**TIMESHEET MANAGEMENT SYSTEM**

**1. Project Overview**

The Timesheet Management Application is designed to streamline project and employee management within an organization. It facilitates efficient project allocation, employee management, and project visibility for employees, with separate login functionalities for administrators and employees.

**2. Key Features**

**2.1. User Authentication and Roles**

* **Admin Login:**
  + Allows the administrator to manage employees and projects.
* **Employee Login:**
  + Enables employees to view assigned projects.

**2.2. Admin Functionalities**

* Create and manage employee details (e.g., name, role, contact information).
* Create and manage projects with specific details like name, description, and deadlines.
* Allocate projects to employees.
* Update employee details as needed.

**2.3. Employee Functionalities**

* View assigned projects upon logging in.
* Seamless access to project details, deadlines, and requirements.

**3. Application Architecture**

**3.1. Frontend (React.js)**

* **Features:**
  + Responsive and user-friendly interfaces for login and dashboards.
  + Components for project and employee management.
* **Libraries Used:**
  + React Router for navigation.
  + Axios for API communication.

**3.2. Backend (Node.js with Express.js)**

* **Features:**
  + RESTful API for handling requests.
  + Middleware for authentication and error handling.

**3.3. Database (MongoDB)**

* **Data Models:**
  + **Admin:** Stores login credentials and permissions.
  + **Employee:** Contains personal details, credentials, and assigned projects.
  + **Project:** Includes project details and assigned employees.

**4. Functional Workflow**

**4.1. Admin Workflow**

1. Admin logs in through the dedicated admin portal.
2. Admin creates employee profiles by entering required details.
3. Admin creates projects and specifies project requirements.
4. Admin allocates projects to employees.
5. Admin can update or delete employee and project details as required.

**4.2. Employee Workflow**

1. Employee logs in through the dedicated employee portal.
2. Assigned projects are displayed on the dashboard.
3. Employee views project details and requirements.

**5. Key Advantages**

* **Efficiency:** Simplified project allocation and management process.
* **Role-Based Access:** Ensures secure and personalized access for both admins and employees.

**6. Conclusion**

The Timesheet Management Application showcases the power and flexibility of the MERN stack for developing efficient management systems. It addresses key organizational challenges by offering a user-friendly, secure, and scalable solution.