Tutorial of how run the application

The application works with a backend folder, a front end folder, and a database

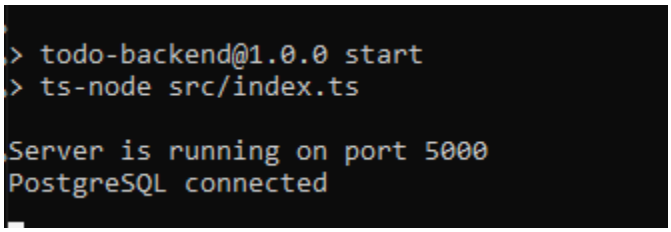
Technology used in app:

Backend

Node.js: A JavaScript runtime built on Chrome's V8 JavaScript engine, used to build the backend server.
Express.js: A minimal and flexible Node.js web application framework used to build the backend APIs.
PostgreSQL: A powerful, open-source relational database system used to store application data.
pg (node-postgres): A collection of node.js modules for interfacing with PostgreSQL database.
bcryptjs: A library to help hash passwords.
express-session: A middleware for session management.
uuid: A library for generating unique user IDs.
Frontend
React Native: A framework for building native apps using React.
Expo: A framework and a platform for universal React applications that allows you to build and deploy iOS and Android apps quickly.
Axios: A promise-based HTTP client for the browser and node.js, used to make API requests from the frontend to the backend.

Backend app

To run backend, open cmd, locate to the folder todo-backend, and run npm install
After, execute npm start to run the backen. Server



After execute backend, a message of postgresSQL server database running show displayed

Front end

Open cmd, locate to the folde rtodo-app, and run npm install
After, execute npm start to run the front end. Choose w if need to run web, a android,i for ios

If some library is missing just install from cmd,example like npm install axios react-navigation react-navigation-stack npm install --save-dev typescript @types/react @types/react-native @types/axios @types/react-navigation @types/react-navigation-stack
npx expo install react-native-web react-dom @expo/metro-runtime

Database

Download **postgresql** from official website. Then create a new database named todoapp, And create two tables:

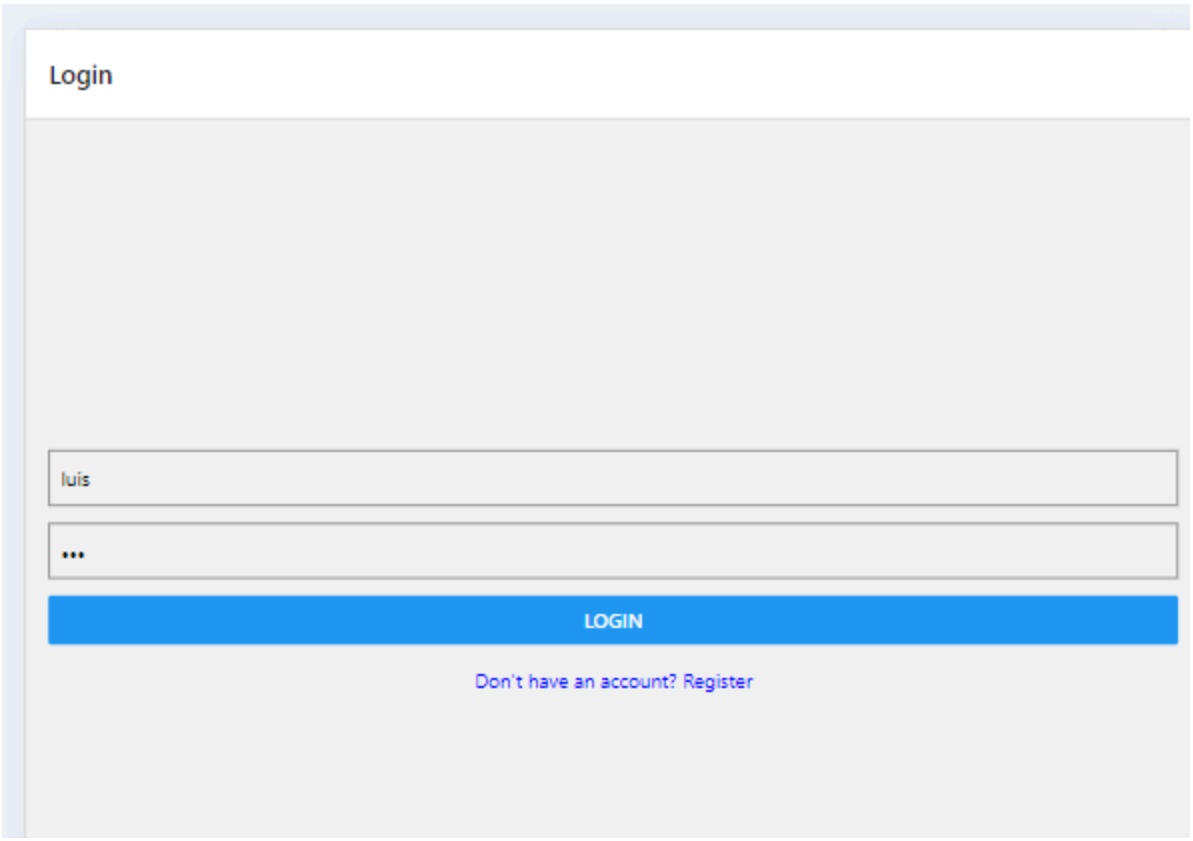
```
CREATE TABLE Users (
    id UUID PRIMARY KEY,
    username VARCHAR(50) NOT NULL UNIQUE,
    password VARCHAR(255) NOT NULL
);

CREATE TABLE Todos (
    id UUID PRIMARY KEY,
    userId UUID NOT NULL,
    task VARCHAR(255) NOT NULL,
    completed BOOLEAN NOT NULL,
    FOREIGN KEY (userId) REFERENCES Users(id)
);
```

On backend db.ts change the next parameters for yours local computer:

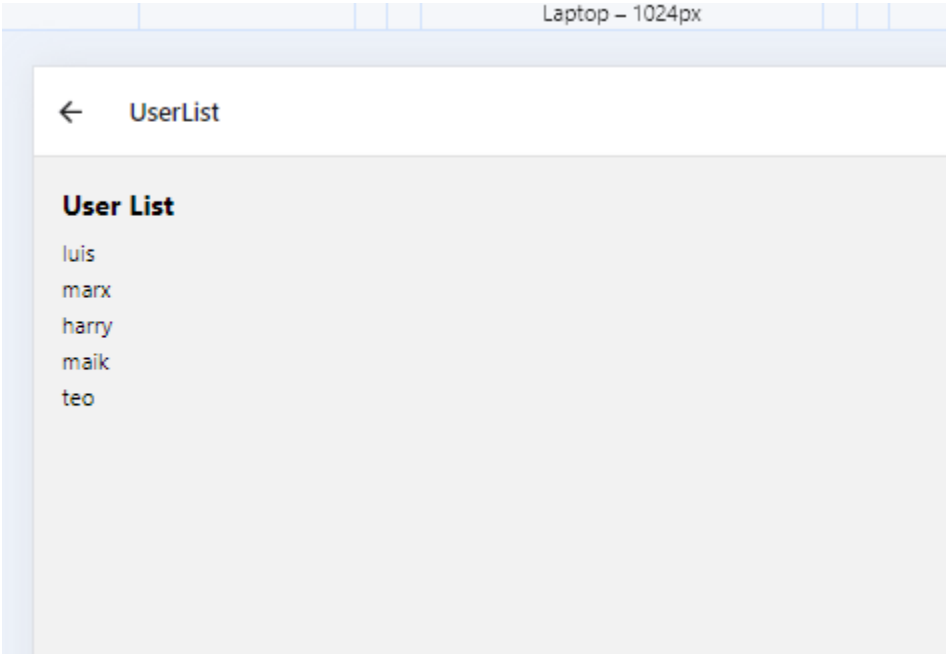
```
const pool = new Pool({
    user: 'postgres',
    host: 'localhost',
    database: 'todoapp',
    password: '123',
    port: 5432, // Default PostgreSQL port
});
```

App work

Just navigate to login, login with user created, or if you dont have already , create a new one clicking on register button to add new user. Then after login successfully, the app will navigate to a view who list all registered users.



User list view



A demo of the application in action is shown at the following URL.
https://www.youtube.com/watch?v=M2uFiXjJi4M