

Lab: Taskify

Objective: Develop a task management app where users can create, manage, and share tasks with others.

Layers:

1. User Interface:

- Design an intuitive user interface with JavaFX for adding, editing, displaying, and deleting tasks.
- Implement screens for task lists, task details, and an editing screen.

2. Service Layer with POJOs:

- Create POJO classes for entities such as **Task** and **User**.
- Implement a service layer with methods for task management and user interactions.
- Optional: Handle logic such as priorities, deadlines, and task sharing among users.

3. JDBC Connection:

- Establish a JDBC connection to store data in a database (MySQL).
- Implement CRUD operations for tasks and user data.

Tasks:

1. User Interface:

- Implement screens for viewing task lists, task details, and adding/editing/deleting tasks.
- Add filters and sorting functions for tasks based on priority, deadline, etc.

2. Service Layer with POJOs:

- Implement the **TaskService** and **UserService** with methods for managing tasks and users.
- Implement logic for task management such as adding, editing, deleting, and sharing among users.

3. JDBC Connection:

- Create a database with tables for tasks and users.
- Implement JDBC methods to read from/write to the database for task management and user interactions.

Bonus Challenges:

- Add user authentication for access control to tasks.
- Implement a notification system for deadlines or shared tasks.
- Create an overview panel for shared tasks among users.