



# SMART INDIA HACKATHON

NSUT INTERNAL HACKATHON

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# PROBLEM STATEMENT

- Building a Modern Version of SocialCalc using Node.js, Go, or Django can use AI tools like copilot.
- SocialCalc has become outdated, and there is a growing need for a modern, scalable version that leverages contemporary web technologies and frameworks.
- By redeveloping SocialCalc using modern languages such as Node.js, Go, or Django, we can enhance its performance, security, and scalability, making it a more robust tool for collaborative data management.



# SOLUTION



The solution involves creating a dynamic, blank spreadsheet using React and CSS. This approach allows you to render a grid of input fields where users can interact with each cell, similar to how they would in a traditional spreadsheet application like Google Sheets or Excel.

Depending upon the email address of the user, the access to them is decided i.e. not all users have the entire access to the database. In this way, the data privacy and user suthentication is ensured. Also, the user credentials are stored safely to prevent information leak or theft.

# SOLUTION

There are many user friendly features as well in the software which makes the user experience friendly and convenient. User can access their sheets in any device comfortably. The software is build in a such a manner that it caters to all the basic needs of a user no matter what type of data or how much big the data is.

Multiple Users can work on the same sheet using an unique id given to each sheet and the data base is updated instantly to ensure seamless user experience. The software is capable of handling many concurrent user at the same time so that work flow is never interrupted at the user side.

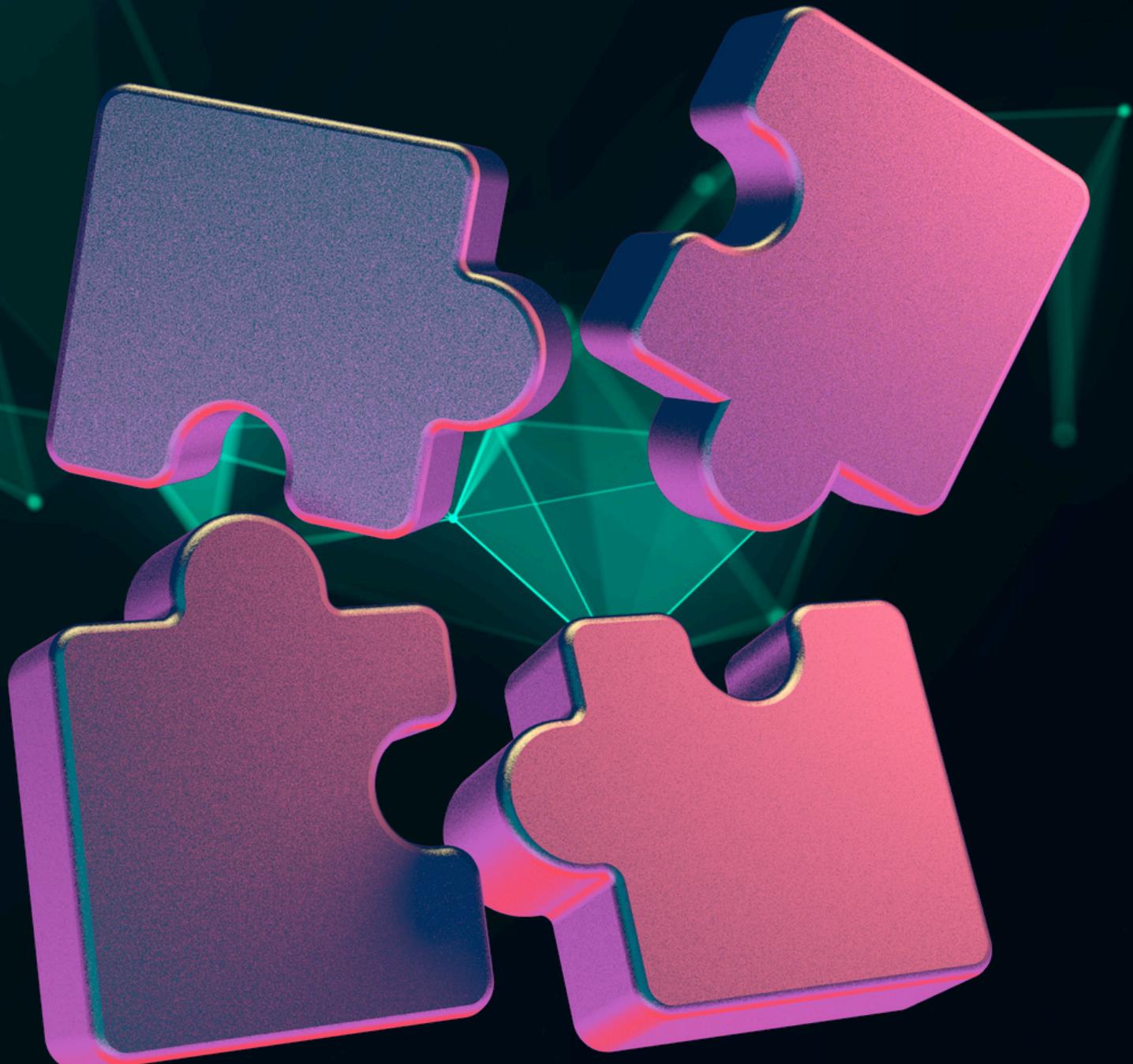


# USP's

- **Customization:** You can easily adjust the number of rows and columns to fit the specific needs of your application. This flexibility is ideal for applications where the grid size may vary based on user input or different use cases.
- **External Integration:** The users have the feature of uploading an CSV file to the software which will be converted to spread sheet. There are other features like sorting and filtering to reduce the work time and give users a enhanced experience of this.
- **Simple State Management:** React's useState hook simplifies the management of the grid's state. You can easily track changes to each cell and update the grid dynamically as users interact with it.



# EXPECTED BENEFITS



- **Open-Source Ecosystem:** React and CSS have rich ecosystems of open-source components, plugins, and tools that you can leverage to extend your spreadsheet's functionality. Access to a wide range of open-source resources can save development time and allow you to add advanced features without building everything from scratch.
- **Version Control and Collaboration:** The component-based architecture create a clean and modular codebase. This structure is ideal for version control, making it easier for multiple developers to collaborate without causing conflicts.
- **Integration with State Management Libraries:** If your application grows more complex, you can easily integrate the spreadsheet component with state management libraries like Redux or Zustand. This allows you to manage global state and share data across components.

# BUSINESS MODEL

- **Market Opportunity:** Traditional spreadsheet software is bulky, and integration with modern web apps is challenging. A lightweight, customizable spreadsheet that integrates seamlessly into web applications. Large market size with applications in finance, education, project management, and more.
- **Revenue Model:** Offer the spreadsheet component as a licensed product for integration into enterprise software. The subscription plans can be monthly, quarterly, half-yearly and yearly.
- **Scalability:** As per the feedback, we will incorporate more and more user friendly features to enhance UI. Launching a mobile application that offers the same features would be a crucial step in expanding our model.



# TECH STACK



React [Front-end]

Node.js [Back-end]

MongoDB [Database]

Libraries [Handsontable,math.js]