CS-186: Front End Engineering

Project Report

BlogBites

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1. Introduction

The React-TailwindCSS Blog Application is a modern web application designed to allow users to access, read, and contribute to a blog platform. It offers a user-friendly interface and is built using React and TailwindCSS, which ensures a sleek and responsive design. This documentation provides an overview of the application's key features, structure, and how to set it up.

2. Features

2.1 Pages

The application consists of the following pages:

- Login: Allows users to log in using their credentials.

- Home: The landing page after logging in, displaying a list of recent blog posts.

- About: Provides details about the blog application.

- Services: Shows a list of blog posts, and users can also create new blog posts.

- Contact: Allows users to submit reviews or contact the administrators with any issues.
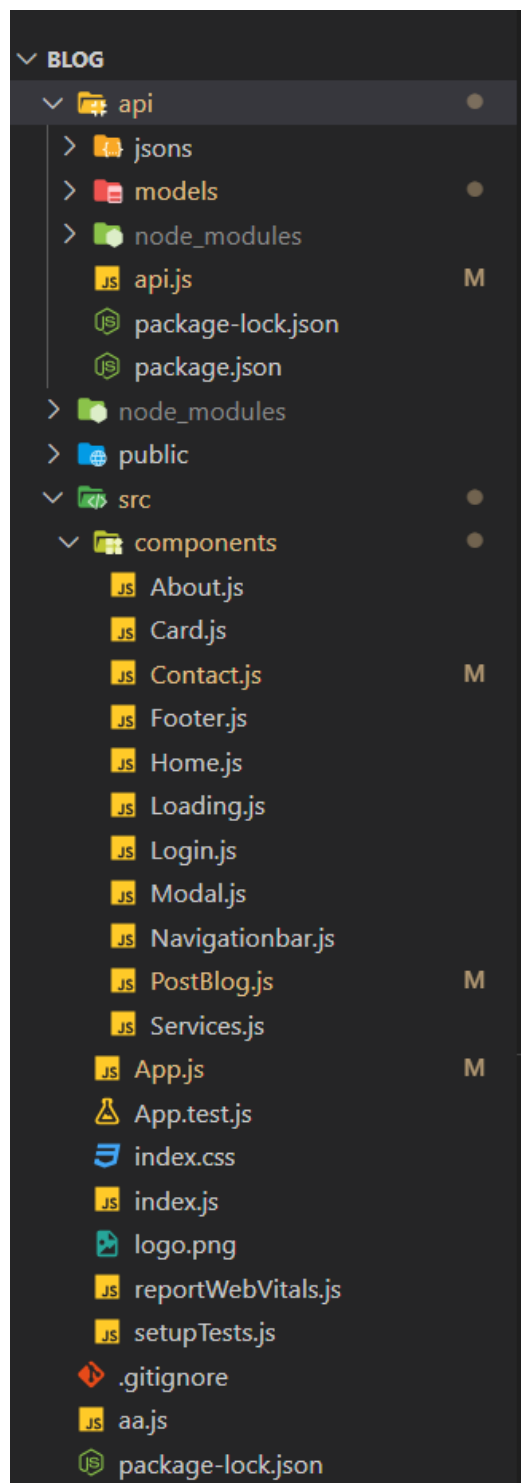
2.2 Blog Management

- View Blogs: Users can read and explore blogs on the Services page.

- Upload Blogs: Users can contribute by creating and posting blogs.

- Review Submission: Users can submit reviews about the services via the Contact page.

3. Application Structure

The React-TailwindCSS Blog Application is structured as follows:

- src/

  - components/

        - about.js: Component for the About page.

        - card.js: Component for rendering blog cards.

        - contact.js: Component for the Contact page.

        - footer.js: Component for the footer section.

        - Home.js: Component for the Home page.

        - Loading.js: Component for displaying loading indicators.

        - Modal.js: Component for rendering a modal for blog details.

        - navigationbar.js: Component for the navigation bar.

        - postblog.js: Component for posting blogs to the API.

        - services.js: Component for storing cards, modals of blogs, and posting blogs.

  - pages/

        - About.js: The About page.

        - Contact.js: The Contact page.

        - Home.js: The Home page.

        - Services.js: The Services page.

  - api/: Handles API calls to the backend for user authentication and blog data.

  - styles/: Contains stylesheets and utility classes for TailwindCSS.

  - App.js: The main application component.

  - index.js: Entry point of the application.

BLOG
- api
  - jsons
  - models
  - node_modules
  - api.js   M
  - package-lock.json
  - package.json
- node_modules
- public
- src
  - components
    - About.js
    - Card.js
    - Contact.js   M
    - Footer.js
    - Home.js
    - Loading.js
    - Login.js
    - Modal.js
    - Navigationbar.js
    - PostBlog.js   M
    - Services.js
  - App.js   M
  - App.test.js
  - index.css
  - index.js
  - logo.png
  - reportWebVitals.js
  - setupTests.js
- .gitignore
- aa.js
- package-lock.json

4. Installation and Setup

To set up and run the application:

1. Clone the repository from GitHub.

2. Navigate to the project directory and run the following commands:

```
Install dependencies
npm install
```

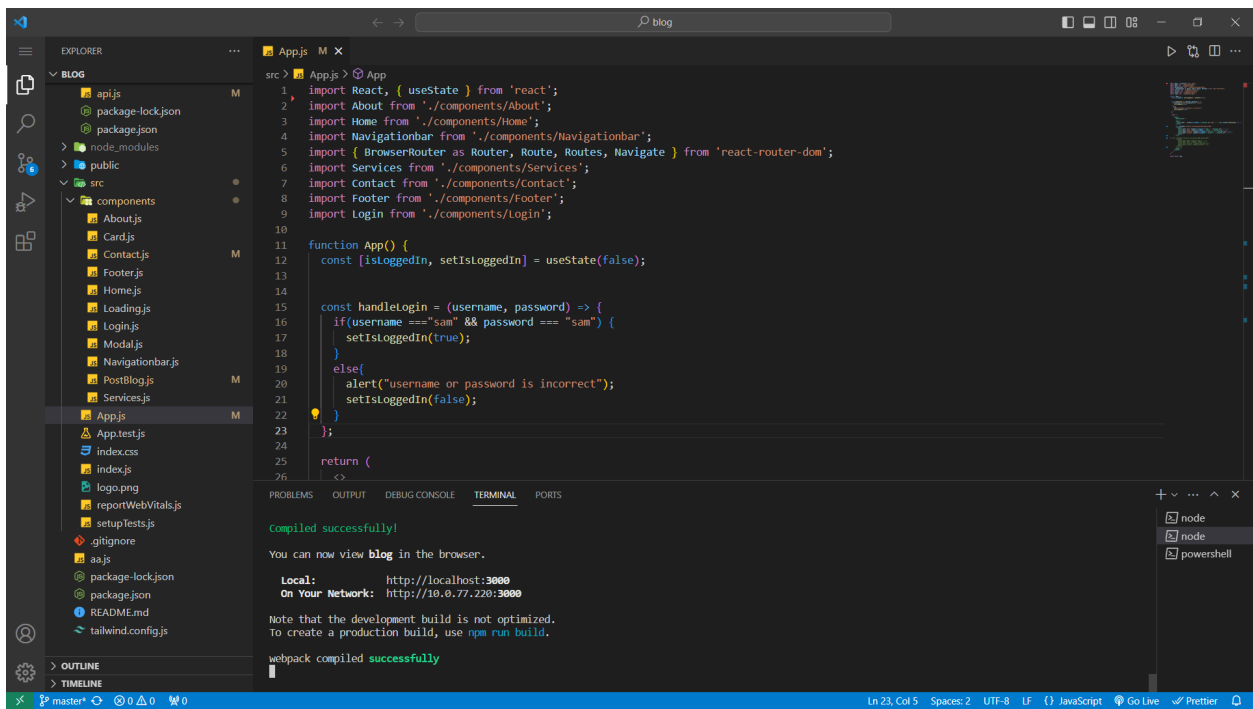Start the development server

```
npm start
```

3. Also you have to install dependencies for api

```
cd api
npm install
```

Start the api server

```
npm start
```

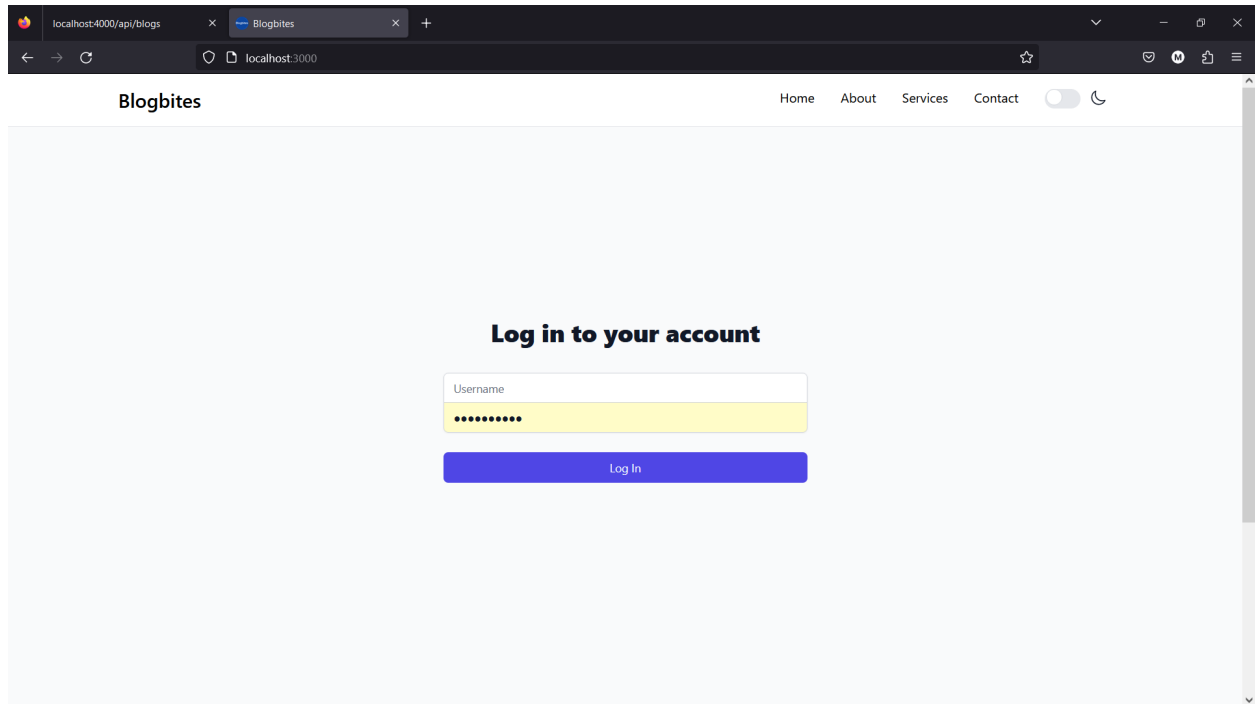The application will be accessible in your browser at `http://localhost:3000`.

5. Application Flow

1. Login Page: Users can log in using their credentials.

2. Home Page: After logging in, users will be directed to the Home page, which displays recent blog posts.

3. Services Page: This page contains a list of blogs. Users can view and create new blog posts by clicking the "Upload" button.

4. About Page: This page provides detailed information about the blog application.

5. Contact Page: Users can submit reviews or contact the administrators for assistance with any issues.

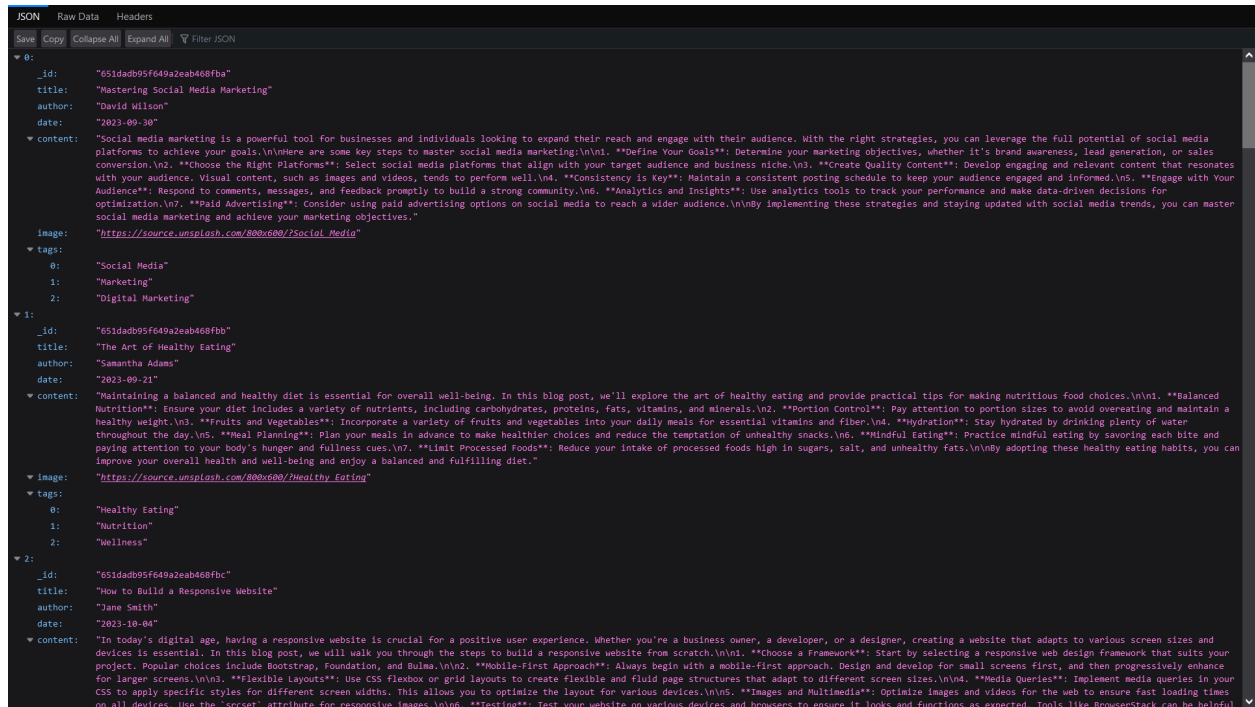## User Authentication

6. API Integration

The application is integrated with an API built using Express and Mongoose. The API handles the storage and retrieval of blog details, including user authentication.

The API endpoints include:

- /api/blogs: Handles CRUD operations for blog posts.

- /api/auth: Manages user authentication and authorization.

The application communicates with the API to fetch and post blog data.

7. Conclusion

The React-TailwindCSS Blog Application is a versatile platform that enables users to engage with blog content, contribute to the platform, and interact with administrators when needed. Its modern design and API integration provide a seamless and user-friendly experience for both readers and bloggers. Feel free to explore and enjoy the world of blogging with this application!