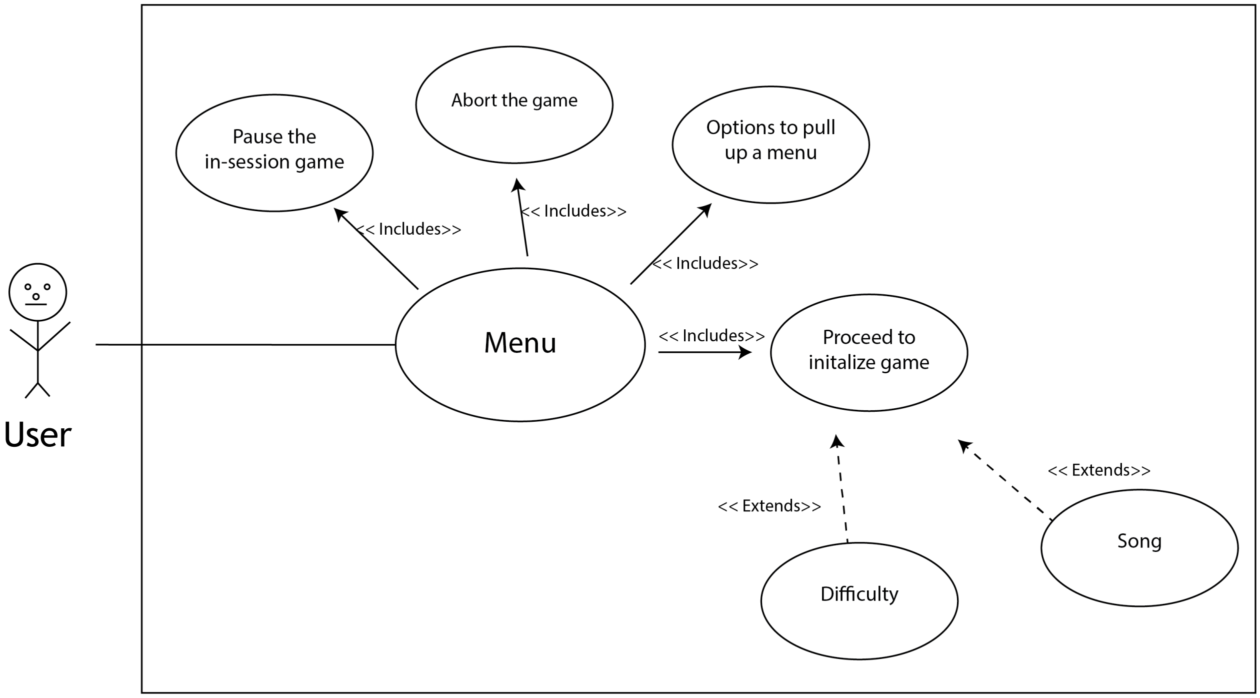
Name_______________________ Mark ___________________/50

1. Brief introduction __/3

Low Effort Games will be bring a single-player, musical-rhythm game to your PC's. "Beat runner" will keep you engaged as you fight your way through every obstacle as the song progresses. Also, the game will include the top 3 greatest hits from the 80's! Now as for my role in the game, I will be in charge of creating an appealing "start menu" with a simple user-friendly interface that will include a "Start", "Options", and "Quit" panel. Now as far as the game, I will bring the ability to "Pause" and "Quit" the game incase you need to get some homework done.

2. Use case diagram with scenario __14



Scenarios

*The priorities are 1 = must have, 2 = essential, 3 = nice to have.

Name: Play
Summary: The user uses the [Start] to proceed to the game.
Actors: User
Preconditions: Game has been initialized.
Basic sequence:

- **Step 1:** User must initialize the game.
- **Step 2:** User will have to click on a button.
- **Step 3:** Button will execute the game command.
- **Step 4:** Begin to play!

Exceptions:

- **Step 1:** User chooses [Song]
- **Step 2:** User Chooses [Difficulty]

Post conditions: Game must be initialized.
Priority: 1
ID: A01

Name: Pause
Summary: The user uses the [Pause] to halt an in-session game.
Actors: User
Preconditions: Game has been initialized.
Basic sequence:

- **Step 1:** User must click on [Pause].
- **Step 2:** Will execute the pause command.
- **Step 3:** Open a Panel with [Resume].

Exceptions:

None

Post conditions: Game must be initialized.
Priority: 1
ID: A02

Name: Options
Summary: The user uses the [Options] to adjust volume of the game.
Actors: User
Preconditions: Game has been initialized.
Basic sequence:

- **Step 1:** User must click on [Options] at the beginning of game
- **Step 2:** Will execute the options command.
- **Step 3:** Open panel with toolbar
- **Step 4:** Toolbar will match level of volume.

