Name: Akhil Karri Mark \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_/50

## Brief introduction \_\_/3

My Features are the inventory and HUD to show the player how many resources he is having during the game and the UI of the game which has the main menu, pause menu and game over screen for the player to go to the game to play, pause or play again and also the levels screen so that player can choose to play a specific level if he wants.

## Use case diagram with scenario \_\_14

### Use Case Diagrams

Scenarios:

**Name:** Main Menu

**Summary: Player can choose to play, pause, and select a level and, he can go to the main menu if he loses. and inventory or HUD to see his health and resources.**

**Actors:** Player

**Preconditions:** Game Starts running

**Basic sequence:**

**Step 1:** Selects play button

**Step 2:** Loads the level

**Step 3:** Displays the health and resources in the game.

**Step 4:** if pauses the game, he can resume or go to the menu screen

If game is over then he can play again or go to the menu screen

**Exceptions:**

**Step 1:** if the health is over then game quits.

**Post conditions:** Game is started

**Priority:** 1\*

**ID:** C01

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

## Data Flow diagram(s) from Level 0 to process description for your feature \_\_\_\_\_\_\_14

Diagram, schematic

Description automatically generated

Box with purple color.

Diagram

Description automatically generated

Diagram

Description automatically generated

### Process Descriptions

UI:

IF player selects an option in main menu or pause screen or gameover screen

UI does the operation accordingly

ENDIF

HUD:

IF player picks up an item or gets damage

Resources and health change accordingly on the HUD.

ENDIF

## Acceptance Tests \_\_\_\_\_\_\_\_9

UI :

Testing the main menu, pause menu and game over screen and load level menu 100 times with different buttons and checking if it loads correctly. Music will also be tested.

HUD and Inventory:

Testing the Player’s health and resources 100 times whenever he picks up something or takes damage to see if it functions properly. Sound will also be tested if he picks up something and takes damage.

## Timeline \_\_\_\_\_\_\_\_\_/10

### Work items

|  |  |  |
| --- | --- | --- |
| Task | Duration (Hours) | Predecessor Task(s) |
| 1. Setting Up Unity | 1 | - |
| 2. Requirements Collection | 4 | - |
| 3. Prefab Gathering | 3 | 2 |
| 4. Design Text and Menu Screen | 10 | 2 |
| 5. Creating UI | 6 | 3,4 |
| 6. Music | 4 | 5 |
| 7. Generate Demo | 5 | 5,6 |
| 8. Testing | 5 | 7 |
| 9. Implementation | 5 | 8 |
|  |  |  |

### Pert diagram

Box and whisker chart

Description automatically generated with low confidence

### Gantt timeline

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 7 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |