

# Full Stack Development with MERN

## Frontend Development Report

Date	10 July 2024
Team ID	SWTID1720101616
Project Name	Project – Video Sharing App MERN

### Project Title: Video Sharing App MERN

Date: 10-07-2024

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### Objective

The objective of this report is to document the frontend development progress and key aspects of the user interface implementation for the [Your Project Title] project.

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### Technologies Used

- **Frontend Framework:** React.js
- **State Management:** Redux
- **UI Framework/Libraries:** Material-UI
- **API Libraries:** Axios

## Project Structure:

- client
  - node\_modules
  - public
    - index.html
  - src
    - components
      - Card.jsx
      - Comment.jsx
      - Comments.jsx
      - Dropdown.jsx
      - Menu.jsx
      - Navbar.jsx
      - Recommendation.jsx
      - Upload.jsx
    - img
      - logo.png
    - pages
      - Home.jsx
      - Profile.jsx
      - Search.jsx
      - SignIn.jsx
      - Video.jsx
    - redux
      - store.js
      - userSlice.js
      - videoSlice.js

- ✖ utils
  - JS Theme.js
  - JS App.js
  - JS firebase.js
  - JS index.js
- 📁 .gitignore
- { } package-lock.json
- { } package.json
- 📖 README.md
- 📦 yarn.lock

## Key Components

### 1. App.js

- Handles routing and sets up the main application layout, ensuring navigation between different pages.

### 2. /components

- Contains reusable UI components for consistent design and functionality across the app.
- **Card.jsx**: Displays individual video thumbnails and basic information.
- **Comment.jsx**: Renders a single comment with user details and timestamp.
- **Comments.jsx**: Manages and displays a list of comments for a video.
- **Dropdown.jsx**: Displays Dropdown menu for displaying profile, logout option.
- **Menu.jsx**: Provides a navigation menu for different app sections.
- **Navbar.jsx**: Displays the top navigation bar with links and user info.
- **Recommendation.jsx**: Shows recommended videos based on user preferences or current video.
- **Upload.jsx**: Handles the video upload form and submission process.

### 3. /pages

- Contains different pages for the web application, each serving a specific purpose.
- **Home.jsx**: Displays the homepage with a feed of videos and categories.
- **Search.jsx**: Manages and displays search results for videos and users.
- **Signin.jsx**: Provides the sign-in form for user authentication.
- **Video.jsx**: Displays a specific video, its details, and related comments.

## Routing

Routing is managed using React Router. Here are the main routes:

- **/** - home page of the application.
- **/signin** - logging page for user
- **/video** - view page of particular video.

## State Management

State management is achieved using Redux API.

## Integration with Backend

The frontend communicates with the backend APIs hosted on Local Host. Key endpoints include:

- **GET /api/video** - Retrieves videos for display.
- **POST /api/user/signin** - Handles user authentication.

**User Interface (UI) Design:**

- Implemented using Material-UI, for a consistent and responsive design.

**Third-Party Integrations (If any)**

- Axios for API calls
- React Router for routing
- Redux for state management