Exceptions:

None

Post conditions: Game must be initialized.
Priority: 2
ID: A03

Name: Choose Song
Summary: The user uses the [Song Selection] to control song.
Actors: User
Preconditions: Game has been initialized. [Play] has been pressed.
Basic sequence:

Step 1: Press [Play].
Step 2: Execute the [Song Selection].
Step 3: Open song selection panel.
Step 4: Press on [Song]
Step 5: Load song.

Exceptions:

Step 1: [Song Selection] is not pressed, it will result to the default song

Post conditions: Game must be initialized.
Priority: 3
ID: A04

Name: Choose Difficulty.
Summary: The user uses the menu to proceed to the game.
Actors: User
Preconditions: Game has been initialized.
Basic sequence:

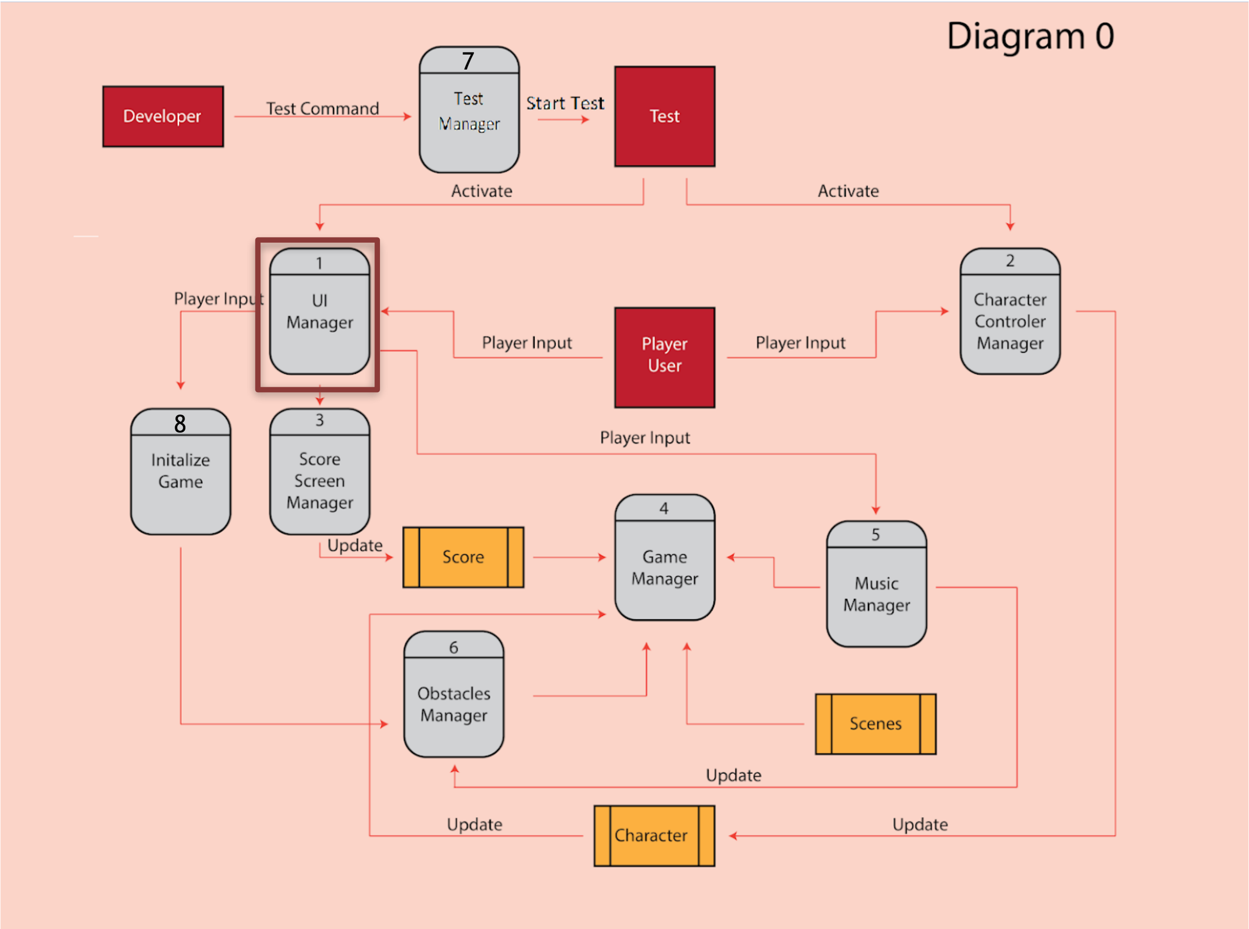
Step 1: Press [Play].
Step 2: Go through song selection.
Step 3: Execute the [Choose Difficulty].
Step 4: Open the difficulty panel.
Step 5: Load the difficulty of game

