Comments:

I developed the entire project from scratch using resources like YouTube tutorials and documentation. Debugging was particularly interesting, as I learned to check API calls thoroughly, enhancing my problem-solving skills. I also faced challenges with data handling between the frontend and backend, which deepened my understanding of both Angular and Node.js.

Account Management Application

Full Stack + Angular 18 Material + Node JS + PostgreSQL

1. Database Setup

1.1. Creating the Database and Table

- Environment: Use XAMPP to manage PostgreSQL.
- 2. Database Creation: Create a new PostgreSQL database to store account data.
- 3. **Table Structure**: Design a table to hold account details such as ID, name, email, and balance.

2. Backend Development

2.1. Setting Up Node.js

- 1. **Project Initialization**: Set up a Node.js project to handle server-side logic.
- 2. **API Implementation**: Develop RESTful APIs to manage account data. This includes endpoints for creating, reading, updating, and deleting account information.

2.2. API Testing

- 1. **Tool**: Use Postman to test the functionality of the implemented APIs.
- 2. **Database Verification**: Confirm that the changes reflect in the PostgreSQL database after API calls.

3. Frontend Development

3.1. Angular Application Setup

1. **Project Creation**: Set up an Angular standalone application using version 18.

2. **Material Design**: Install Angular Material for building a responsive and visually appealing user interface.

3.2. Proxy Configuration

1. **Setup**: Configure a proxy to allow the Angular application to communicate with the backend server running on a different port.

3.3. Component Generation

- 1. **Components**: Generate necessary components, services, and modules to structure the application effectively.
- 2. **Routing**: Implement routing logic to navigate between different components of the application.

3.4. Angular Material Table

- 1. **Data Display**: Create an Angular Material table to display account data, including actions for editing and deleting entries.
- 2. **HTTP Methods**: Implement the necessary HTTP methods (GET, POST, PUT, DELETE) in the service to manage account information.

3.5. Features Implementation

- 1. **Searching, Sorting, and Pagination**: Integrate functionalities to search, sort, and paginate through the account data displayed in the table.
- 2. **User Input Forms**: Use Angular Material form fields to capture user input for creating and editing accounts.

4. User Interaction

4.1. Form Handling

- 1. **Data Submission**: Capture input data from forms and submit it to the backend when creating or updating an account.
- 2. **Edit Functionality**: Enable users to populate form fields with existing account data for modification.

4.2. Account Deletion

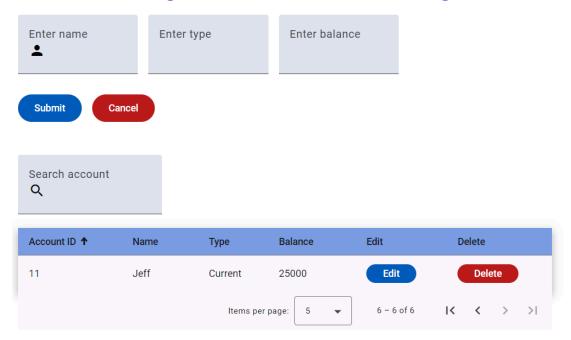
1. **Removal Process**: Implement a feature to delete accounts from the database, ensuring that the table reflects the changes immediately.

References:

- 1. https://www.youtube.com/watch?v=xjgCkEfUlwE
- 2. https://material.angular.io/

Images:

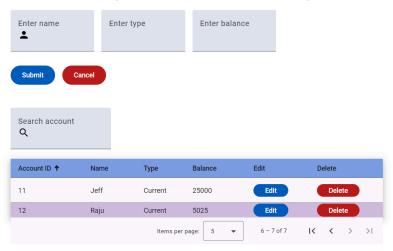
Full Stack with Angular 18 Material Node JS & PostgreSQL



Insertion:

- Inserted Raju

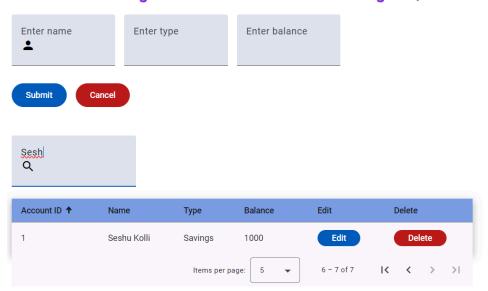
Full Stack with Angular 18 Material Node JS & PostgreSQL



Search:

- Search seshu

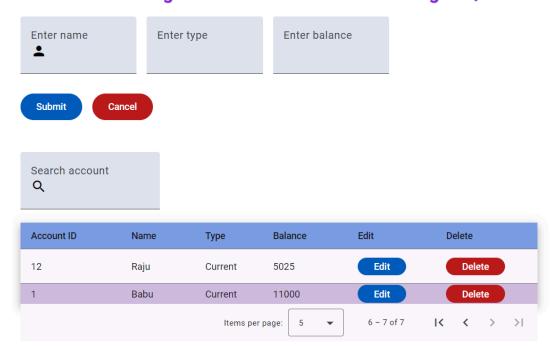
Full Stack with Angular 18 Material Node JS & PostgreSQL



Edit:

- Edited seshu kolli to Babu

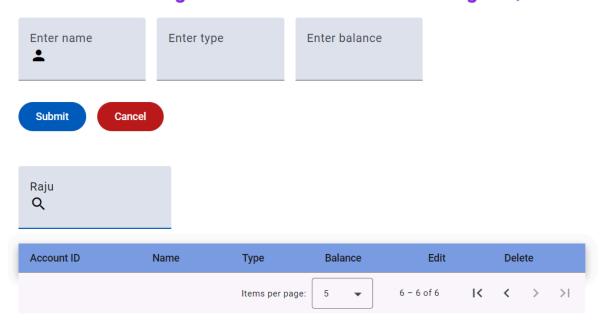
Full Stack with Angular 18 Material Node JS & PostgreSQL



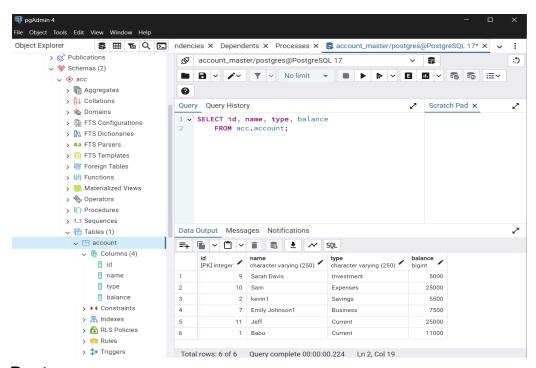
Delete:

Deleted Raju

Full Stack with Angular 18 Material Node JS & PostgreSQL



Postgres DataBase:



Postman:

