Project Mentality

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CST-451 Capstone Project Proposal

Grand Canyon University

Instructor: Professor Michael Landreth

Revision:2

Date:1/21/2021

**ABSTRACT**

Project Mentality is an empathic project that will have the ability to improve the relationships of people who suffer from various mental illnesses and disabilities. As of right now, the game will only have 2 levels. However, I hope to expand on this past the completion of the 1.0 update, with more illnesses and disabilities.

Many friends and family of mine suffer from various illnesses, including schizophrenia, depression, anxiety, autism, downs syndrome, and more. I see their relationships and how many people really don’t grasp when me or my friend explains their issues and I want to help with that. I have quite a bit of experience with therapy and with some of these issues and am confident I can portray these ideas better in a game, than most can with words.

The goal is to provide this game for free on Steam, or a stand-alone client. If it’s on a stand-alone client, I will most likely post the game on Itch.io. This is to allow as many people as possible to try the game and reach as many people as possible.

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| History and Signoff Sheet |

**Change Record**

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| --- | --- | --- |
| **Date** | **Author** | **Revision Notes** |
| 5/4/2021 | Carson Perry | Added the issue pertaining to the Final Architectural Plan document |
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| **Overall Instructor Feedback/Comments** |

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| **Overall Instructor Feedback/Comments** |

**Integrated Instructor Feedback into Project Documentation**

Yes  No

**Project Approval**

Professor Mark Reha

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Project Overview and Project Objectives

**State the Problem and Background**

There are many people that don’t quite understand what living with a mental illness is like, and it’s thusly hard to empathize with people who suffer from them. With the growing use of the internet for communication, empathy is a much harder trait to find where people are simply words or videos on a screen. I wish to help assist in helping people better empathize and understand how some suffer from these illnesses and disabilities by creating moderately sized simulation-style games that present the challenges and differences when living with these.

**Christian Worldview**

I’m addressing the ethical and social aspects of the Christian Worldview. Empathy is a large part of deeper relationships between individuals. Creating a game that helps enhance that empathy is able to better love and care for your neighbors, as well as show God’s love towards those that suffer from these disabilities and illnesses. Ethically, helping people understand each other and connect on a better emotional way, is one of the most ethical things I can think of to help my community and other communities at large.

**Project Objectives**

Working basic Camera controls and movement, physics are properly implemented, and objects respond accordingly, working objective system, working dialogue system, Event handler and timers, Main menu with level choice, OCD level, and a Schizophrenia level

**Challenges**

I have minor experience using Unity to create primarily 2D games, learning to create a 3D game will provide an unknown amount of challenge to my project (I have plenty of learning material that I bought a year ago to learn this). I’ve never created a game as fleshed out as I’m planning with this. Documentation has never been my strong suit, so the documentation side of this project will definitely be a challenge for me as well.

**Benefits and Opportunities**

This would provide me an opportunity to research 3D game creation, game documentation, scientific research experience, Unity 3D libraries, performance optimization, project management and documentation, learn new skills, and learn to play and manage my time efficiently.

***NOTE: If necessary, you may add subsections to those listed in order to match the requirements in the assignment description. Do not remove any top-level sections (those that are listed in the Table of Contents).***

Project Scope

1. In Scope: OCD Level, Schizophrenia Level, Music, and a Main Menu. Out of Scope: ADHD Level and Autism Level
2. Use the template to list all known stakeholders and contacts, if applicable, including self (for some projects self may be the only name listed)

|  |  |  |
| --- | --- | --- |
| Stakeholder Name | Role(s) | Responsibilities |
| Carson Perry | Product Owner | God |
|  |  |  |

1. List the work breakdown required to satisfy the project objectives. Identify teams and other resources that may be required to successfully complete the project.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Work Breakdown Structure | | | | | | | | | | |
| ID | Task | Dependencies | Status | Effort Hours | Cost | Start Date | Planned Completion | Estimate to Completion | Actual Completion | Resource |
| 1 | Main menu | Unity | Planned | TBD | N/A | TBD | TBD | TBD | TBD | TBD |
| 2 | Background Music | Royalty Free Music/FLStudio | Started | TBD | N/A | 1/16/21 | TBD | TBD | TBD | AcesToAces |
| 3 | OCD Level | Unity | Planned | TBD | N/A | TBD | TBD | TBD | TBD | TBD |
| 4 | Schizophrenia Level | Unity | Planned | TBD | N/A | TBD | TBD | TBD | TBD | TBD |
| 5 | Learn Unity Physics Engine | Unity | Started | 3.25 | N/A | 1/19/21 | 2/14/21 | 12hrs | TBD | Udemy |
| 6 | Learn asset management | Unity | Upcoming | TBD | N/A | TBD | TBD | TBD | TBD | Udemy |
| 7 | Learn Unity Camera and player controllers | Unity | Started | 2.75 | N/A | 1/20/21 | 2/14/21 | 17hrs | TBD | Udemy |

Project Success Measures

1. Describe what measures will be used to calculate project success.
2. Use the template to list the project completion criteria.

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| Project Completion Criteria |
| 1 -Working Camera and Player controllers |
| 2 – Working Main Menu |
| 3 – Working Physics |
| 4 – Event Handler and Timer |
| 5 – Working UI and Objectives |
| 6 - OCD Level |
| 7 – Schizophrenia Level |

1. Use the template to list the project assumptions and constraints, if applicable. An assumption is an educated guess that a likely condition or circumstance is presumed to be true. A constraint is a limiting condition or circumstance that defines the project boundaries. Assumptions allow the project to succeed. Constraints restrict or limit the project execution.

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| Assumptions and Constraints | | | | | |
| ID | Description | Comments | Type | Status | Date Entered |
| 1 | Proper Documentation and Time management | I’ve never been too great with these. | Constraint | Current | 1/24/21 |
| 2 | Planning | Even in English, I wouldn’t plan out Essays, this seems it would be difficult | Constraint | Current | 1/24/21 |
| 3 | I can detach the Camera controls from Player controls | This is important for some mechanics I have planned for some of the levels | Assumption | Current | 1/24/21 |
| 4 | I can get working animated 3D models for free from the Unity Asset Store | I’ve seen and used free 2D assets from here, so there should be similar for 3D | Assumption | Current | 1/24/21 |
| 5 | I can properly explain and show how some people suffer from mental illnesses or disabilities | I have connections to many people who have these issues, and they have told me much of what it’s like. | Assumption | Current | 1/24/21 |
| 6 | Stick to the core of the project | I have gotten too ambitious in the past when making 2D games, that slowed me down greatly after wanting to implement extra content during production. | Constraint | Current | 1/24/21 |

Project High-Level Solution

**Introduction**

It’s nearly impossible to truly understand why people think and believe the way that they do if they differ at all from your own experiences and opinions. This is very evident in politics. Both sides of the political spectrum paint and view the opposing side as evil and terrible people, yet neither side wishes to do harm. They both believe they’re doing to right thing, but in very different ways. This is all without introducing any mental disabilities or illnesses. Autism, for example, completely changes the how of their thinking, rather than just the why. This makes it even harder to empathize and understand. When others can’t understand or empathize with people who suffer from mental illnesses and disabilities, it’s highly detrimental for the person who suffers from it and severely harms relationships with those people.

**Solution**

The goal of this project is to create a stylized game that helps show people the how and why people with these illnesses and disabilities think, and how they experience life. This will, hopefully, aid in people understanding how to better interact with these people. Friends of mine have been harmed and are scared of forming relationships because of the fact people they loved just weren’t able to understand why they are the way that they are, nor how to adapt to that. The end goal is for this to help rectify that so that people can have meaningful relationships despite mental differences.

Project Controls

1. Use the template to define the risk and list the steps to prevent the risk from occurring or the steps to minimize the chances of it happening. The contingency plan describes alternative solutions to reduce the impact of the risk. An example of a contingency plan is to provide the customer a temporary web server if there are delays in delivery/completion. If the risk has already happened, then provide an entry in the issue log.

