

Implementation Plan for System : *One Dungeon*

Assignment in the course PA1435 Objektorienterad design

2017-04-10

Author Name	Social Security Number	Thinking(%)	Writing(%)
Hampus Olsson	910813-4298	25	25
Jacob Ahnstedt	940209-8355	25	25
Emil Grenebrant	950215-5212	25	25
Filip Lundbeck	961118-3113	25	25

System Description

The goal is to make a game with a interactable GUI. The game consist of a dungeon randomly generated with the help of Twitter pages. The user explores the dungeon with other users to descend a set amount of floors to reach the final boss.

During the game, the user will find items that will help along the way ranging from weapons and gear to utility items. The user will also be able to meet with other users or wandering personas inside the dungeon. During these encounters the user will have different options of interactions depending on if it's another user or what kind of wandering persona the user meets.

If the user manages to beat the final boss the system will calculate a score for the player depending on how much of the dungeon the user explored, how much gold the user found, the number of monsters the user slayed and how many special items the user is carrying. The score is stored on a personal high-score list.

Prioritised List of Use Cases

We prioritize the parts that is required for the game to function on a basic level. The most important part in our implementation is to move and be able to defend yourself against the monsters lurking in the dungeon. This lays the foundation for the core game, and will be enhanced furthermore by the addition of items and an inventory. The user will be able to equip different kinds of items and also use them in battle.

To orient yourself in the dungeon, you will need some kind of navigational aid. The addition of a dungeon map that progressively updates as you traverse it will be very useful, but not as important as the core use cases.

At this point, the main game will be more or less complete. The addition of convenience functions, such as being able to save and restore the game progress, will make it a lot easier for the user to play the game.

Multiple users should be able to play together on a listen server. This requires functions such as being able to host a game, join it, chat with other users on the particular server and trade with others. Using similar variations of these functions, we can make NPCs that roam the dungeon and provide useful items to trade and start conversations with the users. And of course, at the end of a session, the users should be able to quit the game.

The goal of the game is to reach the final boss and score as much points as possible on the way. At the end of the game, if the user have enough points to make it to the high-score list, they can enter it by writing their signature. It will be saved locally so that the user can view it at a later time.

1. Move	5
2. Attack	3
3. Evade	3
4. Loot	4
5. Check Inventory	4
6. Equip Item	5
7. Use Item	5
8. Check Map	8
9. Save	5
10. Load	5
11. Host Game	13
12. Join Game	13
13. Chat	6
14. Trade	8
15. Talk	4
16. Quit	2
17. Save Highscore	4
18. Display Highscore	3

Estimated Velocity Per Iteration

We estimate that the average number of story points per iteration will be 13 points. The least number of points that we will manage will be about 8 points and max about 18 points. It is possible that the estimates are too low and, if so, the amount will be increased. The goal is to have the first three use cases implemented for the first iteration.

Implementation Plan

Based on our priority list, to get the minimal viable product, we have to implement the core gameplay mechanics of the game for the first iteration. This is to get the base game working for testing and see if there should be further development of the game.

First iteration (11)

1. Move
2. Attack
3. Evade

Second Iteration (13)

1. Loot
2. Check inventory
3. Equip item

Third Iteration (13)

1. Use item
2. Check map

Fourth Iteration (10)

1. Save game
2. Load game

Fifth and Sixth Iteration (26)

1. Host game
2. Join game

Seventh Iteration (14)

1. Chat
2. Trade

Eighth Iteration (13)

1. Talk
2. Quit
3. Save highscore
4. Display highscore