Name____Conner Puopolo_____ Mark _____/50

1. Brief introduction __/3

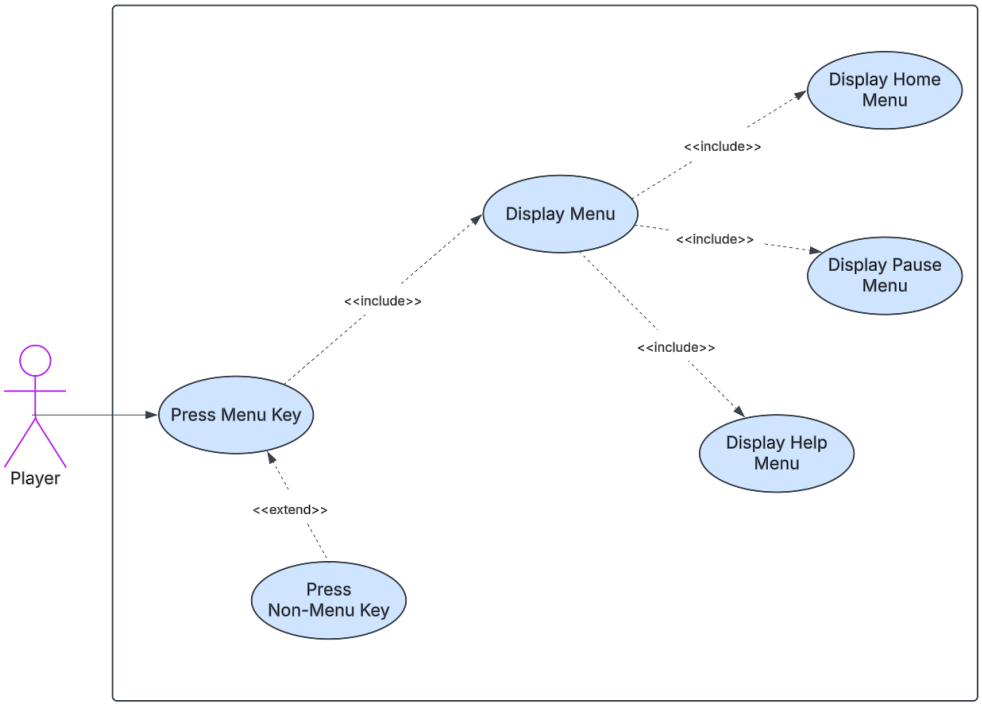
[Describe your feature briefly]

My feature in Warehouse Warriors will be the user interface

My job is to ensure the user is able to interact with the game through the keyboard and mouse or touchpad. In order for this to work need a few accepted conditions to what keys the user can press, and certain buttons the user can click to play the game as well as access the menu.

2. Use case diagram with scenario __14

User Interface Use Case Diagram



Scenarios

Name: User Interface

Summary: The player will use the touchpad/mouse to interact with the game

Actors: Player

Preconditions: The game is programmed to accept input from the mouse/touchpad and keyboard

Basic sequence:

Step 1: Accept input of device Mouse or Keyboard

Step 2: Process input and display Home menu

Step 3: Player presses “Esc” while game is on and displays pause menu

Step 3.1: Player presses “Help button in pause menu and help screen is displayed

Exceptions:

Step 1: The mouse or keyboard is used for input other than to pause or show menu: Ignore

