

JavaFX Todo List Application - Project Report

Team Information

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GitHub Repository: [<https://github.com/Samiullah98/todo.git>]

Project Overview

This JavaFX-based Todo List application offers users a modern interface for task management. Key features include user authentication, data persistence using local file storage, and a responsive GUI. The project adheres to the MVC design pattern.

Development Tools & Technologies

- Java 24 & JavaFX 24.0.1
- Maven for dependency management
- FXML for UI design
- CSS for styling
- File I/O for saving user data and tasks

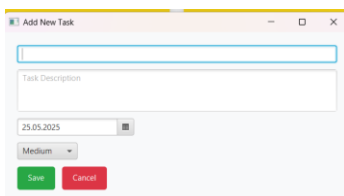
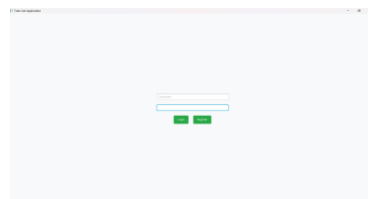
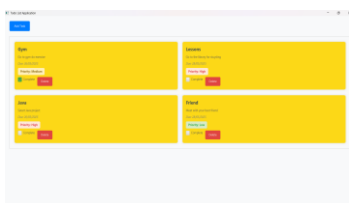
Implemented Features

1. Authentication

- - User registration and login/logout functionality
- Input validation and error handling
- Session management
- User data stored in local files

2. File Handling

- - Each user has a separate task file
- Tasks are loaded automatically after login
- Data format: Title, Description, Due Date, Priority, Completed



Architecture

The project follows the MVC pattern.

- Model: Task.java, TaskFileHandler.java
- View: login.fxml, main.fxml, addTask.fxml, main.css
- Controller: LoginController.java, MainController.java, AddTaskController.java

File Structure

todo/

```
├── src/
|   ├── java/
|   |   ├── controllers/
|   |   ├── models/
|   |   └── utils/
|   └── resources/
|       ├── views/
|       └── styles/
├── tasks/
└── pom.xml
```

Feature Summary Table

| Feature | Successfully realized (Yes or No) | Source code file names |
|------------------------------------|-----------------------------------|------------------------|
| Basic functionality | | |
| Authentication | | |
| File processing | | |
| Additional features (if any): | | |
| 1 st Additional feature | | |
| 2 nd Additional feature | | |

Declaration

I declare that this project is my own work and has not been submitted in any form for another assignment. I have acknowledged all sources used in this report.

Signature: