TO-DO LIST

Project Introduction:
The project is a web-based todo list application developed using servlets, JSP, HTML, and CSS. It provides users with a platform to manage their tasks efficiently. Users can register, log in, add tasks, edit tasks, mark tasks as completed, and reschedule tasks as needed.

Project Category:
Web Application Development

Objectives:
- To create a user-friendly todo list application.
- To provide users with the ability to register and log in securely.
- To allow users to manage their tasks effectively by adding, editing, and marking tasks as completed.
- To enhance user productivity by providing features such as task prioritization and rescheduling.

Problem Statement:
Many individuals struggle to manage their tasks effectively due to the absence of a convenient and user-friendly tool. Existing solutions may lack certain features or suffer from usability issues.

Existing System:
The existing system might involve manual task management using tools like paper lists or basic digital notepads. Alternatively, users might rely on generic todo list applications that lack advanced features or customizability.

Proposed System:
The proposed system is a feature-rich web-based todo list application that addresses the limitations of existing solutions. It provides users with a comprehensive set of features for task management, including task prioritization, rescheduling.

Functional Requirements:
1. User Registration: Allow users to register by providing a username, email, and password.
2. User Authentication: Ensure secure login functionality for registered users.
3. Task Management: Enable users to add, edit, delete, and mark tasks as completed.
4. Task Prioritization: Allow users to assign priorities to tasks.
5. Task Rescheduling: Provide users with the ability to reschedule tasks with new due dates and times.

6. User Interface: Design an intuitive and user-friendly interface for easy navigation and interaction.

Non-Functional Requirements:

1. Security: Implement measures to protect user data and prevent unauthorized access.
2. Performance: Ensure fast response times and efficient data retrieval.
3. Scalability: Design the application to handle a growing number of users and tasks.
4. Compatibility: Ensure compatibility with different web browsers and devices.
5. Accessibility: Design the application to be accessible to users with disabilities.

Hardware Requirements:

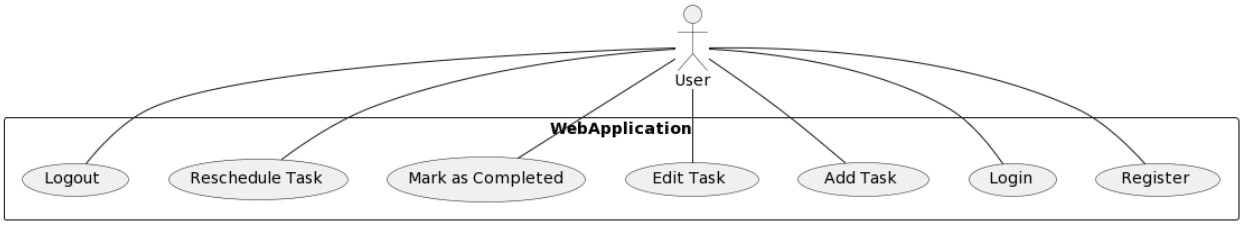
- Web server for hosting the application
- Database server for storing user data and task information
- Client devices (e.g., computers, smartphones) for accessing the application

Unique Features of the Project:

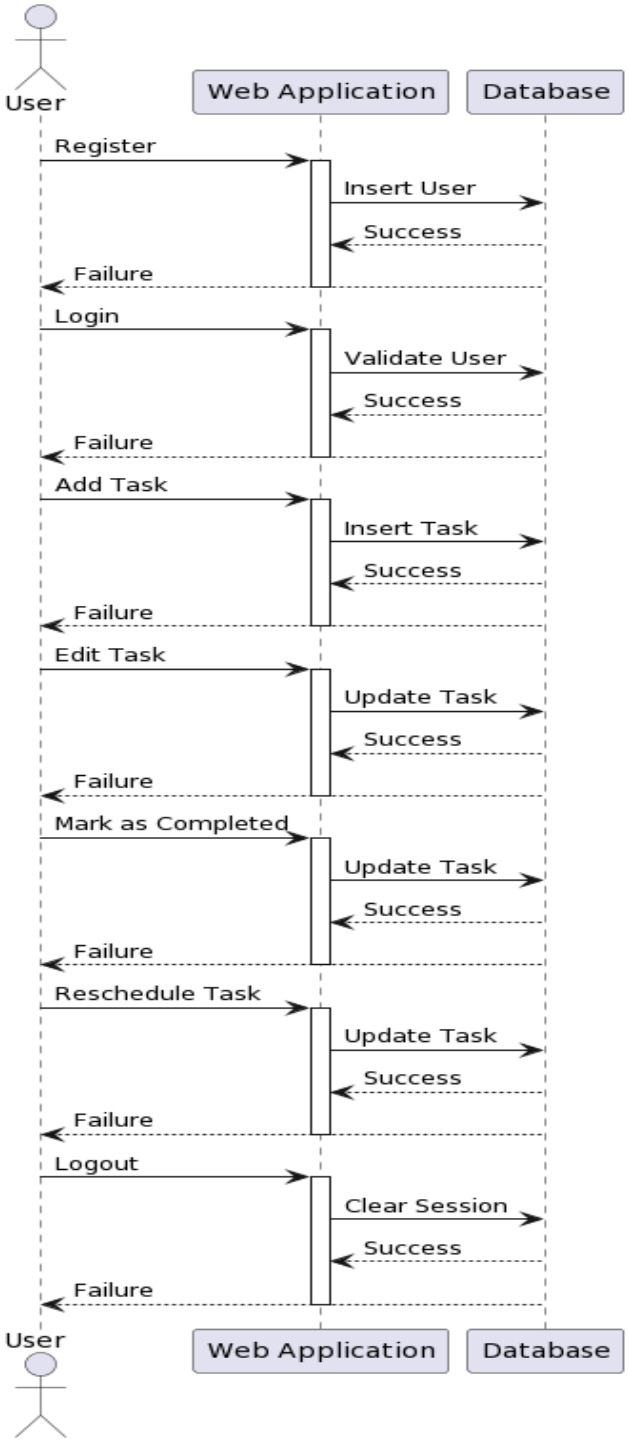
1. Task Rescheduling: Unlike many existing todo list applications, this project allows users to easily reschedule tasks with new due dates and times.

By addressing the limitations of existing solutions and providing users with a feature-rich todo list application, this project aims to improve task management and enhance user productivity.

