based works can

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[29] Laurenson, Pip. 2006. "Authenticity, Change and Loss in the Conservation of
Time-Based Media Installations." Tate Papers: Tate's Online Research Journal
6. www.tate.org.uk/download/file/fid/7401. pp. 2
[30] Ibid. pp. 2
[31] Caianiello, Tiziana. 2013. "Materializing the Ephemeral. The Preservation
and Presentation of Media Art Installations." In Media Art Installations.

be considered within this spectrum of autographic and allographic works due to its dependency on technology and physical devices (Caianiello puts it as "material substance").

What does this mean for cultural heritage workers to view video games as something between autographic and allographic works? Documentation on video games and discussions on how video games are presented within GLAM institutions will now be highly encouraged as part of the workflow of acquiring a video game into the collection. In Joanna Phillips' "Reporting Iterations", Phillips stresses the importance of having artists provide installation instructions accompanying the artwork. In the case of video games in GLAM institutions, this is a possible way to have a well-rounded perception of the video game. However, with artist-provided documentation, the institution does not know if it will gain a highly detailed description of the installation, or just a simplistic instruction set; as Phillips states, "those instructions can be limited". Gaining video game documentation, whether it is installation instructions or how-to-play instructions, will be as difficult as gaining installation documentation for any time-based media artwork. With providing any sort of documentation or related elements (source code, original ideas, presentation instructions, etc.), there needs to be lots of communication and trust between the video game creator(s) and the institution in order to have good, robust supporting documentation.

Another method that institutions can consider to present video games is by installing and exhibiting the hardware devices that make the game function: video game consoles. Through some searching via eBay, Depop, Poshmark, and many other reselling platforms, older generations of video games consoles are hot on the market and can cost you more than it was originally sold for. Looking for an original untested American version of the Nintendo

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Preservation and Presentation. Materializing the Ephemeral, eds. Renate
Buschmann & Tiziana Caianiello, Reimer Verlag, Berlin, 2013, pp. 215

Nintendo GameCube Video Game Consoles

Shop by Category

Video Games & Consoles
- Video Game Consoles
- Video Games
- Video Game Accessories
- Manuals, Inserts & Box Art
- Original Game Cases & Boxes
- Prepaid Gaming Cards
- Replacement Parts & Tools
- Strategy Guides & Cheats
- Video Game Merchandise
- Mixed Lots

All Listings | Auction | Buy It Now

3,050 Results

Best Match ∨

3 filters applied ∨ | Model ∨ | Platform ∨ | Brand ∨ | Storage Capacity ∨ | Region Code ∨ | Condition ∨ | Price ∨

Buying Format ∨ | All Filters

SPONSORED
GameCube NES Snes DS Lot Of 14 Games Untested As Is.
$69.99
$9.25 shipping

SPONSORED
Platinum Silver Nintendo GameCube System Console Tested + Working!
★★★★½ (354)
$179.99
Free shipping
Only 2 left

Nintendo GameCube Console - Black With Pro Bass Challenge
★★★★½ (98)
$99.99
$17.90 shipping
or Best Offer

Nintendo Gamecube[256gb Xeno Chip]
$399.00
$50.00 shipping

Nintendo GameCube Console, New Controller, and Game
$50.00
$16.85 shipping

Xeno GameCube With Games
★★★★½ (354)
$300.00
$27.75 shipping
or Best Offer

Nintendo GameCube Platinum Silver Console Bundle - 2 Controllers 5...
$114.99
$12.20 shipping

WHOLESALE Nintendo Gamecube Console Lot 2 Colors Random Fedex F/S...
$69.98
Free shipping
or Best Offer
Only 1 left!

concept of allographicity, video games are somewhere between autographic works and allographic works- there are multiple iterations of the game, yet it is dependent on the "material substance" (the hardware) in order for it to be authentic.

Representation in Video Games and Archives

Diversity and Representation are in many fields, including video games and archives. Diversity within the archive could illustrate the breadth of Mississippi's history; representation in video games could illustrate and comment on how we perceive cultures and beings in present-day. Together, diversity and representation within video game preservation will be deemed as an essential topic for discussion. Representation can manifest itself in video game preservation as a wide breadth of video games collected in an institution, as well as manifest as various professionals with various backgrounds caring for a video game collection.

Collecting institutions have a scope that supports their collecting practices from the present to the future. The scope could be as wide or as narrow depending on the collecting institution. An institution's scope does not necessarily need to change in order to include more materials and objects. With institutions collecting video games, it is essential that the video games are part of the scope the institution had in mind. However, if the scope is to just collect video games and there are no other requirements for collecting, the collection should be a representation of the various video games. Video games from various geographical locations, video games from various game developers, and video games from various genres should be considered when collecting video games.

Collecting institutions should consider video games that are outside of the mainstream and popular for instance. Institutions could consider collecting video games designed by the first Black woman game designer Muriel Tramis or video games with queer depictions that

goes beyond surface-level representation. The goal for a video game collection with a wide scope is to have a collection that illustrates the various histories and cultures that co-exist within the video game community. In addition, a collection with a healthy representation of video games supports what we can learn from video games outside the mainstream video game realm.

The diversity of professionals and stakeholders working with video game preservation could shape how video games are preserved and which ones are preserved as well. Professionals with a gender and sexuality studies background could offer some insight on how a game with queer representation should be preserved; stakeholders such as a community surrounding a farming simulation video game could offer their thoughts on what aspects should be preserved from the game. Starting a conversation with people outside of the collecting institution could take the preservation of video games to a new level. These dialogues could show that preserving the actual physical object should be preserved alongside other forms of documentation, such as Twitch streams or unofficial video game strategy guides. Sharing ideas and solutions with others in the field could promote a well-rounded view of video game preservation.

Including a code of ethics in preserving video games would become beneficial as well. Not only would a code of ethics for a person-to-object relationship be beneficial, but also an established code of ethics for a person-to-person relationship would be deemed necessary when preserving video games. There is a collaborative aspect in the fields of archiving, preservation, and conservation; if the person-to-person relationship is ignored, the preservation of objects suffers as a result. In a piece written by Joelle Wickens and Natalya Swanson, they noted that,

"If we accept that conservators are not a homogeneous group with extensive training in art history, science, and studio art, we gain the ability to welcome a wide variety of people into our professional network. With this change we become more inclusive with regard to the people who conserve heritage."[32]

This quote brings to the forefront the connections between cultural heritage workers and others working alongside them are as important as caring for an object. This idea also expands the definition of who is a cultural heritage worker. Professionals who are preserving video games are not always trained in art history or computer science- they are also video game researchers, video game enthusiasts, and media scholars. This conceptual shift within the cultural heritage field to a more holistic approach could support how video games are preserved now and in the future.

The Pressing Restart 2.0.1 panel on representation is envisioned as a dialogue between cultural heritage workers, video game enthusiasts, and others interested in video game cultural heritage that would support the growth of video game collections. This panel would consist of professionals with backgrounds in diversity and inclusion initiatives as well. Collecting institution employees could view this panel as a means to start connections and find resources outside of the institution to further support their video game preservation efforts. People outside of the cultural heritage community could view this panel as a means to learn more about what collecting institutions are doing to preserve video games.

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[32] Swanson, Natalya and Joelle Wickens. "Who is a Conservator? What is Conservation? Evolving our Identities and Practice to Thrive in an Inclusive World." . Accessed April 18, 2022. https://whatisconservation.com/idea/who-is-a-conservator/.

v. 3.0.0 Pressing Restart 2.0.1 Event Details

Pressing Restart 2.0.1 will include the panels on copyright, documentation, and representation. However, Pressing Restart 2.0.1 is more than just the three panels. The conference is a continuation of community discussions about the always-changing preservation efforts for video games. The selection of venues and platforms is as important as the panels, since the goal is to continue growing the community through connections and networking.

Objective and Scope

The objective for Pressing Restart 2.0.1 is to start where Pressing Restart left off and continue to create a space for game enthusiasts of all types to discuss and learn more about how games, new or obsolete, can be preserved for the longest time. Pressing Restart 2.0.1 will be a culmination of panels and workshops that specifically look into games outside of the mainstream (such as 1980 era video games). If there is an in-person conference, Pressing Restart 2.0.1 will host around 100 attendees at the Museum of the Moving Image; for the after conference event, attendees could visit New York University Game Center, where it is possible to play or emulate a few of the games that will be mentioned in the panels and discussions. Even though the conference's theme is on games outside the mainstream, the panels will have discussions applicable to the larger scope of video game preservation.

