Name Dylan Thompson Mark: /50

## Brief introduction \_\_/3

My features for this game are as follows: The main menu, a demo mode that shows the game being played, and implementing a monster class that includes one monster.

The main menu will be present upon starting the game, and will be available at any time mid-game via the esc key. It will involve a play and a quit button. If there’s enough time there will be either a save/load option or the option to start the game at higher levels.

The demo mode will be a recording of the game being played. It will either be occurring behind the main menu as soon as the game starts, or it will trigger after a period of no user input from the main menu. If the demo mode is triggered by user inaction, as soon as the user enters input, either by moving the mouse pressing a key, the demo mode will stop playing allowing the user to operate the game normally. There will be two demo modes for each level of the game. One that results in a player success and at least one that results in a player failure.

The monster class is going to include at least one monster, this being a ghost. It will contain the details of the spawning of the monster, the monster's movement, the monsters attack, and the spawning of the monster. The ghost will have at least one attack, a slime attack that it will cast on the player and slow them down.

## Use case diagram with scenario \_\_14

### Use Case Diagrams

A diagram of a computer network

Description automatically generated with medium confidence

### Scenarios

**Name:** Encounter ghost

**Summary:** The player encounters a ghost during his attempt to deliver pizza.

**Actors:** Player

**Preconditions:** The player must be in the middle of a delivery run.

**Basic sequence:**

**Step 1:** Accept input of first number.

**Step 2:** Continue to accept numbers until [calculate] is entered.

**Step 3:** Accept calculate command.

**Step 4:** Calculate and show result.

**Exceptions:**

**Step 1:** [calculate] is pressed before any input: Display 0.

**Step 2:** A button other than [calculate] or a number input is pressed: ignore input.

**Post conditions:** Calculated value is displayed.

**Priority:** 2\*

**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

A screenshot of a computer

Description automatically generated

Diagram Zero:

A diagram of a company

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Example:

### Data Flow Diagrams

A diagram of a game

Description automatically generated

### Process Descriptions

Menu:

Game loads -> menu opens -> receives player input -> close this menu and continues with selection

Ghosts:

While player is on quest -> Chance of ghost spawning on screen

While player is in ghost detection radius -> ghost pursues player

While player is within slime radius -> ghost cast slime

When ghost is sufficiently off screen -> de-spawn ghost

Demo Mode:

If menu receives no input for certain time frame -> demo mode runs

If demo mode is currently running and input is received -> demo mode ends

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

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

**Example for random number generator feature**

Test 1 Menu:

Systematically traverse menu insuring that every button on the menu is functioning as intended and results in successfully taking the player to the desired selection.

Test 2 Monsters:

Start running the game and check to see whether monsters are spawning. Enter detection radius and ensure that monsters successfully start pursuing the player. Once that has been confirmed stop moving wait for ghost to get within slime radius and ensure that the ghosts successfully casts spell. After that start flinging again and ensure that the slime spell has successfully affected player movement.

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

### Work items

|  |  |  |  |
| --- | --- | --- | --- |
| **#** | **Task** | **Duration (hrs)** | **Predecessor(s)** |
| 1 | Develop Menus | 4 |  |
| 2 | Polish Menus | 1 | 1 |
| 3 | Code Monster | 6 | 1,2 |
| 4 | Test Monster | 3 | 1,2,3 |
| 5 | Record Demos | 3 | 1,2,3,4 |
|  | Total: | 17 |  |

### Pert diagram

A diagram of a computer

Description automatically generated with medium confidence

### Gantt timeline

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  | 2 |  |  |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |
| 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |  |