306 Project Pan

TEAM SEVEN

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Contents

1. Game Overview

1.1 Serious Game Concept:

The game's concept is empathy and perspective taking.

1.2 Game Genre:

The game genre is sandbox role playing game. The game offers the player a large amount of freedom to interact with and explore the environment. The game is also incorporated with puzzles.

1.3 Targeted Audience

The targeted audience include young adults and teenagers with age ranging from 15 to 25 years old.

1.4 Player Type and Game Mode

This is a single player game and the player type is explorer

1.5 Goal

You are playing as the main character who is going through the loss of their parent from suicide. Through solving a series of puzzles, the character identifies signs that had led to their mother's depression and eventual suicide. The game takes a journey through the parent's life through the protagonist's memory to show the progression of depression. This game teaches the player to find signs of depression in themselves and their loved ones.

1.6 Central Character

The main character can walk and explore the environment to find clues and solve puzzles. They can interact with objects and other characters in the game.

1.7 Game World

The main character is placed in a restricted map which it can freely explore. Different levels are represented by different maps with increasing difficulty.

1.8 Story

The main character's parent has committed suicide when everything seemed normal. The protagonist then lives through her memories again to get a different perspective on the events that occurred in the past. The game shows the gradual disintegration of the parent's mental state and teaches the player how to identify symptoms of depression in themselves or other people.

1.9 Scoring and Live Mechanics

Scoring is based on a combination of time taken and how the player performs on the puzzles as well as the amount of special objects collected. The player has a 'sanity' bar which acts as a life system, you slowly lose sanity as you take longer to complete the puzzles, successfully completing the puzzle will regenerate a small amount of sanity.

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1.10 Level Generation

Different pre-set levels with a unique map and puzzles associated with it. Completing a level allows you to progress to the next level

2. Design Features

For this project our team will attempt to implement few design features including:

- A 3D version of the game (20%)
- Foxed level design with increasing levels of difficulty (5%)
- Adding sound to the game and triggering on appropriate events (%10)

3. Advanced Feature

Save game (10%)

The player will have the option to save the current state of the game. This is an advanced feature and worth 10% because the current states of objects and data will have to stored somewhere and can be retrieved when the user reload the game.

4. Tools and Technologies

For this project, we are going to use a range of different technologies to support team communication throughout the project, version control for the implementation and testing phase and documentation of design decision and implementation progress. The technologies and tools include:

- Version Control: Git and Github repository. https://github.com/JohPa8696/306GameDev
- Documentation: Github's Wiki https://github.com/JohPa8696/306GameDev/wiki
- Communication: Facebook
- Development Environment: Unity 3D