Pressing Restart 2.0.1 hopes to culminate answers to the question J.C. Herz asked, "where is the actual game?" Raiford Guins in *Game After: A Cultural Study of Video Game Afterlife* brings attention to journalist J.C. Herz's questioning the ontology, or the being, of video games. Hertz asks the following questions: "What is *Space Invaders*? Is it the code? Is it the

arcade cabinet? Was it the idea in a Namco engineer's mind when he made it? Where is the actual game?"[33] Her questions reflect the questions that many cultural heritage workers are faced with when interacting with video games in their collection. Answers to these questions could lead to collections becoming as broad as collecting all aspects of a video game (guides, reviews of games, game consoles, etc.) or as narrow as collecting only the code of the game in mind. These will be the reigning questions for the attendees to keep in mind when visiting the three panels on copyright, documentation, and representation in video game preservation. The very open-ended question will hopefully foster new discussion and ideas between the video game community and the preservation community.

Pressing Restart 2.0.1 initially was planned for an in-person conference in New York, New York during early 2022. This section of the thesis is a representation of how an in-person conference and a virtual conference would be shaped if implemented in the future. Included in this section is a plan for a pre-conference event that would occur during New York University's 2022 spring semester.

Keynote Speaker

James Hodges is an interdisciplinary information studies scholar working to bridge gaps between digital preservation and computer history communities. James Hodges' work on video game preservation is found in *New Media and Society*, *Journal of Documentation*, *IEEE Annals in the History of Computing*, as well as other publications. Hodges' insight on video game preservation and his method of creating connections between communities reflects

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[33] Guins, Raiford. *Game After : A Cultural Study of Video Game Afterlife*. Cambridge: MIT Press, 2014. Accessed April 18, 2022. ProQuest Ebook Central. pp. 11

Pressing Restart 2.0.1's goal of inviting people to start and continue conversations pertaining to video game preservation.

Proposed Speakers

For DMCA/Copyright Panel

This panel will feature speakers who have extensive knowledge on copyright law, especially when it comes to video game circumvention and preservation. The panelists will discuss the future of video game preservation in the lens of copyright, and how changing copyright and DMCA regulations could bolster preservation for not only video games but also other electronic works.

Kendra Albert- Kendra Albert is a clinical instructor at the Cyberlaw Clinic at Harvard Law School. Their research and work is closely linked with U.S. Copyright, specifically with the DMCA, and how the DMCA affects preservation of video games.

Kirk Mudle- Moving Image Archiving and Preservation graduate student Kirk Mudle presented his work on Game Mods and Fair Use at the 2021 Association of Moving Image Archivists; Kirk is continuing research on this topic.

For Supplemental Documentation Panel

Speakers for this panel will discuss how additional documentation and support will strengthen video game preservation projects in GLAM institutions. Topics will include how

modding could support video game preservation as well as the argument for hardware elements to be included in the preservation practices.

Yonah Bex Gerber- One of the organizers of the original Pressing Restart conference, Yonah Bex Gerber has extensive experience and knowledge in video game preservation. Their work includes supplemental archiving for video games (such as videos and metatexts) as well as lore archiving.

Greg Farrell- Known widely in the modding and video game community as gamechanger_mods, Greg Farrell is known for modding and customizing Nintendo handheld consoles (such as the Game Boy Color).

Michael Stetz- Moving Image Archiving and Preservation 2022 graduate Michael Stetz completed their thesis on video game preservation, specifically reviewing field-programmable gate arrays (FPGAs) and its use in emulating video game devices and hardware. His thesis has also been a compiled resource for the history of video game emulators that have been developed or started by video game hobbyists.

For Representation in Video Games Panel

The final panel will have a well-rounded discussion on representation in the archives and representation in video games. The objective of this panel is to fuse the two topics together and form a foundation for adding depth and representation to video game collections at larger institutions. In order to have breadth and depth in this conversation, panelists will be

from various parts of the video game field. Panelists will include people represented from large collecting institutions, small game design companies, and video game developers.

Tanya DePass- Tanya DePass is a journalist and activist whose work is based on video games and representation. DePass founded a non-profit organization in Chicago named I Need Diverse Games, where the organization's goal is to support access and visibility of underrepresented individuals in the video game industry.

Danielle Wallace- Danielle is a 3D Environment Artist whose work spans many sectors, which includes teaching middle and high school students about computer and mobile game design, 3D modeling, animation, and programming.

Curation of Panels
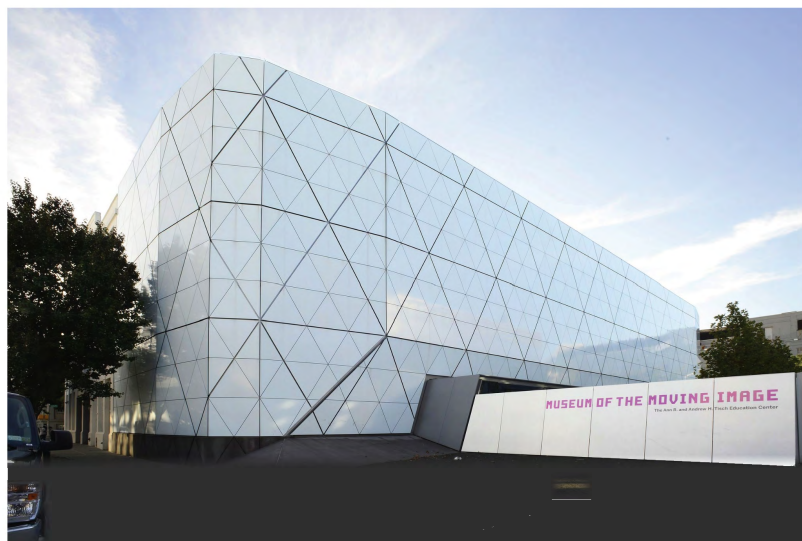
In-person Conference

Venue/Space

Figure 2. Photo by Leeser Architecture

Museum of the Moving Image- The Museum of the Moving Image is located in Astoria, New York and is dedicated to the advancement of "understanding, enjoyment, and appreciation of the art, history, technique, and technology of film, television, and digital media".[34] Included in their various collections is the video game collection (Video Games at Moving Image). Since 1989, the Museum of the Moving Image collected video games and other supporting items; their exhibition *Hot Circuits: A Video Arcade* (1993) was the first museum exhibition dedicated solely to video games.[35]

Food and Additional Support- Food will be catered in and provided for all attendees and participants. There is no decision as of now what company will cater the food for the morning and during lunch; catering via food trucks is a possibility as well. Food has been budgeted for the event and is reflected in the *Pressing Restart 2.0.1 Budget* document (located in the Appendix).

New York University Game Center- the center thus its programs explore games as a cultural artifact as well as design. According to the center's about page, they study games based on the simple idea that "games matter".[36] The Game Center is located and based on New York University's Brooklyn Campus on 370 Jay Street, Brooklyn, New York.

Figure 3. New York University Game Center's logo

[34] Museum of the Moving Image, "About". http://www.movingimage.us/about/
[35] Museum of the Moving Image, "Collection Spotlight- Video Games at Moving Image". http://www.movingimage.us/collection/videogames
[36] NYU Game Center, "About." https://gamecenter.nyu.edu/about/

Program Timeline

Given that this in-person event is within the Northeastern tri-state area (New York, Connecticut, and New Jersey) and that the assumption most people have 9am-5pm work weeks and would need to take time off to attend the event, Pressing Restart has to be meticulously planned. There were conversations on having a two-day versus one-day conference event as well as keeping the conference restricted to a number of people due to venue and space capacity.

It was decided that Friday, April 29, 2022 would be the date for the one day event, Pressing Restart 2.0.1. There was also conversation about the time during that day as well. Knowing that people may be traveling to attend, the event is planned to be from 9 am to 4 pm, with one hour for lunch and networking during the conference which leaves six hours for panel planning. Engagement was also taken into consideration when planning the time. The main portion of the event will end at 4pm, but a supplemental networking event could be planned after. The supplemental event could possibly be playing video games and board games at the New York University Game Center. This is the proposed timeline of the event:

0900-0930: Light networking and light refreshments served

0930-1000: Welcome, Acknowledgements, and Program Introduction

1000-1100: Keynote

1100-1200: Panel 1

1200-1300: Lunch Break

1300-1400: Panel 2

1400-1500: Panel 3

1500-1515: Break before Conclusion

1515-1600: Wrapping Up, What is Next, Thank Yous

Breaks during the event will also be a time for possible interaction and collaboration between the attendees. During the wrap-up of the event, the organizer of the event will thank the sponsors and those who supported the event as well as a thanks to all the participants and attendees. This is also allotted time to discuss with the audience what they would like to see for the next Pressing Restart event or conference.

Panels Breakdown

The panels will occur after the keynote address, with two of the panels being after the lunch break. The first panel will be on DMCA and video game preservation; after lunch, the second session will be on the topic of documentation for video game preservation. The last session will be panel-led discussion on representation in video games and archiving; this session will also provide an opportunity for the audience to gather information on how to either increase positive representation within video games and archiving as well as provide ideas for increasing the diversity of games being preserved.

