

## Use Case Overview for System : *One Dungeon*

Assignment in the course PA1435 Objektorienterad design

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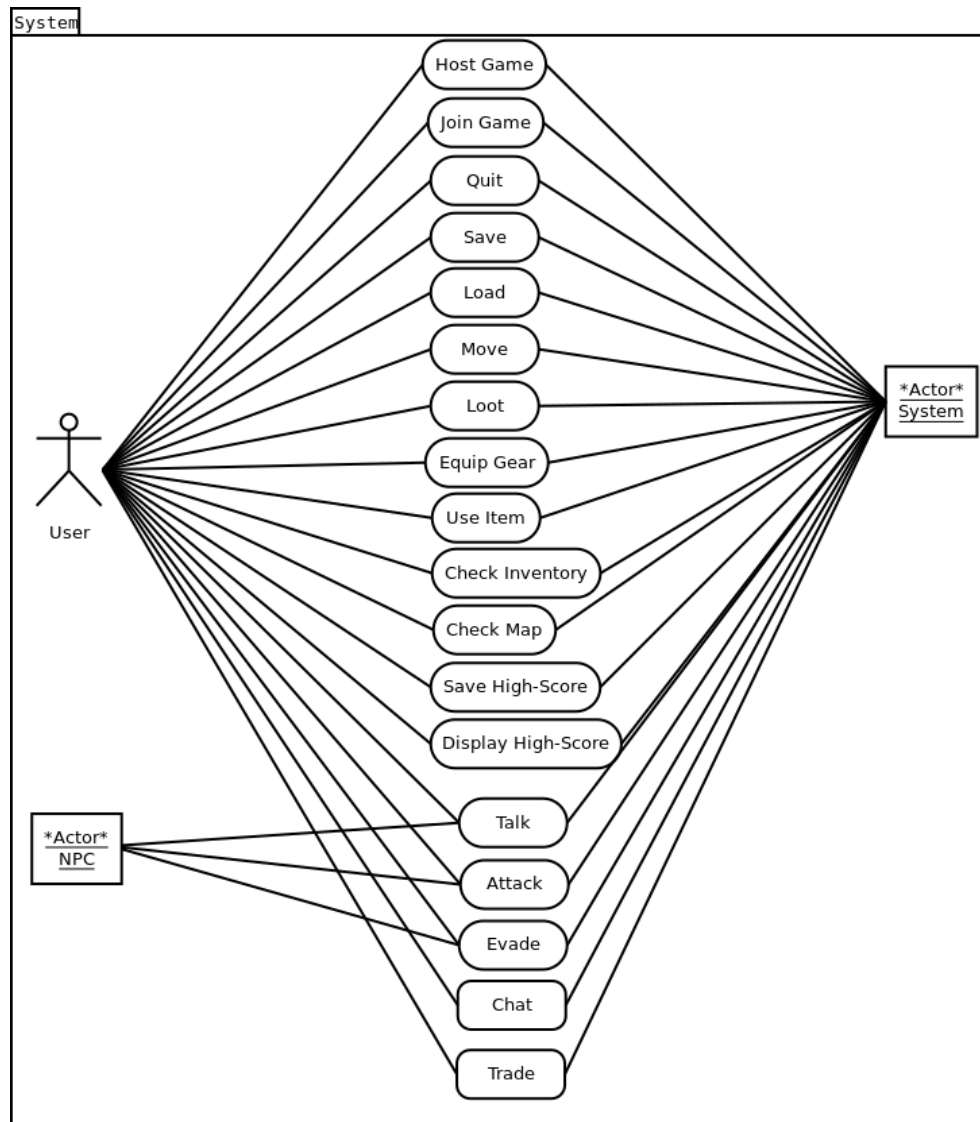
Author Name	Social Security Number	Thinking(%)	Writing(%)
Hampus Olsson	910813-4298	25	25
Jacob Ahnstedt	940209-8355	25	25
Emil Grenebrant	950215-5212	25	25
Filip Lundbeck	961118-3113	25	25

## **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.



## **Description of Actors**

### **User:**

The user is a person who interacts with the application.

### **NPC:**

NPC stands for Non Playable Character and is controlled by the system

### **System:**

The core of the application that provides the user with information.

### **Use Case 1**

Join Game

#### **Actors**

User

#### **Description**

A user requests to join a game. The system requires necessary information from the user. The user enters the necessary information. The system connects the user to the game.

#### **Main Course of Events**

<b>Actor</b>	<b>System</b>
1. A user arrives at the join game screen	
	2. The system requires necessary information
3. The user enters the necessary information	
	4. The system connects the user to the server

### **Use Case 2**

Host game

#### **Actors**

User

#### **Description**

A user requests to host a game. The system requires the necessary information. The user enters the necessary information. The system creates the game and puts the user in it.

#### **Main Course of Events**

<b>Actor</b>	<b>System</b>
1. A user requests to host a game.	
	2. The system requires the necessary information.
3. The user enters the necessary information.	
	4. The system creates the game.
	5. The system puts the user in the game.

### **Use Case 3**

Quit

#### **Actors**

User

#### **Description**

A user requests to quit the game. The system asks the user if they're sure. The user enters their choice. The system shuts down.

#### **Main Course of Events**

<b>Actor</b>	<b>System</b>
1. The user requests to exit the application	
	2. The system asks if the user is sure and provides the user with the available choices
3. The user enters their choice	
	4. The system shuts down.

#### **Alternative Flow of Events**

4. The system ignores the request

### **Use Case 4**

Move

#### **Actors**

User

#### **Description**

A user requests to move into another room. The system checks if the path is available. The system generates the new room and moves the player into it.

#### **Main Course of Events**

<b>Actor</b>	<b>System</b>
1. The user requests to move into another room	
	2. The system checks if the path is available
	3. The system generates a new room and puts the user in it.

#### **Alternative Flow of Events**

3. The system denies the request.

### **Use Case 5**

Attack

#### **Actors**

User, NPC

#### **Description**

The user requests to attack the NPC. The system calculates the attack. The NPC suffers damage or dodges the attack.

#### **Main Course of Events**

<b>Actor</b>	<b>System</b>
1. The user requests to attack the NPC	
	2. The system calculates the attack
3. The NPC suffers damage from the attack	

### **Use Case 6**

Loot

#### **Actors**

User

#### **Description**

The user requests to loot the room. The system checks if there is any loot and adds it to the user's inventory.

#### **Main Course of Events**

<b>Actor</b>	<b>System</b>
1. The user requests to loot the room	
	2. The system adds the loot to the users inventory

### **Use Case 7**

Check Map

#### **Actors**

User

#### **Description**

The user requests to look at map. The system displays the map to the user.

#### **Main Course of Events**

Actor	System
1. The user requests to look at map	
	2. The system displays the map to the user

### **Use Case 8**

Save

#### **Actors**

User

#### **Description**

The user wants to save their progress. The system receives the request and saves the game locally.

#### **Main Course of Events**

Actor	System
1. The user requests to save the game	
	2. The system collects all user data and save it locally

### **Use Case 9**

Load

#### **Actors**

User

#### **Description**

The user wants to restore their progress. The system receives the request and loads the information back into the game

#### **Main Course of Events**

Actor	System
1. The user requests to load the game	
	2. The system retrieves the data and store it in the game

### **Use Case 10**

Check inventory

#### **Actors**

User

#### **Description**

The user requests to check the inventory. The system retrieves all items currently stored in the user's inventory and displays it for the user.

#### **Main Course of Events**

<b>Actor</b>	<b>System</b>
1. The user requests to check the inventory	
	2. The system retrieves all items and displays a list of the collection

### **Use Case 11**

Use item

#### **Actors**

User

#### **Description**

The user wants to use an item. The system checks the inventory to see if that item is available. The system also checks if the item is usable at the current moment by checking its requirement. If it meets the requirement it will trigger a special event.

#### **Main Course of Events**

<b>Actor</b>	<b>System</b>
1. The user requests to use a specific item	
	2. The system checks if the item is available in the inventory.
	3. The system checks if the item can be used with the present set of circumstances
	4. The system calls an item specific function

#### **Alternative Flow of Events**

2. The system tells the user that the item doesn't exist
3. The system tells the user that it's not suitable to use the item at this moment



### **Use Case 12**

Equip gear

#### **Actors**

User

#### **Description**

The user requests to equip an item. The system checks if the item is available and equips the item for the user.

#### **Main Course of Events**

Actor	System
1. The user requests to equip an item	
	2. The system checks if the item is available
	3. The system equips the item on the user

#### **Alternative Flow of Events**

3. The item is not available, the system denies the request.

3. The item is not equipable, the system denies the request.

### **Use Case 13**

Evade

#### **Actors**

User, NPC

#### **Description**

The user wants to evade a NPC. The system calculates if the evade was successful. If the evade was successful the system puts the user into another room, else the user is stuck in combat.

#### **Main Course of Events**

Actor	System
1. The user requests to evade a NPC	
	2. The system calculates if the evade was successful
	3. The system puts the user into another room

#### **Alternative Flow of Events**

3. The NPC attacks the player.

**Use Case 14**

Save High-score

**Actors**

User, System

**Description**

After a successful session in the game, the system calculates the score. If the score can be inserted into the high-score list, it adds it.

Actor	System
	1. The system calculates the score
	2. The system requests the input of a name for the high-score from the user
3. The user inputs a name	
	4. The system stores the high-score

**Use Case 15**

Display High-score

**Actors**

User, System

**Description**

The user may want to see the current high-score list and requests the system to display it.

Actor	System
1. The user requests to view the high-score list	
	2. The system retrieves and displays the high-score list to the user

**Use Case 16**

Talk

**Actors**

User, NPC

**Description**

The user wants to initiate a conversation with a NPC. The NPC gives the user a prompt that the user will have to answer. This exchange of information happens until the conversation is exhausted or the user quits.

**Use Case 17**

Chat

**Actors**

User, system

**Description**

The user requests to chat with another user. The second user either accepts or denies the request. The system opens a chat for the both users.

**Use Case 18**

Trade

**Actors**

User, system, NPC

**Description**

The user wants to trade with a NPC or another user. The other part decides to accept or deny the request. The system initiates the trade.

## References

[1] PA1435