1. What were some challenges you faced while making this app?

One of the primary hurdles was managing state effectively across different components, particularly when implementing the autoplay feature for the simulation. Ensuring that the grid updated consistently and accurately in response to user interactions and during autoplay required a thorough understanding of React's state management and the useEffect hook. Another challenge was optimizing performance, especially as the grid size increased, which necessitated careful consideration of the computational cost of calculating each new grid state and minimizing unnecessary re-renders. I also spend a lot of time on Render and it leads to the late submission.

1. Given more time, what additional features, functional or design changes would you make

Functionally, implementing more advanced simulation features, such as saving and loading grid states or introducing different rulesets for cell behavior, would significantly enrich the user experience. From a design perspective, improving the visual feedback for cell states and transitions could make the simulation more engaging. Additionally, incorporating a responsive design to better accommodate various screen sizes and adding more interactive elements, like drag to toggle cells, would enhance usability and accessibility.

1. What assumptions did you make while working on this assignment?

I presumed that the primary focus should be on the core functionality of the Conway's Game of Life simulation, prioritizing the accuracy and performance of the simulation over implementing an extensive feature set. These assumptions guided the development process, from the design of the user interface to the prioritization of features and optimizations.

1. I spend 15 H on coding and 6 H on setting up in render. Render always shows that it cannot find my program.