Social Networking Event

As part of the in-person conference event, there will be an event for the attendees and participants to meet each other and play video games. Since the theme for Pressing Restart 2.0.1 is related to 1980 computer games, it is expected that several of the games will be from that era. A list and summary of the games and emulators will be provided within the appendix.

Time- The social event will happen the day before the conference from 4pm-9pm.

Venue/Space- The Game Center will provide space for the gathering at the Game Center Library. The Game Center's Library provides the equipment and systems needed for playing most games. People attending will be encouraged to bring a computer (either Mac or Windows operating system) in order to emulate 1980 computer games. A guide on game emulation applications and a list of 1980 games are provided in the Appendix of this thesis. For those interested in working in the construction set HyperCard, the user guides and the guide to emulate HyperCard on a Windows operating system is also within the Appendix.

Marketing/Advertising

Marketing Pressing Restart will be mainly done by word-of-mouth and online advertising. The Association of Moving Image Archivist New York University Student chapter (AMIA at NYU, AMIA NYU Student Chapter), and the Moving Image Archiving and Preservation class of 2022 has generously provided their time to support the marketing of Pressing Restart 2.0.1.

Website- A website will be created outside of New York University's website hosting subscription and will be created and hosted by Kayla Henry-Griffin; the reason for this decision is that once Kayla has graduated, they will be able to update and configure the website for future events pertaining to Pressing Restart and video game preservation.

Advertising- With the support from the MIAP class of 2022 and AMIA NYU Student Chapter, there will be promotional posts and documents circulating throughout social media (Instagram, Facebook, LinkedIn, and Twitter). Kayla Henry-Griffin will also promote the event through emails. The design of promotional materials will also be provided by all parties.

Posters will be printed out and placed in various New York University locations, including the Game Center, Tisch, and Steinhardt.

Virtual Conference

For any reason that Pressing Restart 2.0.1 does not occur in-person, there is the possibility of implementing a virtual conference, which would alter different aspects of the in-person plan. The speakers and panels would not change, but the number of attendees would differ greatly. Because it would be a virtual conference, the conference attendees would represent people not only in the New York tri-state area, but also nationally (maybe even internationally).

Online Platform

Gather.Town is a video chat platform that includes a virtual world that could be either pre-made by the platform itself or made from scratch by the host user. Gather.Town could be implemented in various cases, such as a conference, parties, virtual meetings, and other various events.[37] With Gather.Town, a user can create an avatar and navigate across the virtual world and interact with others and objects in the "virtual layer" created by the host. Gather.Town would be the main platform for the virtual conference so that the conference attendees could meet and share ideas during and in between conference panels.

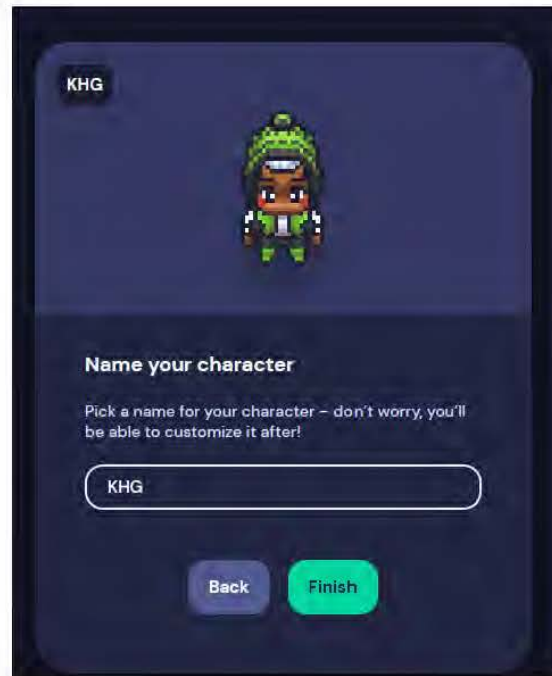[37] Gather, "About". www.gather.town/about

Figure 4. Screenshot of the final step of creating an avatar in Gather.Town.

Figure 5. Enlarged screenshot of user's avatar and account.

The price to utilize the platform varies; the ideal plan for the Pressing Restart 2.0.1 conference would be the "Per day" plan, which is three dollars per user per day.[38] This pricing allows up to 500 users, which is more than enough for the virtual conference. If the Gather.Town platform is utilized for the virtual conference, there is a possibility to pay for the

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[38] Gather, "Pricing". www.gather.town/pricing

education plan, which is 30% less than the basic "Per day" plan. Because it is estimated that there will be more than 25 participants, the plan would be a premium plan, where the virtual space has allocated server resources rather than a free server, where it is shared with other virtual spaces.

Program Timeline

This is the proposed timeline of the virtual conference event:

0900-0930: Light networking and time for people to navigate Gather.Town

0930-1000: Welcome, Acknowledgements, and Program Introduction

1000-1100: Keynote

1100-1200: Panel 1

1200-1300: Lunch Break

1300-1400: Panel 2

1400-1500: Panel 3

1500-1515: Break before Conclusion

1515-1600: Wrapping Up, What is Next, Thank Yous

Breaks during the event will also be a time for possible interaction and collaboration between the attendees. During the wrap-up of the event, the organizer of the event will thank the sponsors and those who supported the event as well as a thanks to all the participants and attendees. This is also allotted time to discuss with the audience what they would like to see for the next Pressing Restart event or conference.

Panels Breakdown

The panels will remain the same in a virtual conference. The panels will occur after the keynote address, with two of the panels being after the lunch break. During the breaks, attendees have the opportunity to use the online platform to network with the other attendees.

Marketing/Advertising

Marketing Pressing Restart will be mainly done by word-of-mouth and online advertising, but will rely more on digital outreach. The Association of Moving Image Archivist New York University Student chapter (AMIA at NYU, AMIA NYU Student Chapter), and the Moving Image Archiving and Preservation class of 2022 has generously provided their time to support the marketing of Pressing Restart 2.0.1.

Website- A website will be created outside of New York University's website hosting subscription and will be created and hosted by Kayla Henry-Griffin; the reason for this decision is that once Kayla has graduated, they will be able to update and configure the website for future events pertaining to Pressing Restart and video game preservation. The website will also host a link to the conference's virtual platform for those who registered for the conference.

Advertising- With the support from the MIAP class of 2022 and AMIA NYU Student Chapter, there will be promotional posts and documents circulating throughout social media (Instagram, Facebook, LinkedIn, and Twitter). Kayla Henry-Griffin will also promote the event through emails. The design of promotional materials will also be provided by all parties. Posters will be printed out and placed in various New York University locations, including the Game Center, Tisch, and Steinhardt.

Pre-Conference Event

Whether the conference is held in-person or virtually, There will be a planned pre-conference event that will occur during the 2022 year at New York University. Due to COVID-19 Protocols, this event will be held virtually via Zoom. This event will be no longer than one hour and will be considered a preview of the copyright sessions that will take place at Pressing Restart 2.0.1.

Proposed Speaker

Phil Salvador is a historian and the Library Director at The Video Game History Foundation and has experience working with various obscure and "relatively unknown" mediums such as video games. [39] Phil Salvador also researches copyright for these obscure video games and has extensive knowledge of the DMCA and how it affects how cultural heritage professionals preserve video games and how institutions collect video games.

Platform

Zoom would be the platform of choice for the pre-conference event in Spring of 2022. The basis for including a pre-conference event is to be a preview of the main conference event as well as produce an initial community that would be in attendance of Pressing Restart 2.0.1. This event has the potential to illustrate how many people are interested in having a community and an event to discuss pressing issues in video game preservation and conservation. The make-up of this event is to be a simple webinar; because New York University provides Zoom subscriptions to both faculty and students, this is the most simple and effective way to have the pre-conference event.

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[39] Obscuritory, "About." https://obscuritory.com/about/

Program Timeline

1050-1100: Await for participants to log into Zoom

1100-1105: Welcome and Thank yous

1105-1145: Guest Speaker Phil Salvador

1145-1200: Questions from participants, wrap up

Marketing/Advertising

Marketing Pressing Restart will be mainly done by word-of-mouth and online advertising via the Cinema Studies department's calendar. The Association of Moving Image Archivist New York University Student chapter (AMIA at NYU or AMIA NYU Student Chapter), and the Moving Image Archiving and Preservation class of 2022 has generously provided their time to support the marketing of Pressing Restart 2.0.1.

Advertising- With the support from the MIAP class of 2022 and AMIA NYU Student Chapter, there will be promotional posts and documents circulating throughout social media (Instagram, Facebook, LinkedIn, and Twitter). Kayla Henry-Griffin will also promote the event through emails. The design of promotional materials will also be provided by all parties. Posters will be printed out and placed in various New York University locations, including the Game Center, Tisch, and Steinhardt.

