Github Repository:

https://github.com/HDSB-BCHS-2425-ICS3UC/final-evaluation-project-shreyasipanthee.git

General Outline - Conway's Game of Life

Simulation of Conway's Game of Life using pygame.

Game Rules:

1. Any live cell with fewer than two live neighbours dies (referred to as **underpopulation** or **exposure**)**.**
2. Any live cell with more than three live neighbours dies (referred to as **overpopulation** or **overcrowding**).
3. Any live cell with two or three live neighbours lives, unchanged, to the next generation.
4. Any dead cell with exactly three live neighbours will come to life.

Program Breakdown:

- Initialize a 10x10 grid of cells.
- Each cell can be alive or dead.
- Set up a loop that updates the grid according to rules.
- Allow user interactions:
    - Toggle cell state
    - Start/pause simulation
    - Clear/reset grid
- Display everything using pygame.

Features:

- Detecting neighbour cells correctly.
- Handling grid boundaries.
- Smooth updating of grid visuals.
- Handling input cleanly/clearly.

Program Structure:

- 2D list to represent grid.
- Function to count alive neighbours with boundary checks.
- Pygame event handling for mouse clicks and keys.
- Use a class Cell to manage each cell state and drawing.

Pseudocode:

Unset