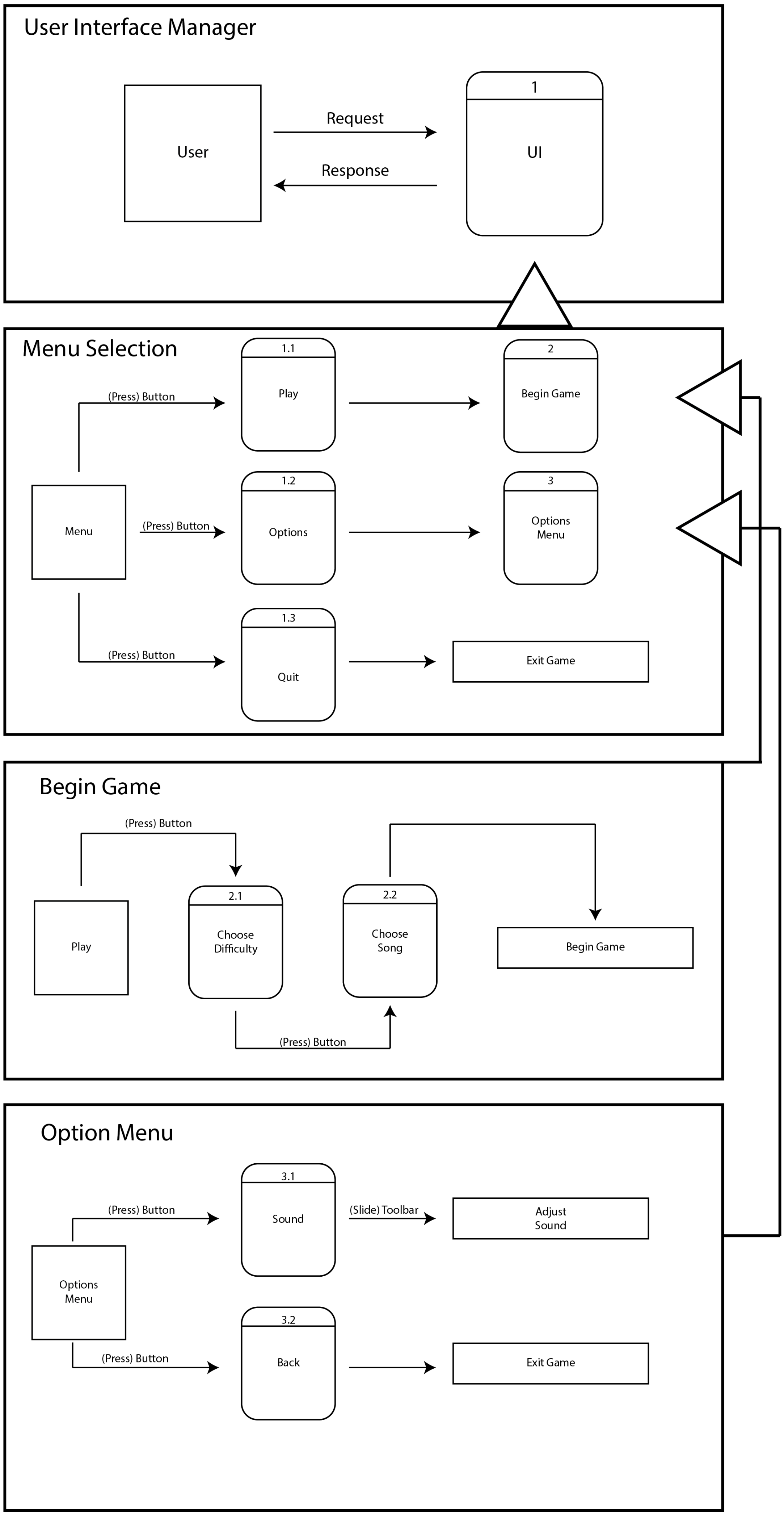
Exceptions:

Step 1: [Difficulty] is not pressed, it will result to the default mode (Easy)