5. Work Breakdown Structure

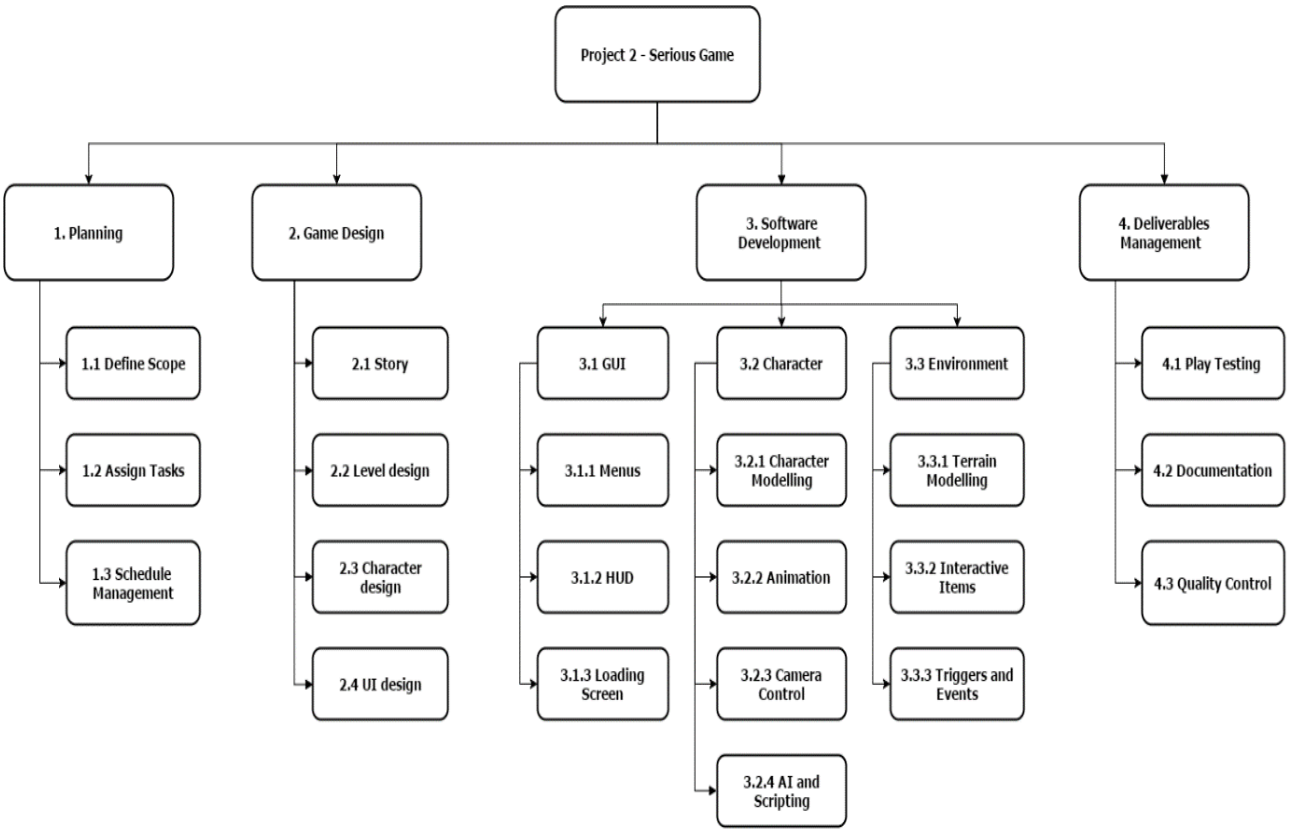

Figure 1. Work breakdown Structure

6. Task Assignment

We will split into two team each is responsible for an area of the project. Each member will be assigned to a subtask within that area as shown in the table. The two teams are:

- Team Character: Jay, Dinal, Vincent and Jack.
- Team Environment: Priyankit, Alex, Aaron and Johnny.

WBS	Task Name	Description	People
1	Planning		
1.1	Define Scope	Review requirements and brainstorm ideas and design features	Everyone
1.2	Assign Tasks	Assign tasks to team members	Everyone
1.3	Schedule Management	Define milestones and implementation deadlines	Everyone
2	Game Design		
2.1	Story	Define a concrete story for the game	Everyone
2.2	Level Design	Brainstorm ideas and design levels of the game	Everyone
2.3	Character Design	Determine features for different characters	Everyone
2.4	UI design	Determine the main interface of the game	Everyone
3	Software Development		
3.1	GUI		Team character
3.1.1	Menu	Design and implement the main menu of the game which consists different options such as level selection, Start.	Team character
3.1.2	HUD	Design and implement features display the current state of the character such as health, stamina	Team character
3.1.3	Loading Screen	Design and implement the loading screen	Team character
3.2	Character		
3.2.1	Character	Implement character features such as different abilities.	Team character
3.2.2	Character Modelling	Model the character's features and abilities	Team character
3.2.3	Animation	Design and implement actions which the player or NPC's can perform.	Team character
3.2.4	Camera Control	Design and implement a camera which shows the player's view	Team character
3.2.5	AI and Scripting	Design and implement an AI, which will allow NPC's to perform tasks.	Team character
3.3	Environment		
3.3.1	Terrain Modelling	Design and create a model of the terrain.	Team environment
3.3.2	Interactive Items	Design and implement items which the player can interact with.	Team environment
3.3.3	Triggers and Events	Design and implement triggers which are activated by the player creating an event.	Team environment
4	Deliverables Management		
4.1	Play Testing	Play the game to test for bugs.	Everyone
4.2	Documentation	Records all work that has been produced in the development of the game. This record will be stored in the GitHub wiki.	Everyone
4.3	Quality Control	Ensure all work maintains a consistent standard.	Everyone
4.4	Deployment	Creates an executable which can run the game.	Everyone

7. Risk Assessment and Management Plan

Project Risk Assessment					
Risk Description	**Possible Consequences**	**Probability**	**Severity**	**Risk Exposure**	**Solution to minimize risk/damage**
Underestimate project scope	Reduce/remove design features which cannot be completed	6	8	48	Ensure project scope and plan is well-defined and use good estimates.
New, unfamiliar technology requiring unexpected amount of training/research	Less development time, more spent on familiarizing with technology.	7	5	35	Assign technical co-ordinator to ensure all members understand the new technology.
Interference from other coursework	Cancellation or less time for project meetings	7	3	21	Good project management plan and communication.
Web-based/Android platform limitation restricts use of technology.	Redesigning game features consuming large amount of time	2	8	16	Research game platform(Unity) and understand its constraints.
GitHub problems due to large number of project members	Harmful conflicts resulting in halt of development until conflicts are resolved.	2	6	12	Communicate often with other group members and have face to face meetings often
Total Exposure = 132					

Figure 2. Risks Management