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

## Brief introduction \_\_/3

I will be overseeing the main menu, pause menu, game over screens and overall, any HUD elements displaying player stats. These elements are crucial in ensuring smooth navigation and conveying essential game information to the player. A well-designed UI enhances the overall experience, making it intuitive and visually appealing while keeping players immersed in the action.

The main menu will serve as the players’ first impression of the game, setting the game’s tone with an engaging design, background animation and appropriate music for the theme of the game. It should be easy to navigate while maintaining its strong visual identity that aligns with the fast-paced experience the game provides. The pause menu will be quick and easy to access allowing players to resume, adjust settings or exit without any interruptions to the experience. Similarly to the pause menu, the game over menu will also be easy to interpret providing a dramatic visual transition, or an option to continue playing. It should keep the player engaged rather than frustrated.

The HUD will display all the players’ most important stats, it will be minimal yet informative ensuring that players can quickly glace at it without removing the player from the immersion of the game. The placement and readability will be crucial in making sure the player is not distracted from the experience.

The UI for our game must match the energetic, action packed nature of the game while remaining user-friendly, with the details enhancing the experience rather than hindering it.

## 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

**[You will need a scenario for each use case]**

**Name:** Add Numbers

**Summary:** The accountant uses the machine to calculate the sum of two numbers.

**Actors:** Accountant.

**Preconditions:** Calculator has been initialized.

**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

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

Example:

### Data Flow Diagrams



### Process Descriptions

Assign rooms\*:

WHILE teacher in two places at once OR two classes in the same room

Randomly redistribute classes

END WHILE

**\*Notes**: Yours should be much longer. You could use a decision tree or decision table instead if it is more appropriate.

## 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**

Run feature 1000 times sending output to a file.

The output file will have the following characteristics:

* Max number: 9
* Min number: 0
* Each digit between 0 and 9 appears at least 50 times
* No digit between 0 and 9 appears more than 300 times
* Consider each set of 10 consecutive outputs as a substring of the entire output. No substring may appear more than 3 times.

**Example for divide feature**

|  |  |  |  |
| --- | --- | --- | --- |
| Output | Numerator  (int) | Denominator  (int) | Notes |
| 0.5 | 1 | 2 |  |
| 0.5 | 2 | 3 | We only have 1 bit precision for outputs. Round all values to the nearest .5 |
| 0.0 | 1 | 4 | At the 0.25 mark always round to the nearest whole integer |
| 1.0 | 3 | 4 | At the 0.75 mark always round to the nearest whole integer |
| 255.5 | 5 | 0 | On divide by 0, do not flag an error. Simply return our MAX\_VAL which is 255.5. |

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

[Figure out the tasks required to complete your feature]

Example:

### Work items

|  |  |  |
| --- | --- | --- |
| Task | Duration (PWks) | Predecessor Task(s) |
| 1. Requirements Collection | 5 | - |
| 2. Screen Design | 6 | 1 |
| 3. Report Design | 6 | 1 |
| 4. Database Construction | 2 | 2, 3 |
| 5. User Documentation | 6 | 4 |
| 6. Programming | 5 | 4 |
| 7. Testing | 3 | 6 |
| 8. Installation | 1 | 5, 7 |

### Pert diagram



### Gantt timeline

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 6 |  |  |  |
| 8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 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 |