


are the remaining ones, you can generate another portion of it. So just generate as much as you can, but I don't need you to generate everything at a single time. We can have multiple conversations for you to finish the generation so that the full code, make sure that this is a whole repository, it has many folders, it has many files, make sure these files incorporate with each other and just run, you know, run in my WSL Windows subsystem for Linux on my VS Code Windows version and, you know, do you understand that?

Thought for 9m 50s >

Here's a first big chunk of the repo: **full skeleton + working minimal grid + all the function names you specified (as real or stub implementations).**

You'll be able to `npm install` and run both client & server in WSL, then we can deepen behavior in later messages.  requirements

0. Folder layout

text

 Copy code

```
ai-excel/  
  package.json  
  README.md  
  
server/  
  package.json  
  tsconfig.json  
  src/  
    index.ts  
    routes/  
      sheets.ts  
      ai.ts  
      formulas.ts  
  core/  
    SheetModel.ts  
    formulaEngine.ts  
    operations.ts
```

```
    db/
      SheetRepo.ts
    shared/
      types.ts

client/
  package.json
  tsconfig.json
  index.html
  vite.config.ts
  src/
    main.tsx
    App.tsx
    shared/
      types.ts
    state/
      gridState.ts
      sheetState.ts
      aiState.ts
      undoRedoState.ts
    services/
      apiClient.ts
    utils/
      keyboardUtils.ts
      rangeUtils.ts
    components/
      Grid/
        GridView.tsx
        CellView.tsx
        RowHeader.tsx
        ColumnHeader.tsx
      FormulaBar/
        FormulaBar.tsx
      AIPanel/
        AIPanel.tsx
      Toolbar/
        Toolbar.tsx
        SheetTabs.tsx
```

1. Root