Budget

A budget was created for all three events so that there was a clear vision on how much funds would be needed to implement the conference and pre-conference event.

For the in-person planned event, I have accounted for a modest honorarium for the keynote speaker and each panelist; in addition, the venue and food catering fee was accounted for. There is also a fee for American Sign Language interpreters (2) for each planned event; this is a start to making the conference and pre-conference event more accessible to the audience.

I found it was cheaper to fund a virtual conference event, since panelists would not be traveling, and there is no venue and food catering fee. However, there is still a virtual platform fee (at a much lower cost) as well as smaller honorarium for keynote and panel speakers. The pre-conference event is similar to the budget for the virtual conference, but less speakers and no fee for a virtual platform.

All planned events do have a fee for marketing, where posters would be printed out; the designs for the marketing materials will be in-kind, due to the generous support of the New York University's Association of Moving Image Archivists (NYU AMIA) Student Chapter. The budget is included in the appendix.

v. 4.0.0 What's Ahead

Pressing Restart 2.0.1 is expected to occur during New York University's 2022-2023 school year. I hope to continue being an organizer for the event as well as have continued support for the conference. This conference would need a steady committee that meets regularly as well as funding in order for the event to happen. The committee would be able to

produce marketing materials, attendee registration, as well as call for proposals (since the speakers selected are subject to change). A conversation about the continuation of Pressing Restart would be necessary as well. Since I was not one of the original organizers of the event, discussing with one of the first Pressing Restart organizers would give clarity on how to make Pressing Restart an ongoing conference series. The work and selections here in this document are still in the process of updating and completion.

Video game preservation efforts are going to continue to alter and discussions about these efforts are going to multiply as well. Creating spaces for these continued conversations is the crux of this thesis and the creation of Pressing Restart 2.0.1. Conversations will lead to making relationships with stakeholders outside of the video game industry, which these relationships are as essential to the success of video games preservation.

Appendix

Appendix I- Budgets

Budget- In-person Conference

Pressing Restart 2.0.1 Video Game Preservation Conference	Budget Sheet: In-Person One-Day Event			
Bill/Charge	Name	#	Price	Total
Venue	MOMI	1	3000	3000
Speakers	Keynote Speaker	1	600	600
	Panelist	7	450	3150
Food	Morning	1	850	850
	Afternoon	1	1500	1500
Marketing	Posters	50	2.25	112.5
	Print Agendas	150	1.25	187.5
	Website-In Kind	1	0	0
	Design-In Kind	1	0	0
Accessibility	ASL Interpeter	2	1050	2100
				0
				0
				0
			Overall Total	11500
Notes				
Within the price, MOMI will provided AV and Technical help In-Kind charges are provided by AMIA Student Chapter at NYU and Kayla Henry-Griffin	ASL Interpreter quotes vary from 15/hour to 125/hour. I calculated for 75/hr for each ASL Interpreter for 7 hours			

Budget- Virtual Conference

Pressing Restart 2.0.1 Video Game Preservation Conference	Budget Sheet: Virtual One-Day Event			
Bill/Charge	**Name**	**#**	**Price**	**Total**
Venue	Gather Town	1	450	450
Speakers	Keynote	1	500	500
	Panelist	7	300	2100
Marketing	Print Posters	50	2.25	112.5
	Design-In Kind			0
	Website-In Kind			0
Accessibility	ASL Interpreter	2	1050	2100
				0
				0
				0
			Overall Total	**5262.5**
Notes				
Gather Town price includes 150 users from April 29 6am to April 30 1am for the premium reservation. Possible to make a case for doing this event as an educational institution and get 30% off In-Kind charges are provided by AMIA Student Chapter at NYU and Kayla Henry-Griffin	ASL Interpreter quotes vary from 15/hour to 125/hour. I calculated for 75/hr for each ASL Interpreter for 7 hours			

Budget- Virtual Pre-Conference Event

Pressing Restart 2.0.1 Video Game Preservation Conference	Budget Sheet: Virtual Pre-Conference Event			
Bill/Charge	**Name**	**#**	**Price**	**Total**
Venue	Zoom Event	1	0	0
	EventBrite	1	0	0
Speakers	Moderator	1	150	150
	Speaker	1	300	300
Marketing	Print Posters	30	2.25	67.5
	Design-In Kind	1	0	0
Accessibility	ASL Interpreter	2	350	700
				0
				0
				0
				0
			Overall Total	**1217.5**
Notes				
The Pre-Conference event will be a small taste of Pressing Resart 2.0.1 This event will take place during the spring semester while planning for the conference takes place In-Kind charges are provided by AMIA Student Chapter at NYU	ASL Interpreter quotes vary from 15/hour to 125/hour. I calculated for 75/hr for each ASL Interpreter for 2 hours			

and Kayla Henry-Griffin				

Appendix III- Potential Graphics for Advertising

PRESSING RESTART

DMCA AND VIDEO GAMES

SUMMARY HERE WITH
NAME OF GUEST
SPEAKER'S NAME

DAY.MONTH.YEAR
TIME HERE
LOCATION HERE

SPONSORS:

Appendix III- Curated List of Games and Emulators
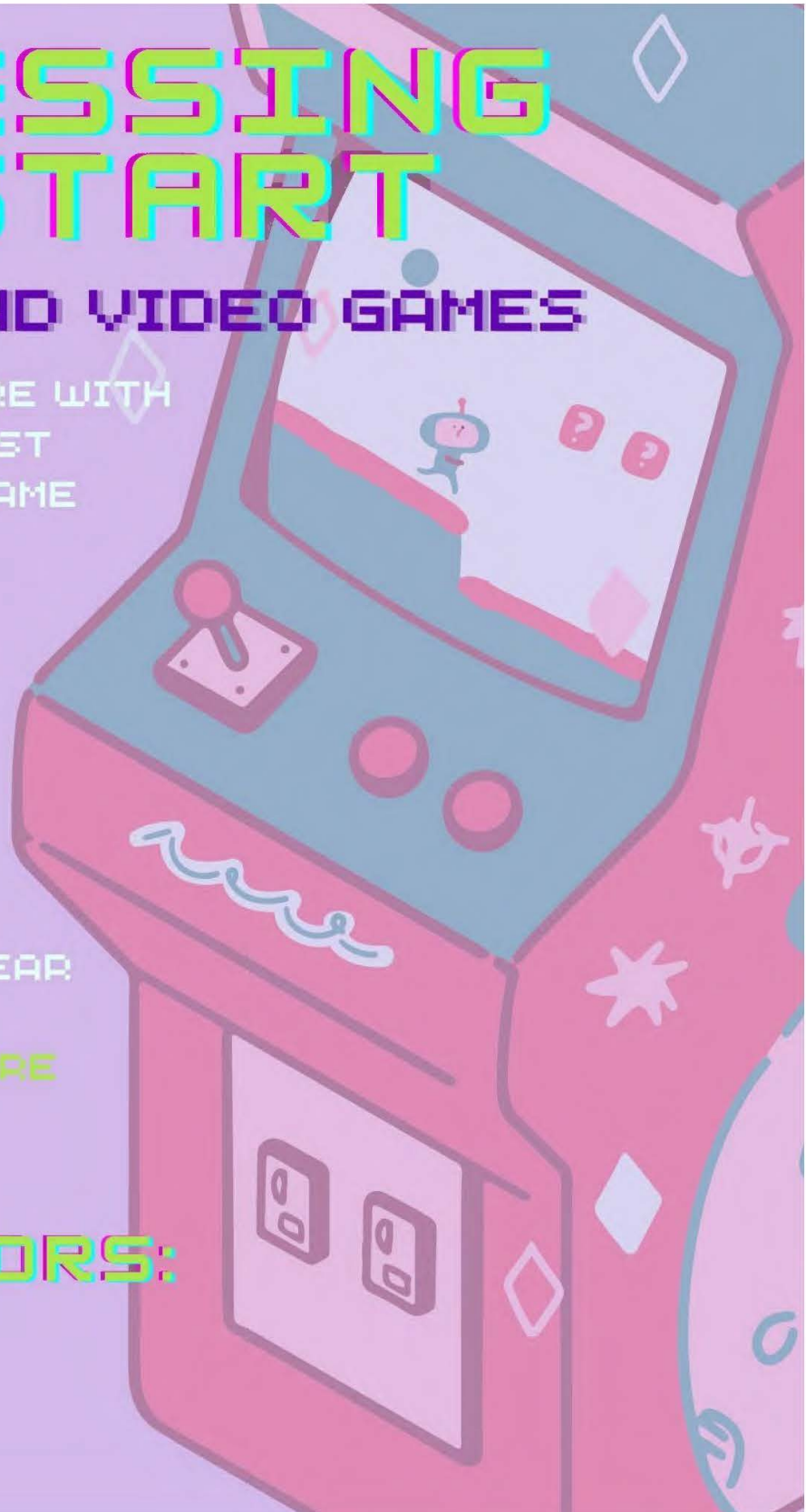
Here is a curated list of games and emulators to use for the in-person Pressing Restart 2.0.1 conference. This list of games was influenced by NYU Game Center's course on 1980s American Computer Games. The listed games have some sort of historical significance to the video game industry, yet have not been highlighted as much as an important part of video game history. This is just a suggested list of computer games to play while at the New York University Game Center and there are a variety of games and systems available to play in the Game Center's library. Attendees of the Pressing Restart 2.0.1 conference could play whatever game they please.