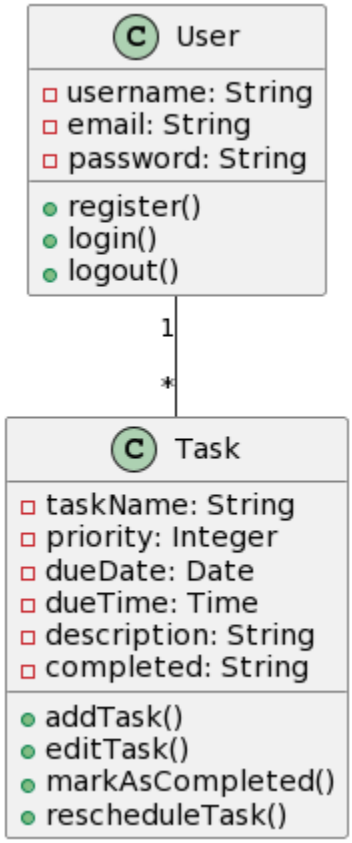
Use Case Diagram



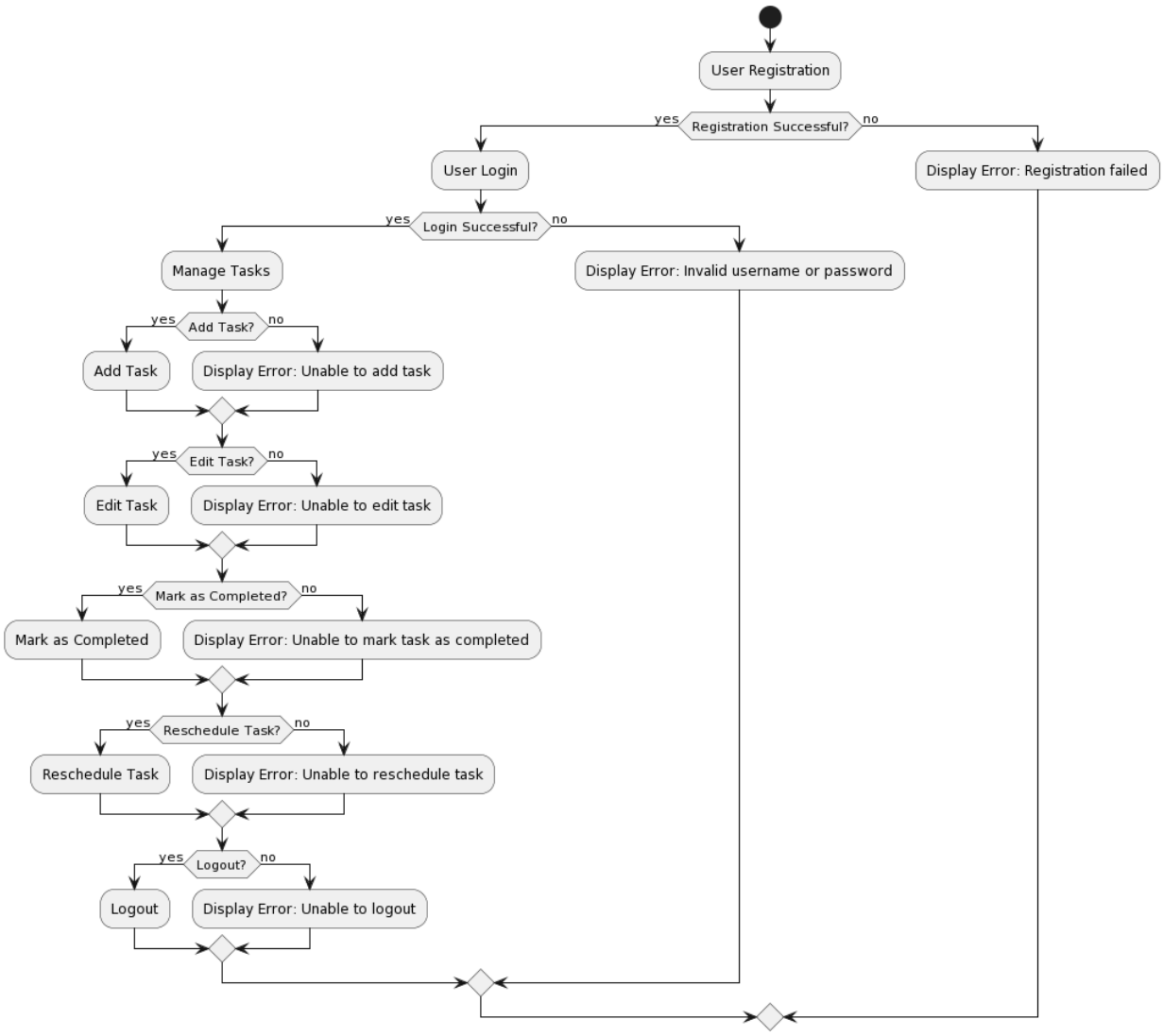
Sequence Diagram


User
Web Application
Database
Register
Insert User
Success
Failure
Login
Validate User
Success
Failure
Add Task
Insert Task
Success
Failure
Edit Task
Update Task
Success
Failure
Mark as Completed
Update Task
Success
Failure
Reschedule Task
Update Task
Success
Failure
Logout
Clear Session
Success
Failure
User
Web Application
Database

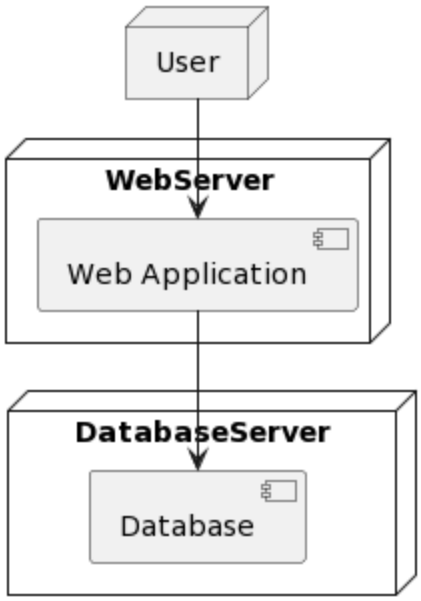
Class Diagram



Activity Diagram



Deployment Diagram


User
WebServer
Web Application
DatabaseServer
Database