TASK AND PROJECT MANAGEMENT



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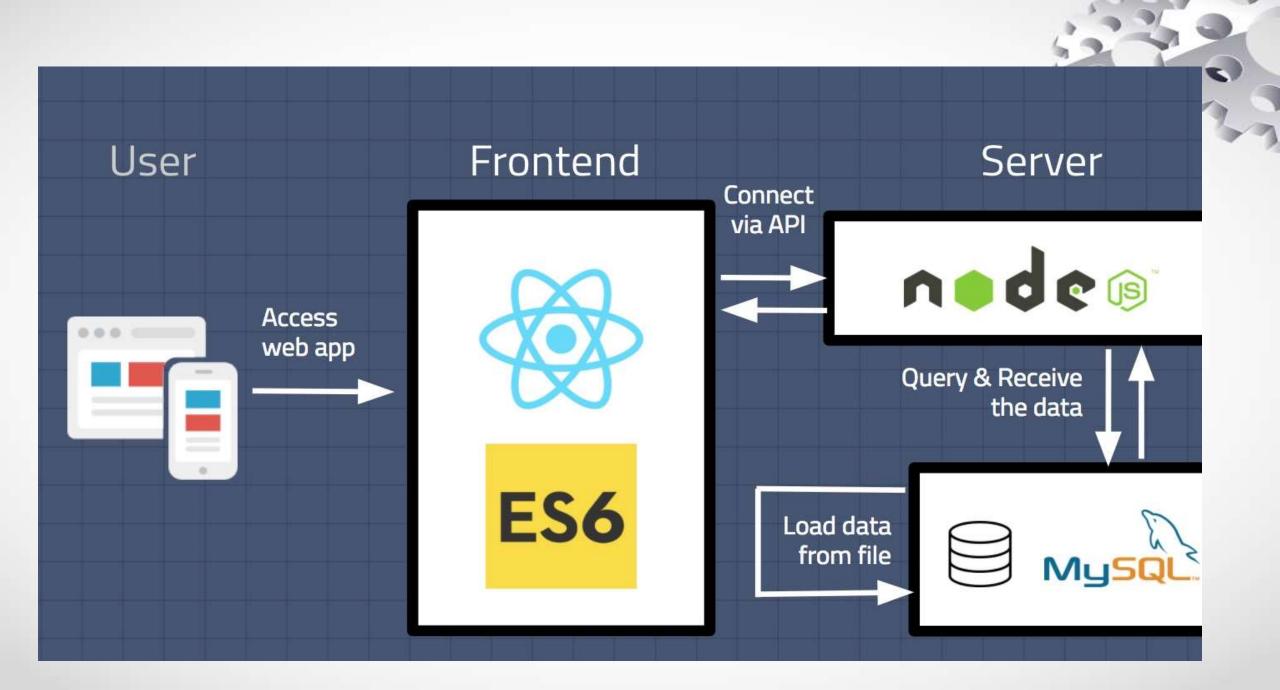


INTRODUCTION

Effective task and project management are crucial for maximizing productivity and achieving goals. Our application offers a comprehensive solution to streamline workflow, manage tasks, and organize projects efficiently. With user-friendly features, secure authentication, and seamless integration, our platform empowers users to stay organized, focused, and productive. Let's explore how our application can revolutionize your approach to task and project management.

ARCHITECTURE OVERVIEW

In the login page, users input their email and password. The application validates this information and sends it securely to the server for authentication. If the credentials are correct, users are redirected to their personalized dashboard, where they can manage their tasks and projects efficiently. Additionally, the application employs error handling mechanisms to notify users in case of incorrect credentials or other authentication issues. Users can seamlessly navigate through the application using React Router, ensuring a smooth and intuitive experience from login to dashboard access.



FLOW DIAGRAM FOR TASK AND PROJECT



TECHNOLOGIES

1.Frontend:

- React.js: A JavaScript library for building user interfaces.
- React Router: A routing library for navigation within a React application.
- CSS: Cascading Style Sheets for styling the user interface.
- Bootstrap: A CSS framework for responsive and mobile-first front-end development

2.Backend:

- Express.js: A Node.js web application framework for building server-side applications and APIs.
- MySQL: A relational database management system for storing user data and application state.



 Cors: A middleware for handling Cross-Origin Resource Sharing (CORS) to allow secure communication between frontend and backend..

3. Additional Libraries:

- Axios: A promise-based HTTP client for making asynchronous HTTP requests from the browser.
- bcrypt: A password-hashing function for securely storing user passwords.
- React Icons: A library providing a set of high-quality icons for React applications

FEATURES

1.User Authentication-

- Allows users to sign up with a name, email, and password.
- Provides secure login functionality.
- Validates user input on the client-side using React and server-side using Express.js.

