# Task Assignment & Roles

## Team Overview

Our team consists of four frontend developers, each responsible for different aspects of the Movie Recommendation App. Below is the distribution of tasks and roles among the team members.

## Roles and Responsibilities

### 1. UI/UX & Component Development

- Design and implement the user interface based on wireframes and mockups.

- Develop reusable and responsive React components.

- Ensure UI consistency and accessibility across different screen sizes.

- Implement animations and transitions for better user experience.

### 2. API Integration & State Management

- Integrate The Movie Database (TMDb) API to fetch and display movie data.

- Implement Redux for global state management (movies, filters, user preferences).

- Handle asynchronous actions using Redux Thunk or Redux Toolkit.

- Optimize API calls to improve performance and reduce unnecessary re-fetching.

### 3. Features & Functionality Implementation

- Develop core features including search, filtering (genre, year, rating), and sorting.

- Implement pagination to handle large movie lists.

- Ensure proper error handling for failed API requests.

- Write unit tests using Jest to validate core functionalities.

### 4. Deployment & Documentation

- Optimize the application for performance and SEO.

- Ensure cross-browser compatibility.

- Deploy the application to Netlify or Vercel.

- Prepare project documentation, including API usage, component structure, and deployment steps.

## Collaboration & Workflow

- Use GitHub for version control and collaboration.

- Follow Agile methodology with weekly sprints and stand-up meetings.

- Use Trello or Jira for task tracking and progress updates.

- Conduct peer code reviews to ensure code quality and maintainability.

Each developer will actively contribute to multiple areas while focusing on their primary responsibility. This structured task assignment ensures an efficient workflow and successful project completion.