Games

Fishing Derby
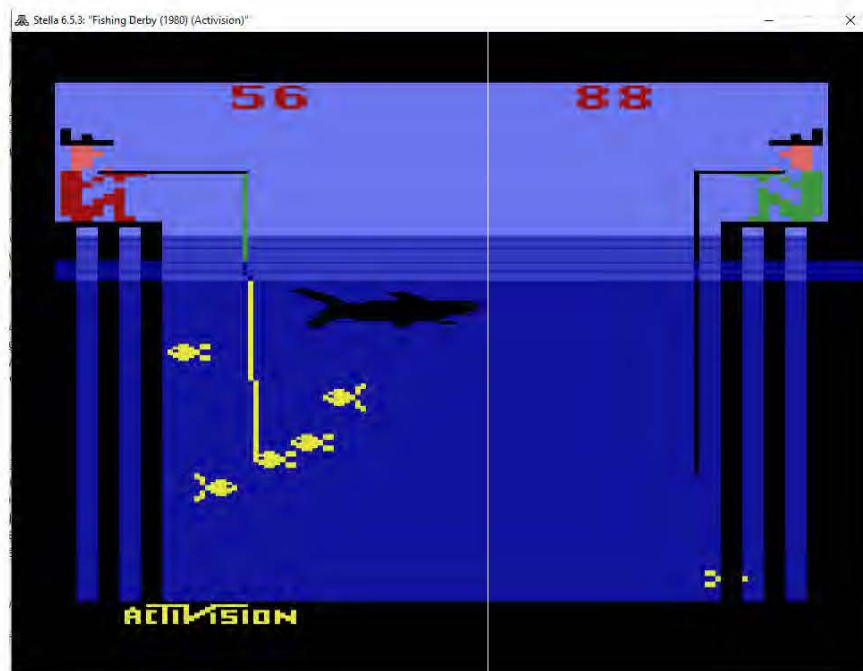
Figure 6. Screengrab of Fishing *Derby* gameplay

Fishing Derby are for those players who want a pretty low-impact game, where there is very little competition and no combat, just catch the bright yellow fish. Fishing without the sounds of

fish popping in and out of the water and without the touch of a fishing rod or a slimy fish- this is one way to perceive the 1980 Activision game *Fishing Derby*. *Fishing Derby* allows one to fish, but in a way where you lose some experiential senses but gain the experience of fishing without leaving the comfort of one's home. Both fishing experiences- on a boat or on the couch- do provide a sense of calmness, where one is in no rush to reel in fish. However, that idea does begin to break down in *Fishing Derby* when one is aware of the shark eating hooked fish or if there are two people playing the game competitively. The game *Fishing Derby* provides fairly simple actions without the need to think critically or strenuously.

Fishing Derby* is both a single-player and two-player game; according to the *Fishing Derby* manual, two-player is simultaneous (i.e. if both players have a fish hooked onto the rod, only one player can reel the fish up to the surface). There is a points component to the game however it can be questioned how essential this feature is. The color scheme of the game is not too harsh on the eyes and not dull to look at; the two people reeling in fish are shaded in complementary colors; the blue of the water is a soothing hue, while the color that represents the sky illustrates an early morning on the dock. This game is for entry-level gamers or gamers who just love the idea of simple fishing gameplay.
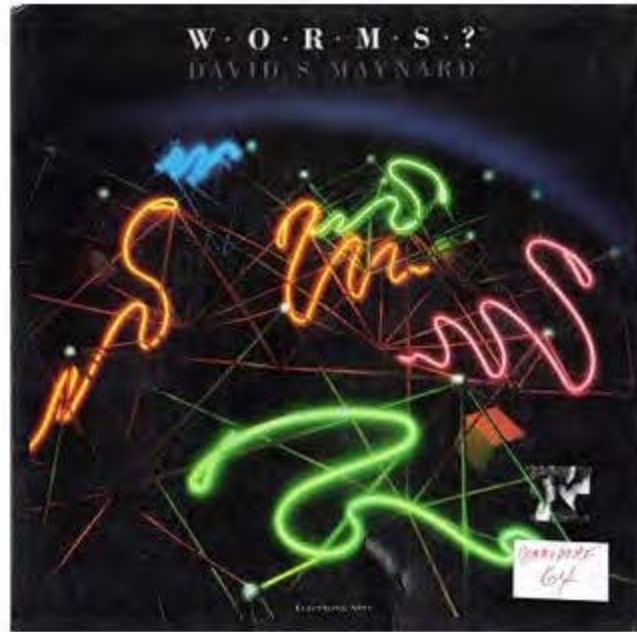
Worms?

Figure 7. Electronic Art's cover for *Worms?*

Published by Electronic Arts (EA) in 1983, *Worms?* is an interactive game that is influenced by the model Paterson's worms developed by Mike Paterson and John Horton Conway (who designed Conway's Game of Life). *Worms?* was developed for both the Atari 8-bit and Commodore 64. The purpose of the game is to grow the cellular automaton (the worm in this case) to grow and survive as long as possible and longer than the other worm automatons. In *Hi-Res*, Léo G. Laporte exclaims, "Did I say game? That may not be the correct word. It's more cooperative than competitive." Although it does not have all the qualities of a common 1980s computer game, there are still some qualities that make this entertaining lightshow a game, such as the mild competition between two, three, or four worms.

There are four variations of worms in the game: NEW worms are developed by the player, so whatever direction the player plays, that is where the worm will go; AUTO is a computer-operated worm where the worm automatically creates its direction; WILD worms are similar to AUTO worms, but their movements are more erratic (and arguably more beautiful); SAME worms copy the worm's movement and direction from the previous gameplay.

Figure 8. Screengrab of a finished *Worms?* game, where the purple "WILD" worm achieved the longest survival.

Boulder Dash

Figure 9. In-game screenshot of Boulder Dash (1984). Referenced from gamesdatabase

The 1984 game *Boulder Dash* can be a frustrating and anger-inducing game, but in the most positive way possible. The perspective on Boulder Dash is that it is a challenging game for a 1980s game, to the point that some would like to quit the game in its entirety. A player could make a supposedly correct turn and end up getting squashed by what seems like thousands of rocks. A player would need to know a bit about physics to understand which boulders will squash the character (Rockford) or the ones that can be held up.

The game's challenge comes in because of the real-time factor. The player must be quick with their movements in order to get to the goal before time runs out. Similarly, one can feel rushed by Rockford's tapping foot, impatiently waiting for the player to make a move; it does not take more than a second for Rockford to get annoyed and express its agitation.

There are multiple environments (i.e. caves) that a player can play in and each one varies from the last. Each cave also has its own challenging puzzles, and each cave speaks to what kind of challenge a player wants to overcome. The graphics and sound of the game is

fairly critiqued in reviews; however the opening tune of the game does have a charm to it and is not too annoying.

