UFCFHQ-45-3 Comprehensive Creative Technologies Project: Initial Proposal	
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Award:	Digital Media
Provisional project title:	Transferrable UI Across Game Platforms

Description

My project will outline the importance of a transferable User Interface (UI) system for games between platforms. In this case the UI will be exclusive to the menus but will take into account Gaming Experience (GX) and User Experience (UX). As someone who plays games, I can empathise with how frustrating it can be to move from one platform to another; "not understanding the differences between these platforms can cause difficulties and dissatisfaction for the end users" (Mori, 2019).

Figure 1 - Image showcasing Genshin Impact UI on PC compared to Mobile.

Therefore, I aim to recommend an improved UI, specifically a menu, for a pre-existing game that is available across multiple platforms. Ultimately, I want my work to be viewed as a recommendation, that is based on evidence and user testing, to be used as a tool to aid developers in creating an easily transferrable interface for the main methods of gaming: Console, PC and Mobile.

Deliverables/Outputs:

- Documentation of User Testing
  - Transcripts & data visualization
- Wireframes
- Prototype Created in Figma
- Progress Diary
- Recommendation Documentation
- Report
- Explainer Video and Script

Background

There is little research into this field, for that reason I view this as an opportunity to produce work for a low populated field and hopefully stand out with my discoveries. However, with the few works I did find, they helped guide me in a direction I could expand upon the research they have undertaken as well as find my footing in the field with my own project.

This will be a key principle throughout my work and is a reflection of the "Iterative Cycle of Human-Centred Design" as shown in *Figure 2,* to find the root issue and make multiple solutions. One such example of this from my research is Peacocke. They performed user testing for first-person shooter games, in which they had participants play numerous games with an element of the game changing each time, constantly repeating the testing and observation phase of their research.

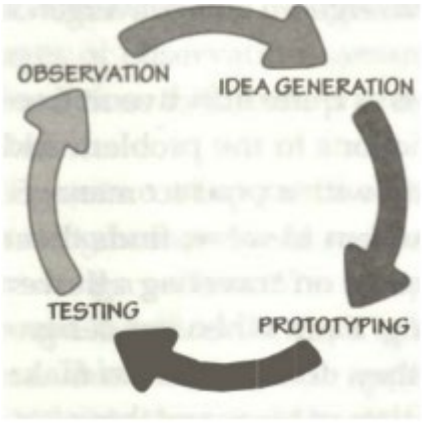

Figure 2 - Iterative Cycle of Human-Centred Design

Moreover, the report opened my eyes to other factors of consideration such as diegetic vs non diegetic displays; "good design is actually a lot harder to notice than poor design… the design is invisible" (Norman, 1998). In Peacocke's work they gave an outline of their user testing, which has had influence on my methodology. However, mine will incorporate new additional factors, such as the use of focus groups and surveys for more quantitative research: "Design is really an act of communication, which means having a deep understanding of the person with whom the designer is communicating" (Norman, 1998).

In addition to Peacocke's work was Hana Mori's report on "Multi-Platform Game UI Design". This report is the closest artifact I have found in correlation to my own project. Within it, is an abundance of critical analysis which I aim to utilise as secondary research. This will help showcase the significance of my artifact and the importance of my project with its accessibility for other devices, "If any of us can't use a Design, then it is exclusive, pure and simple" (Moore, 2023).

Objectives

Project Objectives: (What do I want to do? What is it I am doing?)

- Create an effective and accessible UI
- Collect and record data from participants
- Drawing conclusions from research
    - Create visual representation of data
- Effectively communicating findings
- Create an intricate wireframe
- Recommendation documentation
- Final output report

Research Objectives: (What research do I want to achieve?)

- Research into effective UI for video games
- Research into accessibility for UI in video games
- Effective UI for each platform
- Expand understanding of user testing methods

Learning Objectives: (What do I want to learn by the end of this project?)

- How to utilise Figma efficiently and effectively
- Process for creating an accessible UI
- How to perform informative user testing

Methodology

This project will be a hybrid of qualitative and quantitative research. For my quantitative research I want to create a survey to gather more minor information to aid in shaping questions for interviews and find key focal points for the artifact. Therefore, my qualitative research will involve interviews as well as focus groups for more in-depth information after participants have partaken in recorded sessions of playing games. This will give insight into what a collective think together, "focus groups often bring out users' spontaneous reactions and ideas" (Nielsen, 1997).

An integral part of my methodology is the user testing; I will have participants play a variety of games on different consoles before ultimately playing one title on numerous devices. While participants play, I will have setup an eye tracker as well as have them speak their thoughts aloud to follow their process. The addition of an eye tracker means I can analyse what decisions people were making when perusing the menu while speaking aloud "serves as window on the soul, letting you discover what users really think" (Nielsen, 2012). The data I collect will help me in wire framing my work and be a great addition of help alongside established UX laws.

