Project Planning

List of the Features to be implemented in the final project

1. Design a 2D Grid which serves as a game platform
2. Design 2D Snake which serves as player
3. Implement a Feature which would enable the snake to move to all 4 directions on a 2D playground.
4. Implement a food feature which the Snake feeds on to
5. Design the Snake in such a way that it increases in length with each time it consumes food
6. Add a background music to the game
7. Implement a Score Card Feature
8. Implement a Feature that keeps track of latest high score by any player
9. Implement multiple levels which include different types of obstacles in the playground
10. Implement the feature to increase the Snake Speed
11. The Game Over feature comes into play whenever the snake bites its own tail.

Minimum Viable Product

1. Design a 2D Grid which serves as a game platform
2. Design 2D Snake which serves as player
3. Implement a food feature which the Snake feeds on to
4. Design the Snake in such a way that it increases in length with each time it consumes food
5. Implement a Feature which would enable the snake to move to all 4 directions on a 2D playground
6. Implement a Score Card Feature.
7. The Game Over feature comes into play whenever the snake bites its own tail.

User Stories [Varun Jaisundar Raju]

Design a 2D Grid which serves as a game platform :

Priority: Medium

In order to design a 2D grid which acts as a game platform it is necessary to come up with all the features of the Grid such as width, height and the background color of the grid.

Design 2D Snake which serves as player

Priority: Large

We have to decide the dimensions and also choose the right coordinates where the Snake has to be created when we start the game. We would be using Canvas shapes such as rectangle, square's to come up with the Snake Structure.

Implement a Feature which would enable the snake to move to all 4 directions on a 2D playground

Priority: Medium

Design a Python Class which would enable the snake to keep track of user keyboard movements and move in the respective direction on the 2D Game Grid. We would have the snake to travel in four directions such as Right, Left, Top, Bottom.

User Stories [Achyutha Harish]

Setup a Python Environment and Install all the dependencies:
Priority: Small

Create a python virtual environment and install tkinter and all the related python packages using python pip install.

Implement a food feature which the Snake feeds on to

Priority: small

Design a food component that changes coordinates as the snake moves and consume it. Food component must be placed in a position that makes it difficult for the user to complete it when the snake grows.

The Game Over feature comes into play whenever the snake bites its own tail.
Priority: Medium

When the snake grows and consumes the food component. It eventually reaches a point when the snake head meets the tail and the game ends with a GAME OVER display on the screen.

User Stories [Dhatri Ramagiri]

Implement a Score Card Feature

Priority: Large

As the length of the snake starts by 1, we will implement a score card feature by creating a new function “score card” where it displays the score depending on the length of the snake, the final score updated is the length of snake minus 1 .

Design the Snake in such a way that it increases in length with each time it consumes food

Priority: Medium

The length of the snake increases when it consumes food; this can be done by creating a list and initializing the size of the snake to 1.

Team Members

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