Step 2: User presses non-buttons/input-desired part of screen

Post conditions: Correct menu is displayed

Priority: 1*

ID: CP1

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

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

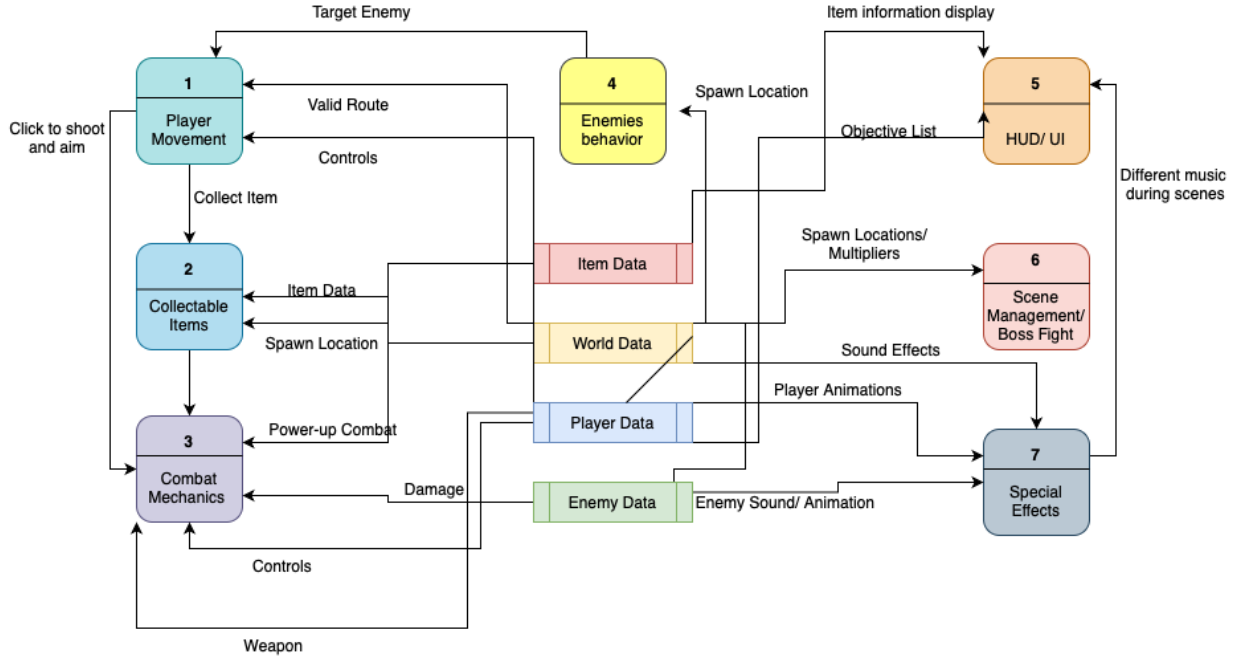
[Get the Level 0 from your team. Highlight the path to your feature]

Example:

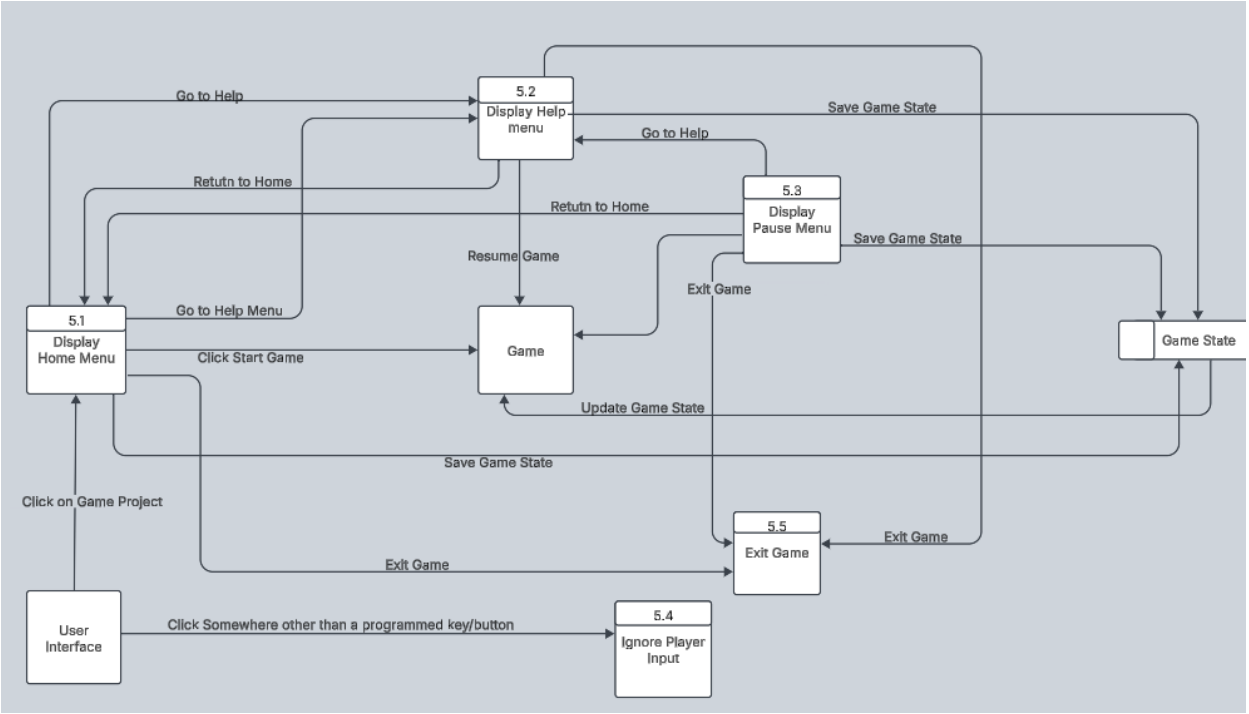
Data Flow Diagrams

CONTEXT DIAGRAM (level 0)

Diagram 0(level 1)



USER INTERFACE DATA FLOW DIAGRAM: process 5.0 Display Menu



Process Descriptions

Display pause Menu:

IF help menu is clicked

    Display help menu

ELSE IF home menu is clicked

    Display home menu

ELSE IF home menu is clicked

    Display home menu

ELSE IF resume is clicked

    Resume to game

ELSE IF exit is clicked

    Exit game

4. Acceptance Tests _____9

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

Acceptance Tests for UI Screens

1. Main Menu Screen

Test Case 1: Main Menu Loads Successfully

- **Input: Launch the game.**
- **Expected Output: Main menu appears with all buttons (Start, Help, Settings, Quit).**

Test Case 2: Start Button Works

- **Input: Click the "Start" button.**
- **Expected Output: The game transitions to the first playable level.**

Test Case 3: Quit Button Works

- **Input: Click the "Quit" button.**
- **Expected Output: The game closes successfully.**

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2. Pause Menu

Test Case 4: Pause Menu Activates

- **Input: Press the "Esc" key or click the pause button in the UI.**
- **Expected Output: The game pauses, and the pause menu appears with options (Resume, Settings, Main Menu).**

Test Case 5: Resume Button Works

- **Input: Click the "Resume" button.**
- **Expected Output: The game resumes from where it was paused.**

Test Case 6: Returning to Main Menu

- **Input: Click the "Main Menu" button.**
- **Expected Output: The game returns to the main menu, resetting the level.**

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3. Help Screen

Test Case 7: Help Screen Opens

- **Input: Click the "Help" button from the main menu.**
- **Expected Output: The Help screen appears with instructions and an exit button.**

Test Case 8: Help Screen Closes

- **Input: Click the exit/back button on the Help screen.**
- **Expected Output: The main menu reappears.**

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4. Edge Cases

Test Case 9: Spamming Pause Button

- **Input: Press the "Esc" key multiple times rapidly.**
- **Expected Output: The pause menu only appears once and does not cause errors.**

