

LIVE COLAB

created by Team - Tech Titans

Agglomeration 1.0

PROBLEM STATEMENT

Real Time Collaboration Platform for multiple users to visualise

- Managing JSON files collaboratively is cumbersome.
- No efficient platform exists for simultaneous editing with controlled access.
- Need for real-time collaboration with role-based permissions for enhanced teamwork.

SOLUTION

A real-time collaborative platform where:

- Users can join room created by admin.
- Admins can upload JSON files.
- Editors can edit the file.
- Admins can manage roles (e.g., assign/remove editor privileges).

KEY FEATURES

Real-Time Updates:

- Changes reflect live for all room participants.

Editor Role:

- Edits JSON files in real-time.
- Changes tracked for transparency.

Admin Role:

- Uploads JSON data.
- Manages user roles (e.g., promotes/demotes users to/from editors).

Room-Based Collaboration:

- Users join specific rooms for isolated workflows.
- Role-based permissions ensure data integrity.

TECH STACK

- **HTML**
- **CSS**
- **JavaScript**
- **Web Socket(Socket.io)**
- **.ejs File (View Engine)**
- **Mongo DB**
- **Express.js**
- **Chart.Js**

USER FLOW

- Admin will create a room on the web app
- Other users can join the room using login codes
- Chart.js will plot graphs using the uploaded data
- Admin can upload dataset and editors can manipulate the data and its effect on graph.
- Admin can give editor privileges to any user
- Web Socket is used for Real time updates in data and graphs

RELEVANCE

- Real-Time Collaboration: Enables seamless teamwork on JSON files with live updates.
- Role-Based Access: Ensures data security and controlled editing.
- Conflict Resolution: Prevents version conflicts and overwrites.
- Productivity Boost: Simplifies workflows for developers and teams.
- Widespread Utility: Useful for API development, data preparation, and education

THANK YOU