Subsequently, I will combine both my primary and secondary research which will aid in creating a wireframe for a pre-existing game on paper, before transferring it to Figma. Throughout all these steps I will have participants trial my work for a consistent stream of feedback to create the best interface. My final output should be a reflection of my growth in using Figma and my understanding of accessibility within a UI.

This methodology will be a grand showcase of my UX skills accumulated since starting Digital Media, as I will be displaying my comprehension on a multitude of theories. As well as my understanding of more practical skills; for example, user testing, data matrices, etc. Additionally, I will be incorporating other teachings from previous modules such as Graphic and Web Design for my understanding of accessibility in creating content.

Specialist Resources and Support Required

I will be using Figma and an eye tracking software. No support will be required.

Project Plan

Month	Task	Days
October	Submit initial Proposal	1
	Submit Proposal	1
November	Analyse Games	3
	Create Survey	2
	Create Tasks for Participants	2
	Create a Contract and GDPR Form	1
	Conduct Tests, Interviews and Focus Group	18
December	Visualise Data	9
	Research into UX Laws	3
	Wireframing	7
January	Design Poster	7
	User Testing	3
	Figma	14

	Submit Poster Poster Presentation	1 1
February	User Testing Data Visualisation	14 3
March	Figma Report	7 21
April	Report Video Submission of Project	21 3 1
May	Viva	1

Sources and References

Game Maker's Toolkit (2021). The Power of Video Game HUDs. *YouTube* [video]. 29 April. Available from: https://www.youtube.com/watch?v=4Bv45aPMGyI [Accessed 09 October 2023].

HoYoLAB (2022) *In-Game UI Explanation.* Available from: https://www.hoyolab.com/article/5921298 [Accessed 25 October 2023].

Interface In Game (2023) *Loot*. Available from: https://interfaceingame.com/screenshots/genshin-impact-mobile-loot/ [Accessed 26 October 2023].

Jorgensen, K. Llanos, SC. (2011) *Do Players Prefer Integrated User Interfaces? A Qualitative Study of Game UI Design Issues* [online]. Report number: . DiGRA. Available from: http://www.digra.org/wp-content/uploads/digital-library/11313.34398.pdf [Accessed 06 October 2023].

Jorgensen, K. (2012) Between the Game System and the Fictional World: A Study of Computer Game Interfaces*. Games and Culture: A Journal of Interactive Media* [online]. 7 (2). [Accessed 06 October 2023].

Kristiadi, DP. Udjaja, Y. Supangat, B. Prameswara, RY. Warnars, HLHS. Heryadi, Y. Kusakunniran, W. (2018) *The effect of UI, UX and GX on video games* [online]. Report number: 17618073. IEEE. Available from: https://ieeexplore.ieee.org/abstract/document/8311702 [Accessed 06 October 2023].

Mori, H. (2019) *Approach to multi-platform game UI design* [online]. XAMK. Available from: https://www.theseus.fi/bitstream/handle/10024/167129/Mori_Hana.pdf?sequence=2&isAllowed=y [Accessed 07 October 2023].

Nielsen, J. (2012) Thinking Aloud: The #1 Usability Tool. *Nielsen Norman Group* [online]. [Accessed 24 October 2023].

Nielsen, J (1997) The Use and Misuse of Focus Groups. *Nielsen Norman Group* [online]. [Accessed 24 October 2023].

Norman, D.A (1998) *The Design of Everyday Things* [online]. London: MIT. [Accessed 26 October 2023].

Norman, D.A (2013) *Design of Everyday Things* [diagram]. Cambridge, Mass: MIT Press Ltd, p. 212.

Peacocke, M. Teather, RJ. Carette, J. MacKenzie, IJ. McArthur, V. (2018) An empirical comparison of first-person shooter information displays: HUDs, diegetic displays, and spatial representations. *Entertainment Computing* [online] 26, pp. 41-58. [Accessed 06 October 2023].

Playbookux (2023) *Why are Focus Groups in User Experience Research?.* Available from: https://www.playbookux.com/what-are-focus-groups-in-user-experience-research/ [Accessed 25 October 2023].

Razbuten (2022). What Elden Ring Is Like For Someone Who Doesn't Play Games. *YouTube* [video]. 31 December. Available from: https://www.youtube.com/watch?v=WamFLD7Y2-4&t=861s [Accessed 07 October 2023].

Royal College of Art (2023) *Reflections on Inclusivity: Design.Inclusive with Patricia Moore.* Available from: https://www.rca.ac.uk/news-and-events/news/design-inclusive-with-patricia-moore/ [Accessed 26 October 2023].

ScienceDirect (2023) *User Interface Design*. Available from: https://www.sciencedirect.com/topics/computer-science/user-interface-design [Accessed 07 October 2023].

Swenson, L (2014) Solving the Right Problem and Finding Your Own Solution: An Interview with Don Norman. *UX Magazine* [online]. [Accessed 26 October 2023].

Yin, P. (2019) *Research on Design and Optimization of Game UI Framework Based on Unity3D* [online]. Report Number: 19359798. IEEE. Available from: https://ieeexplore.ieee.org/document/8990972 [Accessed 06 October 2023].