[Instructions: Remove everything that is not a heading below and fill in with your own diagrams, etc.]

1. Brief introduction __/3

The feature I am working on is UI. The menus will be designed to make the game play as smooth as possible with all other necessary features like play, quit, shop, achievement, settings. The menus will allow the user to control the game and make several game option choices and view game information as well as their profile like achievements and status.

I will also add the Health bar, Special power usage and the score bar in the game and the other team lad will update those throughout the game.

2. Use case diagram with scenario _14

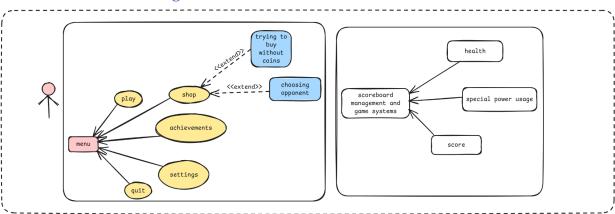
[Use the lecture notes in class.

Ensure you have at least one exception case, and that the <<extend>> matches up with the Exceptions in your scenario, and the Exception step matches your Basic Sequence step.

Also include an <<include>> that is a suitable candidate for dynamic binding]

Example:

Use Case Diagrams



Scenarios

Name: Menus

Summary: The player uses the menu to customize the game and to choose options like play and quit and also customize the game setting. They can also view their achievement and achievements through the menu and buy things from shop.

Preconditions: Game has been launched.

Basic sequence:

Step 1: The game has been launched and the player chooses the *play* option.

Step 2: If the *Play* option is chosen, the game starts and transitions to the gameplay screen..

Step 3: Once the game has been started, the player will be able to collect coins to gain a score.

Step 4: In the game, for the score management and game system there will be a health bar, score bar and special power usage bar which will be updated by other programmers.

Step 5: If the *Settings* menu is chosen, the player can adjust game settings (e.g., sound, graphics).

Step 6: If the *Shop* menu is chosen, the player will be prompted to a new screen and will be able to choose characters, costumes and weapons.

Step 7: If the player chooses the *achievements* option, they will be prompted with a new screen to review their game achievements.

Step 8: If the *Quit* menu is chosen, the player will exit the game.

Exceptions:

Step 1: If the player wishes to choose his opponent, it will not let him to do that

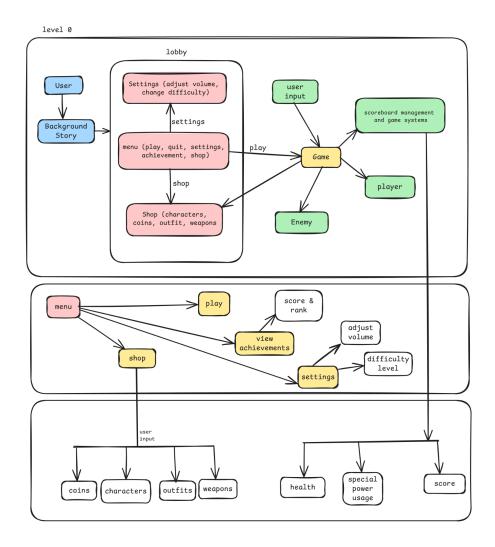
Step 2: If the player wishes to buy anything from the shop without having coins, it will not let him do that.

3. Data Flow diagram(s) from Level 0 to process description for your feature _____14

[Get the Level 0 from your team. Highlight the path to your feature]

Example:

Data Flow Diagrams



Process Descriptions

- 1. The main menu accepts player input (e.g., Start, Settings, Shop, View achievement, Quit). Routes the player's action to the appropriate submenu or action.
- 2. If the player chooses Play, it will initiate the Game Start/Quit Processing.
- 3. If the player chooses achievement, it will query Player Data to show progress or achievements.
- 4. If the player chooses Quit, it will exit the game.
- 5. When the coins appear in the game the players will try to grab them if they want and also they can attack each other to take the coins.
- 6. Whoever gets the coins first will have the score added to their profile.
- 7. During the attack the health bar will be affected as well.

- 8. Health will be initialized as hundred.
- 9. Throughout the game the health will be changed.
- 10. Depending on the injured spot, health will decrease.
- 11. There will be hidden treasure in the game if the player can find that depending on the treasure their health will change. Some treasure can be poisonous and lower their health bar and some can be beneficial that will increase their health bar.
- 12. Health bars can not go over 100 and it is essential to decide who will win.

