

# Web-Application Mimicking Google Sheets

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## Full Stack Project

- This is web-application that closely mimics the user Interface and core functionalities of Google sheets, with a focus on mathematical and data quality functions, data entry and key UI interactions.
- This can be a spread-sheet engine with advance features like cell references, formulas, formatting, and basic function using React.
- Includes React components like spreadsheet, cell, toolbar and FormulaBar.
- It can help to convert cell references like 'A1' to data[0][0].
- It is a Google Sheets-style web application with React.

## Web-App Features

- A spreadsheet interface ( cells, rows, columns, formula bars, toolbar ).
- Basic styling and cell formatting controls.
- Mathematical and data-equity functions.
- The ability to add / delete / resize rows and columns.
- Data entry and Data Validation ( numeric only ).
- Support for dragging cell content.
- Find and replace and remove duplicate utilities.
- A mechanism for testing the functions ( enter own data , applying formula ).
- Google-sheet clone.
  - A simple formula parser to handle the requested functions : SUM, AVERAGE, MAX, MIN, COUNT, TRIM, UPPER, LOWER, REMOVE\_DUPLICATES and FIND\_AND\_REPLACE.
- Mimic Google Sheets UI
- For a Visual Design and layout that closely resembles Google Sheets.

```
google-sheets-clone/
├── src/
│   ├── App.js
│   ├── components/
│   │   ├── Spreadsheet.js
│   │   ├── Toolbar.js
│   │   ├── FormulaBar.js
│   │   ├── SheetCell.js
│   │   └── Modals.js
│   ├── utils/
│   │   ├── formulaParser.js
│   │   └── helpers.js
│   └── index.css
└── package.json
```

- Implemented drag functionality for cell content, formulas and selections to mirror Google sheets behaviour.
- Support for basic cell formatting ( bold, italic, font size, colour ).
- Ability to add, delete, and resize rows, and columns.
- Allow users to input various data types ( numbers, text, dates ).
- To manage drag and drop more robustly -> install react-beautiful-dnd or react-dnd

- Main application ( App.js) ties the spreadsheet, toolbar, and formula bar. Also host the Find & Replace Modal.
- Git Commands used here to pushing it onto GitHub -
- `cd path/to/google-sheets-clone`
- `git init`
- `git commit -m "Initial commit: Basic Google Sheets clone setup"`
- `git remote add origin https://github.com/vimlendu/sharma/google-sheets-clone.git`
- `git push -u origin main`
- `git status`