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| Risk Management | | | | |
|  | **Risk Probability** | **Risk Impact** |  |  |
| **Event Risk** | **(high, medium, low)** | **Risk Mitigation** | **Contingency Plan** |
| Learning 3D Game creation | Medium | Difficult to make a 3D game, without knowing how to | Utilize all of the courses I’ve bought over the years | Can create a two-dimensional, less immersive game instead |
| Misrepresentation | Low | Could harm the formation of relationships instead | Place a disclaimer explaining that people suffer these illnesses and disabilities differently | Have professionals, as well as victims of the illness or disability critique the game |
| Creating complex mechanics | High | Could break or bug out the game | Have plenty of unit tests for each individual mechanic before combining them | Dumb down the mechanics and make new, simpler ones |

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| Issues Log | | | | | | | | |
| **ID** | **Description** | **Project Impact** | **Action Plan/Resolution** | **Owner** | **Importance** | **Date Entered** | **Date to Review** | **Date Resolved** |
| 1 | Need more detail in the Final Architectural Plan | Architectural plan fails to specify every aspect of the project for creation, and may lead to poor information and implementation of features | Add more detail, more flowcharts, and more instructions as to how I imagine the features and mechanics of the game should be implemented | Carson | *High* | *5/4/21* |  |  |
| 2 |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |

1. All projects have either anticipated and planned or unexpected changes. Describe any issues in management or change management due to the anticipated and planned or unexpected changes. Use the template to list anticipated and planned or unexpected changes.

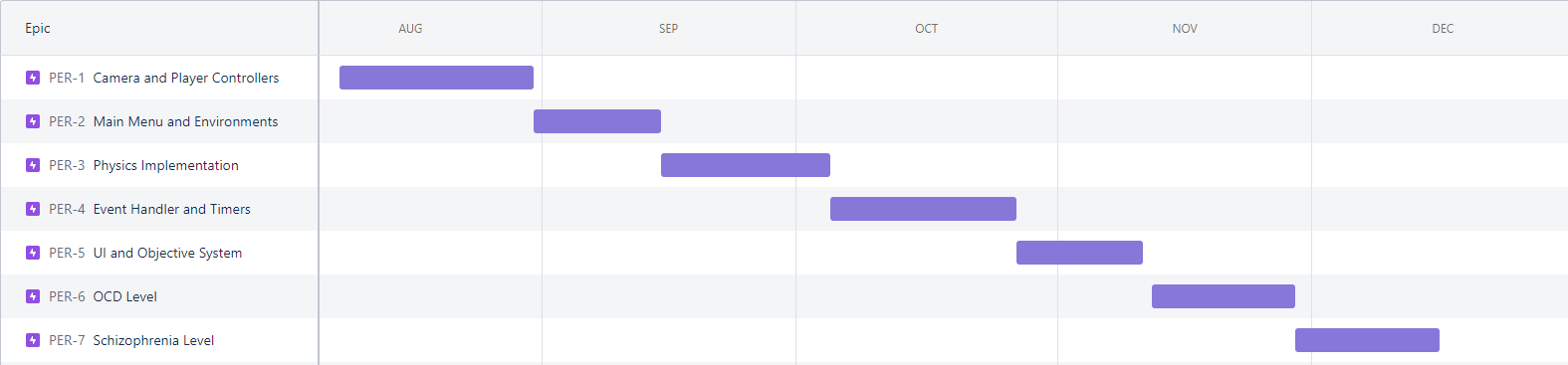
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| Change Control Log | | | | | | | | | |
| **ID** | **Change Description** | **Priority** | **Originator** | **Date Entered** | **Date Assigned** | **Evaluator** | **Status** | **Date of Decision** | **Included in Rev. #** |
| 1 | No changes yet |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |  |

1. Use the template to describe how the end user is involved in the software development, if applicable. Include relevant information about meetings, reviews, presentations, etc.

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| Roles and Responsibilities | | | |
| Name | Team | Project Role | Responsibility |
| Names are promised to be anonymous | User | Illness and Disability Experience Team | Ensure my implementation is true to their experience, or true to others’ experiences with that illness or disability |
| Dr. Wahl | Psychologist | Psychologist Team | Ensure that the implementation is sound to the knowledge we have of the illness or disability being presented. |

Project Cost and Schedule

No Cost Applicable



Appendix A – References

*List all references using APA style*

Appendix B – Copyright Compliance

For each external technical tool or code used, provide a reference to its copyright policy, clearly showing your right to use it. For each external technical tool or code used, detail how you used it, how you adapted it, how you modified it (if permitted), and why did you use it as opposed to write your own. Only a small portion of your project may rely on external code. When code libraries/packages are used, explain why this was necessary/required/recommended. Seek instructor approval for using external resources prior to beginning to work on the project.