4. Acceptance Tests _____9

[Describe the inputs and outputs of the tests you will run. Ensure you cover all the boundary cases.]

Goal: Ensure the game menu system is functioning correctly, including selecting options (Play, Settings, Shop, achievement, Quit), adjusting settings, and starting/ending the game and the player's profile has been updated throughout the game depending on their moves.

Steps:

850854400. Launch the game.

850854401. Open the main menu.

850854402. Select each menu option in turn (Play, Settings, Achievement, Shop Quit).

850854403. Verify the correct transition after each selection (e.g., starting the game, opening the settings menu, showing achievement, taking to the shop, quitting the game).

850854404. Launch the game.

850854405. Put score bar, health bar, power usage bar

Expected Results:

| 850855360, | The system should navigate to the correct screen when each menu option is |
|------------|---|
| selected. | |

850855361. The game should start when the Play option is selected.

850855362. The Settings menu should open when selected, and changes should be applied when saved.

850855363. The achievement menu should display the player's current achievements.

850855364. Selecting Quit should prompt the player to confirm quitting and then exit the game.

850855365. Game is ongoing

850855366. Initialized bars should be on the screen

Menu feature

| Test ID | Test Descriptions | Steps | Expected Results | |
|---------|----------------------|--|--|--|
| Т01 | Menu Navigation | 1. Launch the game. 2. Open the main menu. 3. Select each menu option (Play, Settings, achievement, Shop Quit). | System navigates to the correct screen for each menu option. Game starts, settings open, achievement displayed, shop displayed, game quits. | |
| Т02 | Play option | 1. Select Play option from main menu | The player should be redirected to the game scene. | |
| Т03 | Quit option | 1. Select the Quit option from the main menu. | The player should exit the game. | |
| Т04 | Setting option | 1. Select Settings from the main menu. 2. Adjust sound and graphics settings. 3. Save changes and return to the main menu. | - Settings changes are saved Adjusted sound and difficulty level settings are applied. | |
| Т06 | Achievement option | 1. Select Achievement from the main menu. 2. Verify achievements are displayed. | - Player's achievements are correctly displayed. | |

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| Tests ID | Test Description | Steps | Expected Results |
|----------|---------------------|-----------------------------|--|
| T08 | Score | collect coins | 1. will change throughout the game |
| T09 | Health Bar | the health bar will change. | will change throughout the game |
| T10 | Power ups | using special power | keep track how many times the power has been used. |

5. Timeline _____/10

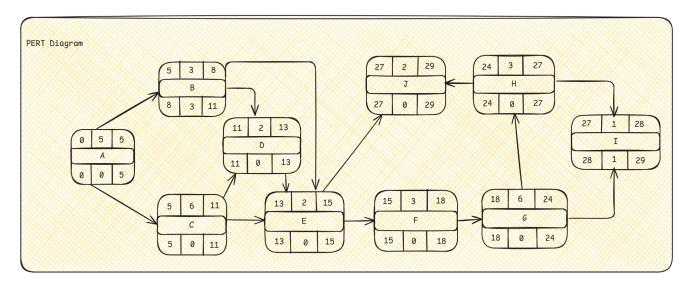
[Figure out the tasks required to complete your feature]

Example:

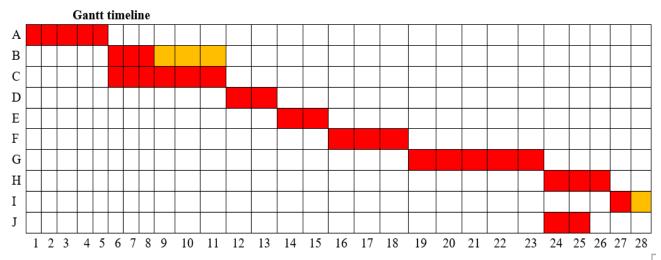
Work items

| Task | Duration (hours) | Predecessor Task(s) |
|----------------------------------|------------------|---------------------|
| A. Requirements Collection | 5 | - |
| B. Level 0 design | 3 | A |
| C. Main menu design | 6 | A |
| D. Updating options of main menu | 2 | B, C |
| E. Drawings | 2 | B, C, D |
| F. Diagrams design | 3 | Е |
| G. Pseudo programming | 6 | F |
| H. Testing | 3 | G |
| I. Debugging | 1 | G, H |
| J. Documentation | 2 | Н, Е |

Pert diagram



Gantt timeline



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