Test Case 10: Navigating UI with Keyboard/Gamepad

- **Input: Use arrow keys or a game controller to navigate menus.**

- **Expected Output: The UI responds correctly to all inputs.**

  Test Case 11: Resume After Pausing with Background Actions

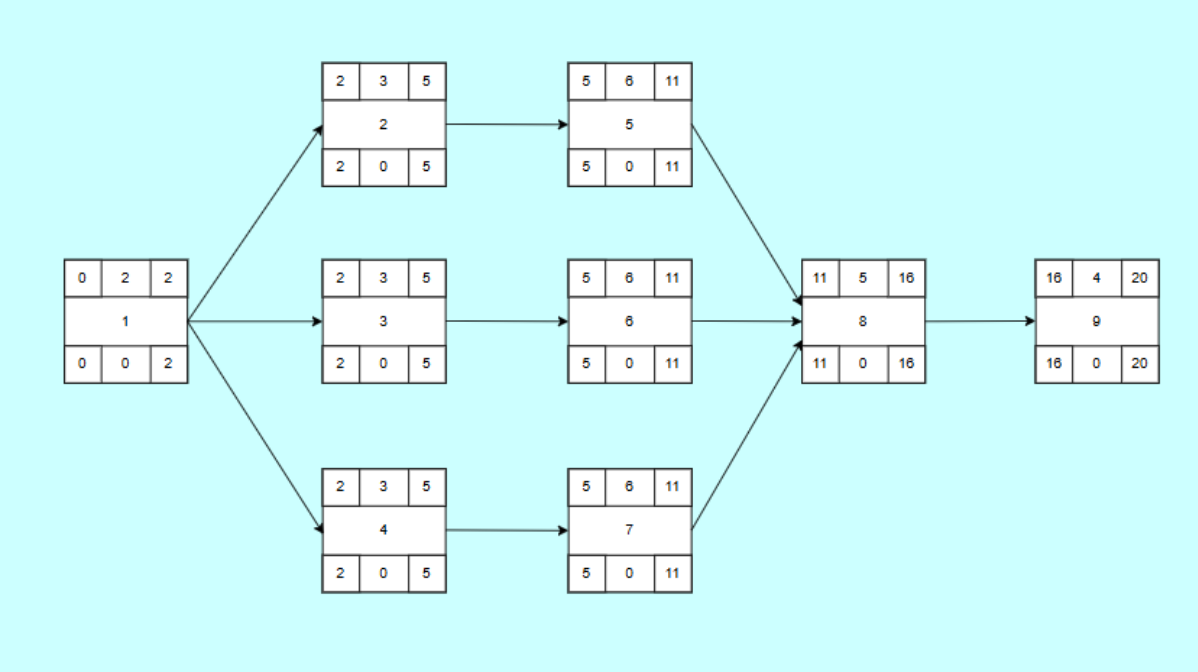
- **Input: Pause the game while animations or background music are playing.**
- **Expected Output: Background actions freeze when paused and resume correctly.**

5. Timeline _____/10

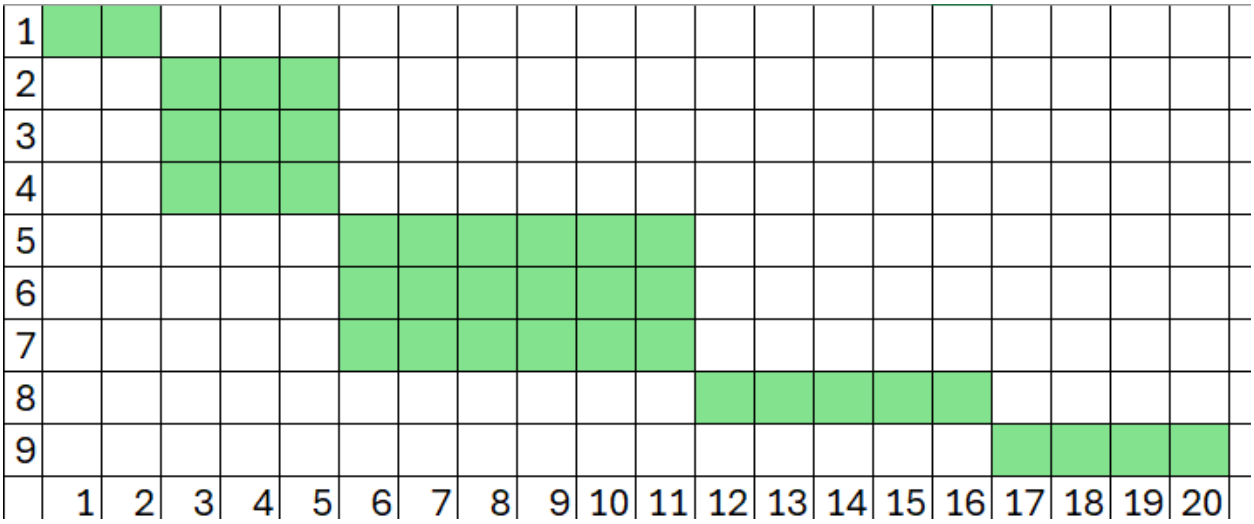
Work items

Task	Duration (PWks)	Predecessor Task(s)
1. Requirements Collection	2	-
2. Home Menu – UI Design	3	1
3. Help Menu – UI Design	3	1
4. Pause Menu – UI Design	3	1
5. Home Menu Development	6	2
6. Help Menu Development	6	3
7. Pause Menu Development	6	4
8. Testing and Fixes	5	5, 6, 7
9. Final Review and Installation	4	8

Pert diagram



Gantt Chart



Gantt Chart