2.Dashboard-

- Presents a centralized dashboard for users after login.
- Includes sidebar navigation for easy access to different sections: Home, Tasks, and Projects.
- Utilizes React hooks for state management, ensuring a responsive and interactive user interface.

3. Task Management-

• Enables users to add, view,



- Tasks can be associated with deadlines for better organization.
- Supports real-time updates and rendering using React's virtual DOM.

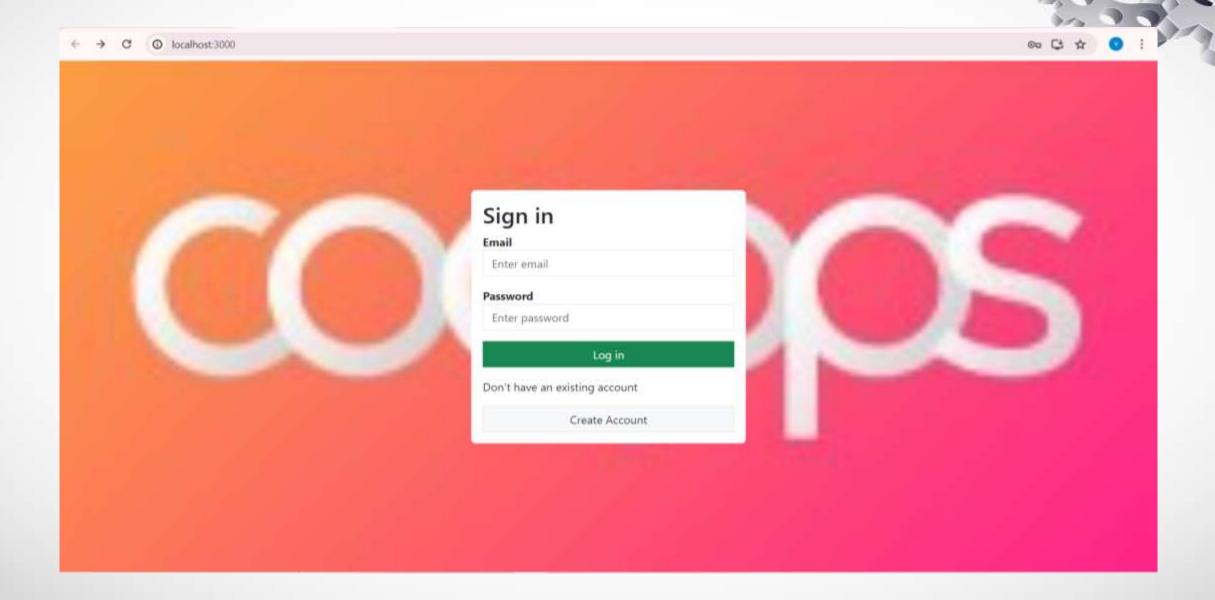
4. Project Management:

- Allows users to create, edit, and delete projects.
- Each project can have a name and a description for clear identification.
- Projects are displayed in a list format for easy access and management.

5. Server-side Functionality:

- Utilizes Express.js for handling server-side logic and API endpoints.
- Implements RESTful APIs for user authentication, task management, and project management.
- Validates user input and handles errors gracefully to ensure a smooth user experience.

OUTPUT



Dashboard

Home

Tasks

Projects

TASK AND PROJECT MANAGEMENT



Tasks and projects are organized according to your specifications.

The total count of tasks and projects is offered to meet your specific needs.

Total Tasks	Total Projects
1	0

FUTURE ENHANCEMENTS

1. Mobile Application:

• Develop a mobile application version of the Task and Project Management platform to enable users to access their tasks and projects on the go, enhancing accessibility and user experience.

2. Collaboration Features:

• Enable collaboration between users by allowing them to share tasks, projects, and progress updates with team members, fostering teamwork and productivity.

3. User Roles and Permissions:

• Introduce role-based access control (RBAC) to assign different permissions to users based on their roles (e.g., admin, regular user), enabling finer control over data access and management.

CONCLUSION

In conclusion, our Task and Project Management application offers a robust solution for organizing tasks and projects efficiently. By leveraging technologies such as React.js, Express.js, and MySQL, we have created a secure and user-friendly platform that empowers users to streamline their workflow and enhance productivity. With features like user authentication, task management, and project organization, our application provides a seamless user experience. As we continue to innovate and implement future enhancements, we remain committed to delivering a reliable and scalable solution that meets the evolving needs of our users.