This game has been ported onto various consoles as well as has various versions Rockford has morphed and molded into various characters during this Boulder Dash series, but many players are a fan of the alien-like Rockford rather than the human form. Boulder Dash has a long legacy of being quite a good game no matter what the time is.
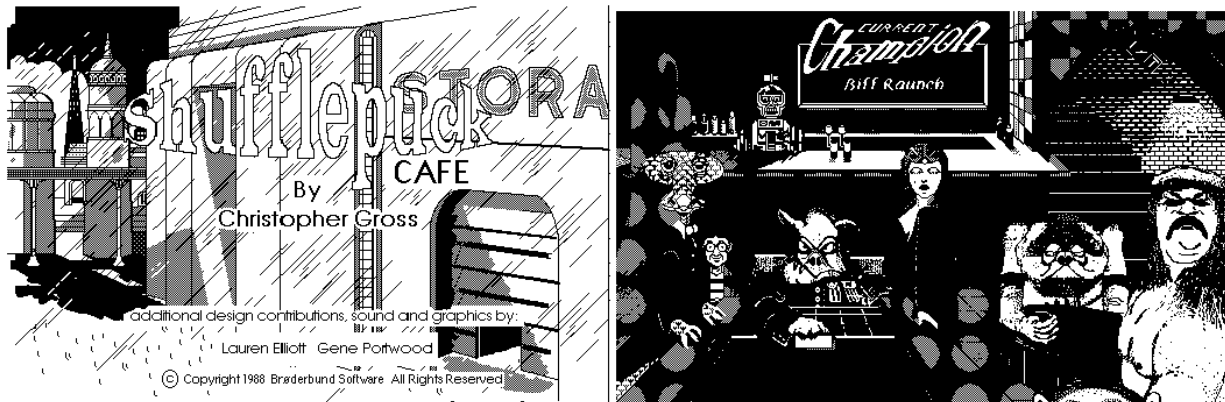
Shufflepuck Cafe

Figure 10 and 11. Shufflepuck Cafe Macintosh Version

Shufflepuck Cafe has its fun moments with the varying levels of difficulty with each opponent, but for those players looking for a goal, the game lacks a storyline. There is no continuing storyline nor any consequences to the player's choices other than playing the game enough to see themselves as reigned champion. This is a game to simply enjoy some air hockey on the computer screen.

The manual is essential to glance over just so that the player understands the difficulty level of each character as well as read the backstory of the (maybe) questionable characters in this sleazy space. The robot character is a malleable character and is considered to be the introductory character; this robot can be customized to be the easiest opponent to the most grueling match. Biff Raunch is the most difficult character and is not the best to compete against for the first try. Skip Feeney is a great opponent if a player wants a "Good job!" response after they gain a point. Vinnie is also a good solid match for a medium-level difficulty play.
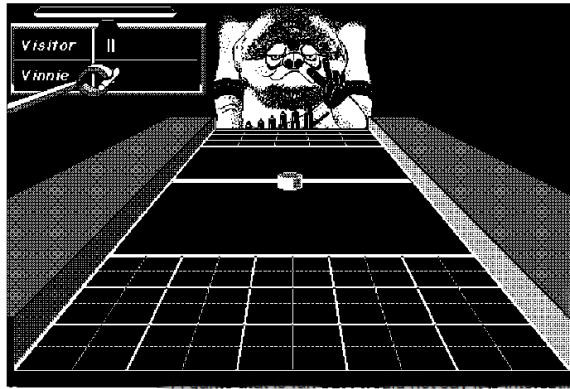
Figure 12. Gameplay in Shufflepuck Cafe: Vinnie holding up a peace sign

Shufflepuck Cafe boasts a high-level customization for difficulty. The paddle can increase or decrease in size which is perfect for players who need the extra support; the blocker rests in the middle of the playing field and brings in another entertaining way of honing the player's computer air hockey skills.This allows any player at any level (beginner, intermediate, advanced) to find joy in playing Shufflepuck Cafe.

Both versions of Shufflepuck Cafe, besides the graphical aesthetics, have kept the same level of characters, challenge, and enjoyment for any player to find entertainment in. However, other than trying to gain the name of champion, there is not much else to this game. The storyline is very general and is not continuous; if someone is looking for a game to play a few matches or tournaments before getting work done, Shufflepuck Cafe is a fun game to go to.

Figure 13 and 14. Shufflepuck Cafe Amiga Version

Emulators

winVICE Emulator

      winVICE is a Commodore 64 emulator for Windows operating systems; commonly called VICE, this emulator is used for Mac operating systems as well. Hosni's Guilde on Emulation considers this emulation to be "fairly configurable".

      In order to utilize this emulator, the user needs to download winVICE from the VICE home webpage; with that download there will be multiple executable files to use, but the only one of use would be the 'x64' executable file. This emulator only recognized T64 and D64 game files.
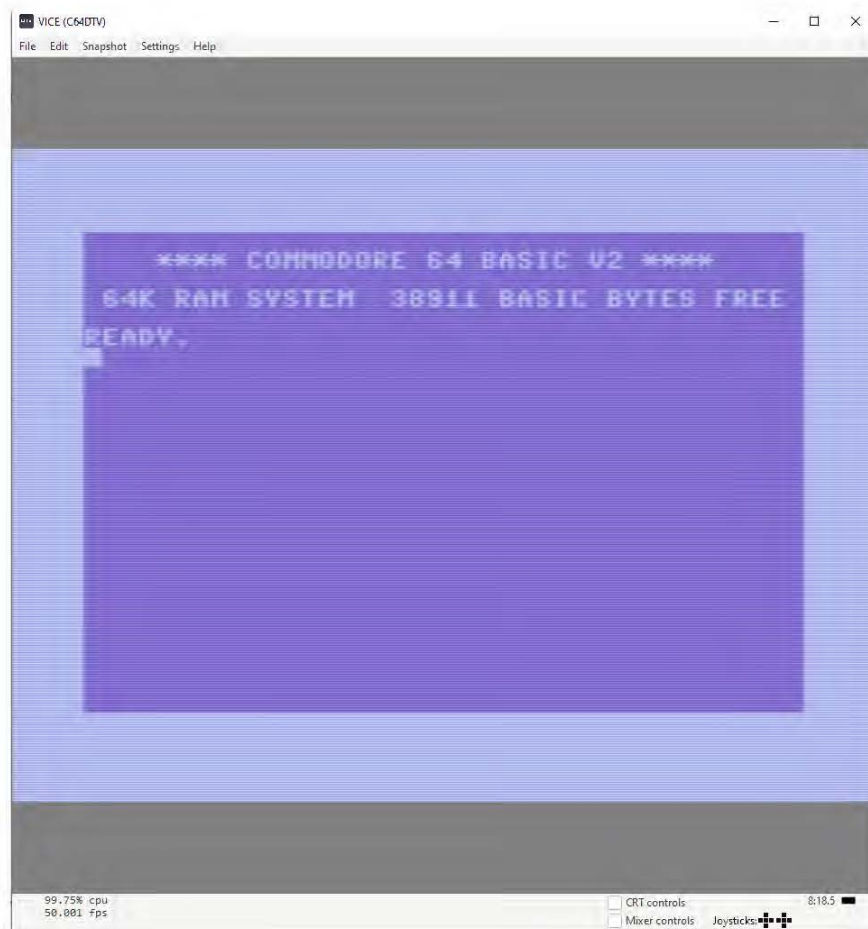
Figure 15. Screenshot of the executable file that launches the winVICE emulator

Figure 16. Screenshot of the window that opens when selecting "smart attach" from the previous window. Here, the user could select a T64 or D64 file to play in the emulator.

Figure 17. Screenshot of the game, *Pirates!* playing in the winVICE emulator

FS-UAE Emulator

Available for Mac, Windows, and other operating systems, FS-UAE can emulate various Amiga systems. According to the website, FS-UAE can emulate Amiga systems accurately, as well as the user could configure and customize their own Amiga system.[40]

According to Hosni's Guide to Emulators, downloading the FS-UAE suite and opening the FS-UAE Launcher application within the suite is a quick start to using the emulator. In order to play any emulated Amiga system, the user needs to also download the Kickstart ROMs; in Hosni's Guide, the ROMs are included, and the 1.3 ROM is commonly used for the A500 emulated system.
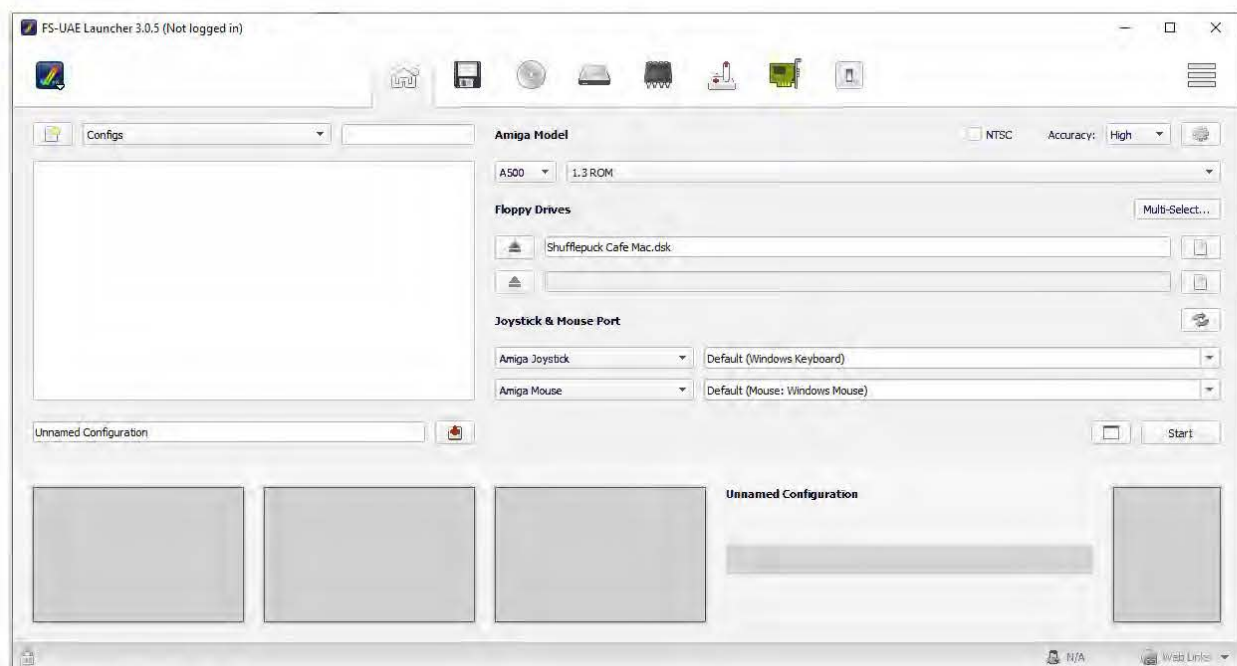
Figure 18. Screenshot of the FS-UAE Launcher when opened on a Windows operating system

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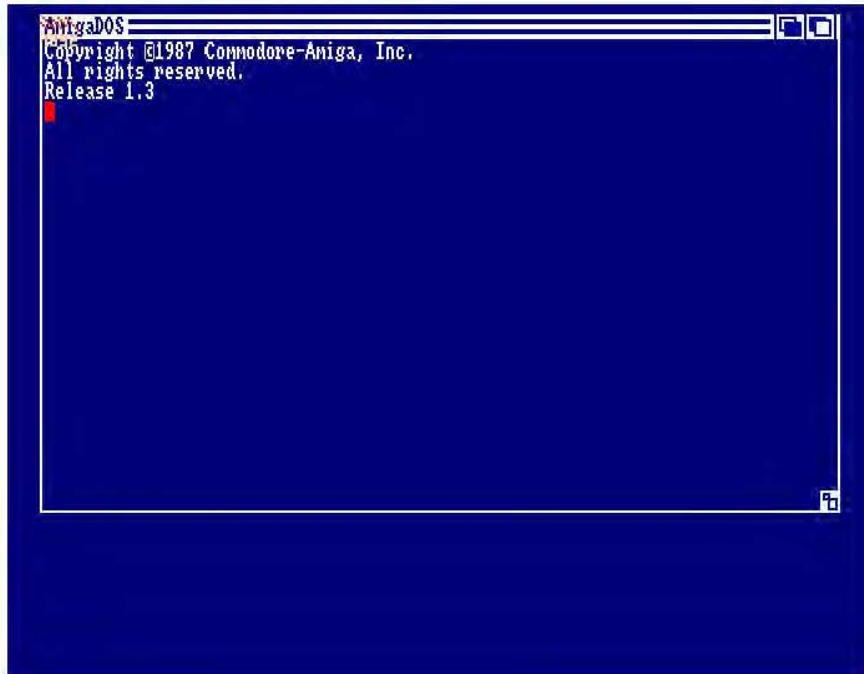[40] FS-UAE. "Home". https://fs-uae.net/

Figure 19. Screenshot of the Amiga 500 loading on the FS-UAE emulator

Figure 20. Screenshot of the loaded game, *Dungeon Master*

Mini vMac Emulator

"Small and minimal" is what the Hosni's Guide on Emulation calls the Mini vMac. This emulator is used on both Mac and Windows operating systems. Even though the actual emulator screen is small, it is a mighty emulator that lets the user play Mac games as well as use Mac-exclusive applications, such as Macintosh's HyperCard.

In order to use the emulator, a user needs to download Mini vMac through the home website, as well as a system file, which will help emulate any older Mac versions; once the Mini vMac is launched and the system .dsk file is dragged into the Mini vMac GUI, the user needs to drag a game or application .dsk file to enjoy the emulator.

There is a guide on how to use the Mini vMac emulator to utilize HyperCard created by Kayla Henry-Griffin. The guide is included in the next appendix.[41]
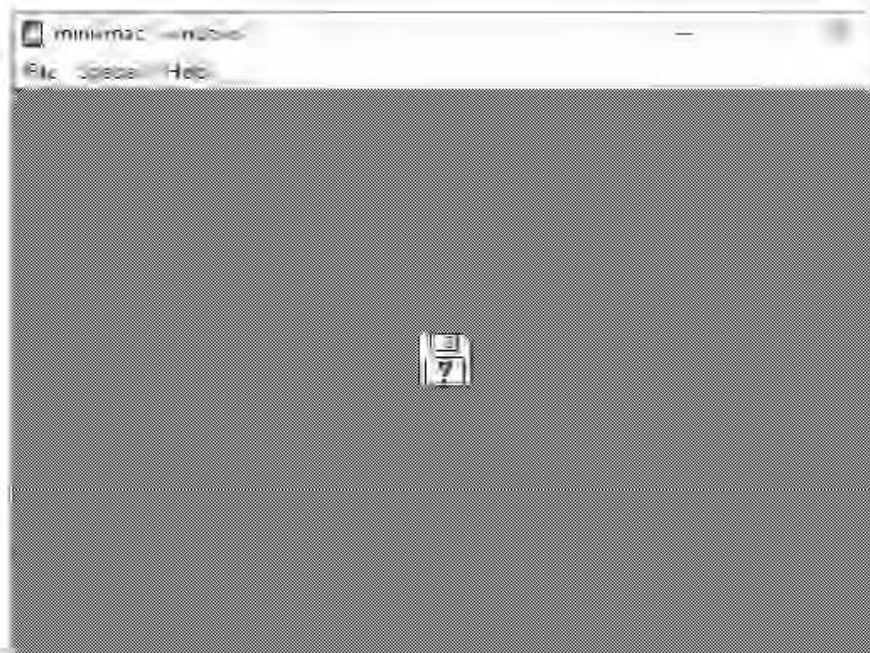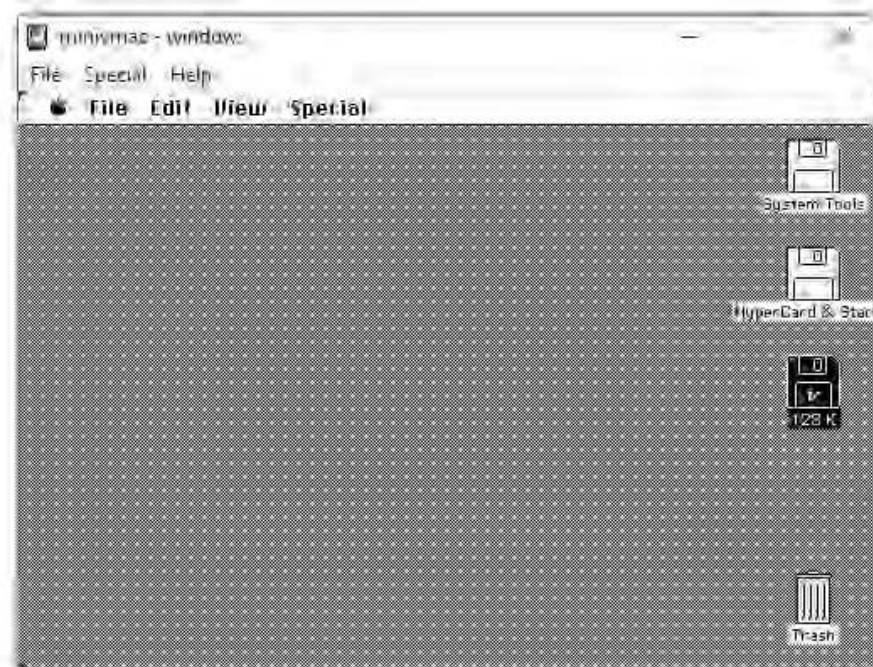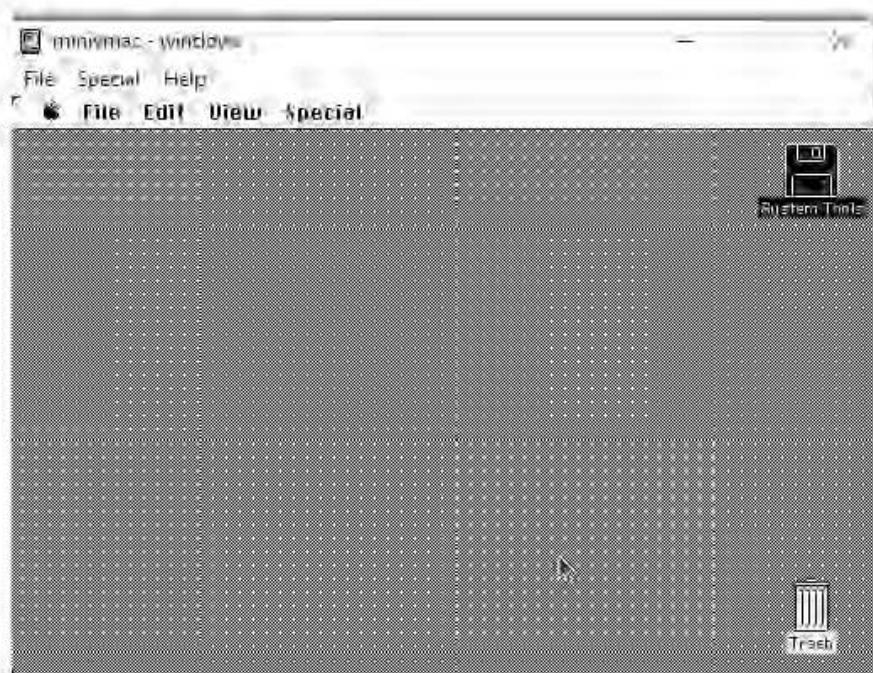
Figure 21. Screenshot of Mini vMac launched. The floppy disc flashes the question mark, which indicates it needs a system .dsk file.

