

Development Process Conway's Game of Life.

1. Project Configuration:

- Established project structure with HTML, CSS, and JavaScript files.
- HTML provided webpage structure, CSS handled styling, and JavaScript housed game logic.

2. Grid Creation:

- Developed `createGrid ()` function to dynamically construct the grid.
- Each cell represented as a `<div>` element within the grid container.

3. Cell Interaction:

- Enabled user interaction by allowing clicks on cells to toggle their state.
- Clicking a cell updated its status in the grid array, toggling between living and dead.

4. Rules Integration:

- Enhanced `updateGrid ()` function to apply Conway's Game of Life rules.
- Rules determined cell states based on current status and neighboring cells.

5. Control Buttons:

- Added Start, Stop, and Reset buttons for simulation control.
- Corresponding functions (`startSimulation ()`, `stopSimulation ()`, `resetGrid ()`) activated by buttons.

6. Testing and Debugging:

- Ensured accurate emulation of Conway's Game of Life through extensive testing.
- Addressed any issues to ensure proper rule implementation and smooth operation.

7. Code Refinement:

- Reviewed code for clarity, conciseness, and maintainability.
- Provided comments to clarify complex logic and implementation details.

8. User Interface Enhancement:

- Improved user interface for ease of navigation and aesthetic appeal.
- Ensured control buttons and grid were user-friendly and visually pleasing.

In summary, the development process involved various phases, from initial setup to final refinement, focusing on accuracy, efficiency, and usability to deliver an engaging Conway's Game of Life implementation.