Post conditions: Game must be initialized.
Priority: 3
ID: A05

3. Data Flow diagram(s) from Level 0 to process description for your feature ________14




User Interface Manager
User
Request
Response
1
UI
Menu Selection
(Press) Button
1.1
Play
2
Begin Game
Menu
(Press) Button
1.2
Options
3
Options Menu
(Press) Button
1.3
Quit
Exit Game
Begin Game
(Press) Button
Play
2.1
Choose Difficulty
2.2
Choose Song
Begin Game
(Press) Button
Option Menu
(Press) Button
3.1
Sound
(Slide) Toolbar
Adjust Sound
Options Menu
(Press) Button
3.2
Back
Exit Game

Process Description:

```
1.1 Play (Parameter: Player Input){
    IF (Player Input == 1)
        Execute play();
    Else IF
        Do nothing //Remain on the main page
}

1.2 Options (Parameter: Player Input){
    IF (Player Input == 2)
        Execute options();
    Else IF
        Do nothing //Remain on the main page
}

1.3 Quit (Parameter: Player Input){
    IF (Player Input == 3)
        Execute quit();
    Else IF
        Do nothing //Remain on the main page
}

2.1 Choose Difficulty (Parameter: Player Input){
    IF (Player Input == 3)
        Execute quit();
    Else IF
        Do nothing //Remain on the main page
}
```

```
2.2 Choose Song (Parameter: Player Input){
IF (Player Input == Button 1||Player Input == Button 2||Player Input == Button 1)
    Load Song();
Else IF
    Do nothing //Remain on the main page
}
```

```
3.1 Sound (Parameter: Player Input){
    IF (Player Input moves Toolbar )
        Execute sound();
    Else IF
        Do nothing //Remain on the main page
}
```

```
3.2 Back (Parameter: Player Input){
    IF (Player Input == 3)
        Execute Back();
    Else IF
        Do nothing //Remain on the main page
}
```

4. Acceptance Tests ________9

Inputs: Click on the buttons to perform action

- Play
    - Input: Click on [Play]
    - Output: Game will be initialized.
- Options
    - Input: Click on [Options]
    - Output: Display Menu for user to access.
- Quit
    - Input: Click on [Quit]
    - Output: Aborts the game.
- Pause
    - Input: Click on [Pause]
    - Output: Halts the in-session game.
- Resume
    - Input: Click on [Resume]
    - Output: Resume the game activity.
- Song Selection (Extensions)
    - Input: Click on [Song]
    - Output: Experience the game with the song selected.
- Difficulty Selection (Extensions)
    - Input: Click on [Difficulty]
    - Output: Experience the game at the difficulty specified.

Output: Carry out action.

Example for [Option] button:

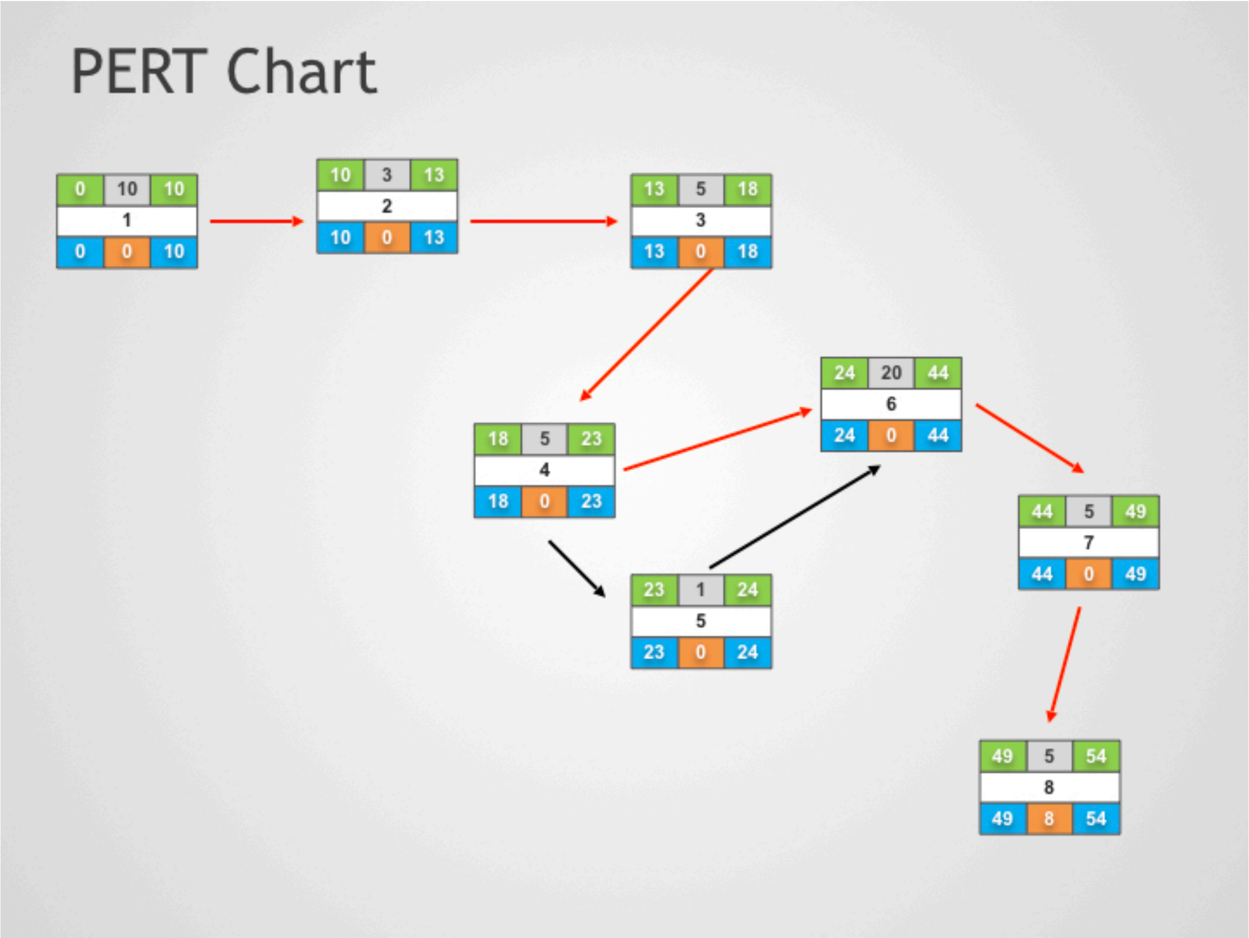
Option button can be connected to a hot-key. For example, if the user presses the 'o' on the keyboard then it will bring up the "Option Menu"

5. Timeline _________/10

Work items

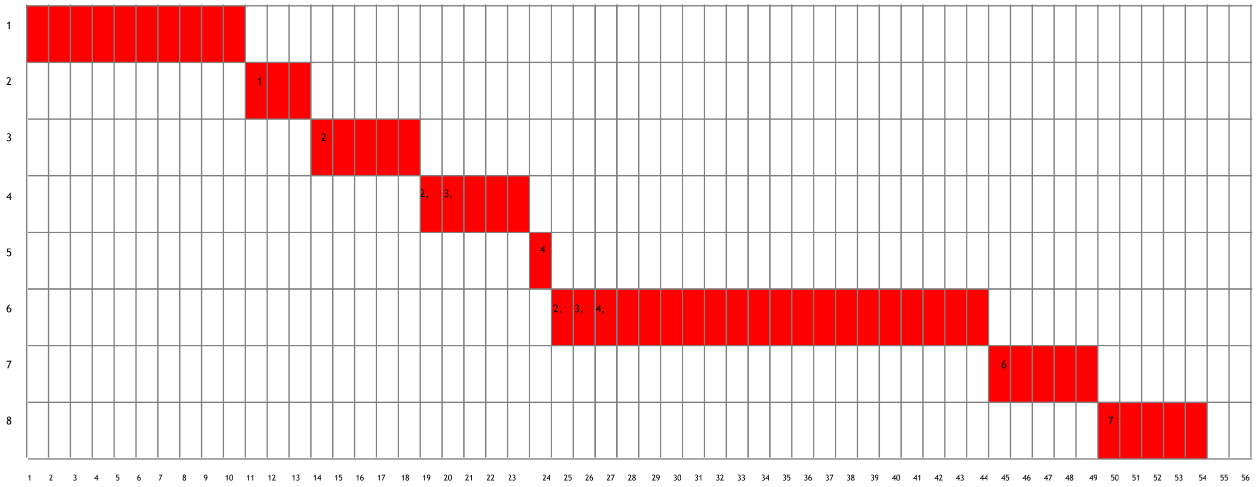
Task	Duration (PWks)	Predecessor Task(s)
1. Requirements Collection	10	-
2. Canvas	3	1
3. Panel / Buttons	5	2
4. In-game Menu	5	3
5. User Documentation	1	4
6. Programming	20	4
7. Testing	5	6
8. Installation	5	7

Pert diagram



PERT Chart

Gantt timeline


1
2
3
4
5
6
7
8
1
2
2, 3,
4
2, 3, 4,
6
7
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56