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[41] An URL link to the guide is here:
https://www.canva.com/design/DAExai9Dh-A/FvA5Y6vkkRThHW1LmrnM7g/view?utm_content=DAExai9Dh-A&utm_campaign=designshare&utm_medium=link&utm_source=sharebutton#9

Appendix IV: HyperCard Guide

A GUIDE ON EMULATING

HYPERCARD

by Kayla Henry-Griffin

About HyperCard

HyperCard is a software application and construction set for Apple Macintosh and Apple IIGS computers. HyperCard is considered the first successful hypermedia systems predating the World Wide Web. HyperCard combines a flat-file database with a graphical, flexible, user-modifiable interface.

File   Edit   Go   Tools

Intro

Help

Phone

To Do

Art Ideas

Clip Art

Plots

Student Stack

Copyright ©1987 Apple Computer

WHAT'S INSIDE

The guide is parsed out in three main steps: installing the Mini vMac emulator, inserting the HyperCard and an empty .dsk file in the emulator, and saving stacks from the HyperCard file.

For the purposes of this guide, HyperCard .dsk file emulates the 1.2.5 version of HyperCard, a 24MB empty .dsk file was used, and Windows 10 is the host operating system.

MINI VMAC EMULATOR

Step 1- Set up emulator

HYPERCARD

Step 2- Utilize .dsk file to run program

HOW TO SAVE STACKS

Step 3- Store content onto blank .dsk file

Start Emulator Mini vMac

It might be useful to create a folder for your Mini vMac emulator and files you will be using before saving HyperCard stacks. This guide will provide you the System.dsk for the emulator

1. Install Mini vMac to your computer
2. Download empty .dsk files to your computer (will be utilized at a later time)
3. Launch Mini vMac
4. A window with a 'Disk?' icon will appear
5. Drag the Mac System.dsk file to the window and OS should launch.
6. If there are any issues, hold, **Ctrl+H** to open the menu

Emulation instructions provided by
Hosni's Emulator Guide V0.9 12-2017

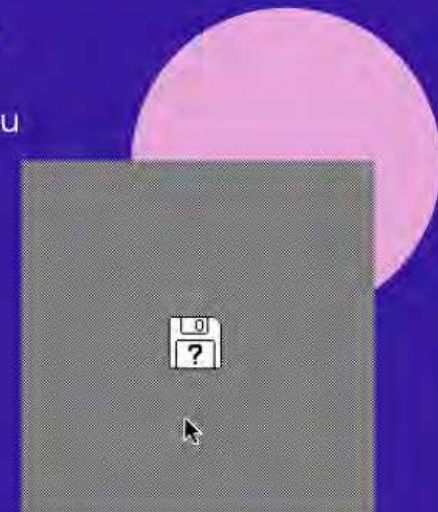
Insert HyperCard .dsk File

For this guide, the HyperCard and Stacks .dsk files will be provided.

1. Drag the HyperCard & Stacks .dsk file into the emulator
2. Drag the other .dsk files you would like to use into the emulator (the HyperCard Help and HyperCard Ideas are available .dsk files to use)
3. At this time, drag any blank .dsk file you would like to use (I personally use the *024M.dsk* file)
4. If this is your first time exploring HyperCard, it is suggested to look into the *HyperCard Beginner's Guide* manual. If you are familiar with HyperCard, have some fun and make some scripts and stacks!
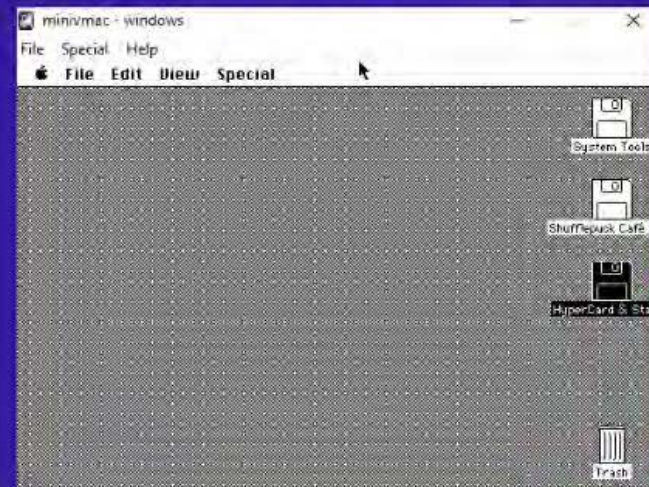
Making a New Stack to Use

1. Go to a premade stack icon (such as Documents), and double-click to open
2. Under File, go to New Stack, a window will open
3. Click Drive to go to your emulated drive, and you should see your blank disk.
4. Name your stack under the New Stack Name. Once finished, click New. *Optional: you can select or unselect 'Copy current background'.*
5. Voila! You created a stack!
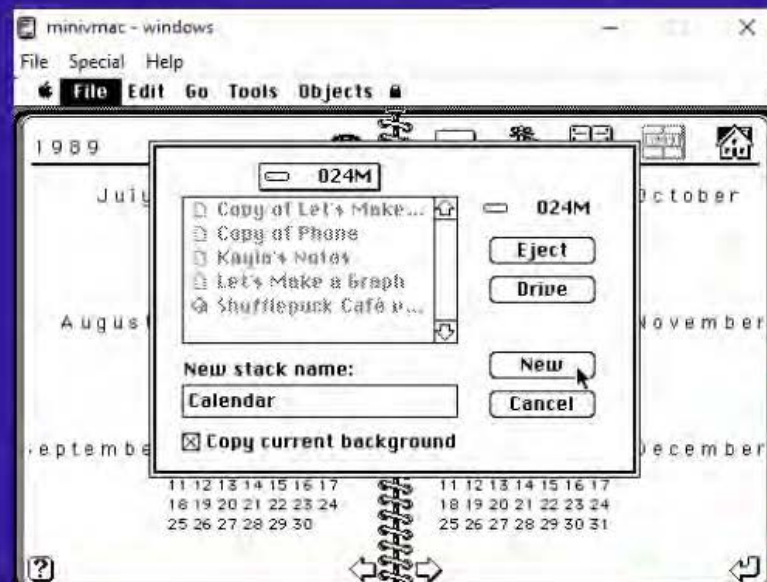
Save HyperCard Stacks

I have played and enjoyed HyperCard! But I want to save my creations. What do I do?

Once you are ready to save some HyperCard files, the blank disk starts to have a purpose.

1. Make sure your creation/stack/script is saved under your blank .dsk drive.
2. Quit HyperCard or quit the emulation completely
3. Go to your favorite hex editor (such as Hexed.it)
4. Drag/upload the blank .dsk file. At this time, this blank .dsk is not so blank anymore!
5. You can search for your stacks through the hex editor by using the find function. You should see the hex editor find searches that match the text of your stack and scripts.

Resources

Various resources to look into if you want to learn more about HyperCard

HYPERCARD GUIDES

Beginner's Guide

User's Guide

OTHER LINKS

Download Mini vMac

Download blank disks

KAYLA'S REPORT ON HYPERCARD

42434445

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[42] HyperTalk Beginner's Guide- https://drive.google.com/file/d/1Pv0or7AZljHRdEQFaLB5pyeup00PyZCE/view
[43] HyperCard User's Guide- https://drive.google.com/file/d/1I9hYVLfoJidhYOyad3wuyIIkLQulJpmC/view
[44] Download Mini vMac- https://www.gryphel.com/c/minivmac/dnld_std.html
[45] Blanks: a Mini vMac Extra- https://www.gryphel.com/c/minivmac/extras/blanks/

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