# Task Manager

LBYCPA2 - EQ8

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## I. Introduction

Students in the current digital era constantly struggle to balance their obligations to their personal lives with their academic responsibilities. Maintaining an orderly and effective digital workspace has become increasingly challenging due to the expansion of digital resources and personal data. Today's students extend their educational journey into the digital realm, where files and assignments call for an organized approach beyond traditional classrooms and textbooks.

To address these pressing issues, a dedicated team has embarked on a mission to simplify and enhance students' lives. Researchers have developed a task management system that goes beyond being just a software program; it is a skillfully crafted tool designed to help students organize their files based on various criteria. Equipped with features such as priority levels, due dates, categories, and detailed descriptions, this system caters to the diverse needs of modern learners.

The implementation of this approach will significantly boost students' productivity. It streamlines the management of their digital lives and contributes to their academic success by ensuring easy organization and retrieval of both personal and academic documents. This project is more than a mere collection of data structures and lines of code; it is a transformative tool that empowers students to efficiently complete their academic tasks.

Each student is expected to organize their folders to provide a quick and effective means of accessing their information. Managing numerous files can be challenging, particularly when dealing with multiple subjects, each with its own distinct requirements. Complicating matters further is the fact that students often store private data on their computers. By allowing students to categorize their academic and personal documents according to priority levels, deadlines, categories, descriptions, and other relevant factors, this task management system becomes a comprehensive and user-friendly solution to address these challenges. The primary objective of this method is to enhance overall productivity while ensuring that students can easily locate the information they need, precisely when they need it.

Key-Features:

1 Log-in System

2 Priority levels

A. Due dates

B. Categories

C. Task description/notes

D. Task hierarchy

-Basically before being able to proceed to another task, one has to complete a pre-requisite task first

E. Completed task with date finished

F. Teams

-To be able to share tasks with “groupmates”

-Have to add them with one another

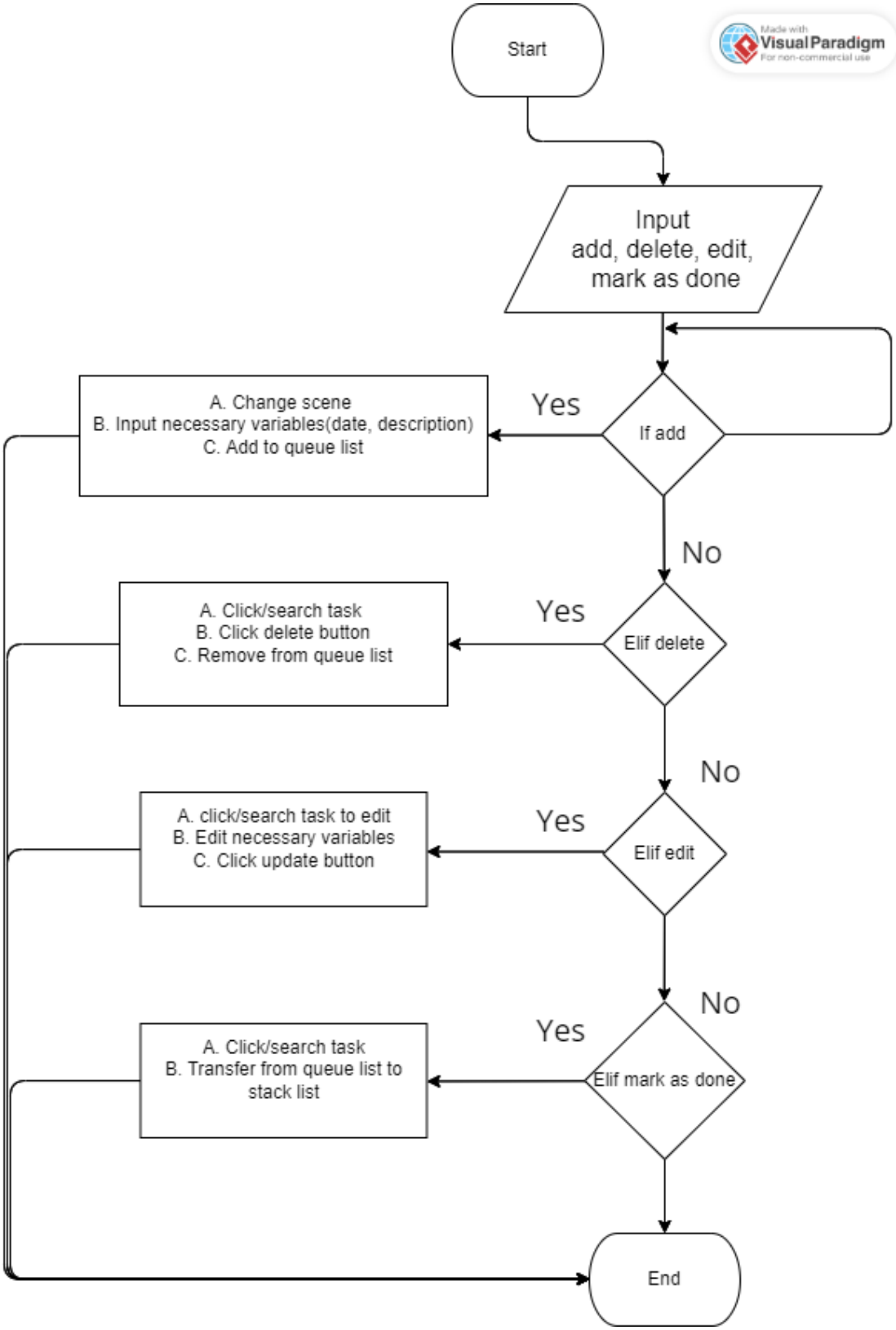
## II. Methodology

We plan on approaching this project by designing our front-end first which is the JavaFX interface. Afterwards, we will implement the logic behind the buttons which is the backend of the program. In the backend, we will apply the different data structures that will be needed to be able to create a task manager. Once the backend is complete, we will then integrate the backend to the frontend of the program giving the buttons and the other different variables that the user has to interact with. After the integration of the frontend and backend is done, we will then debug and fix any possible issues that we have seen in the program.

**Milestones:**

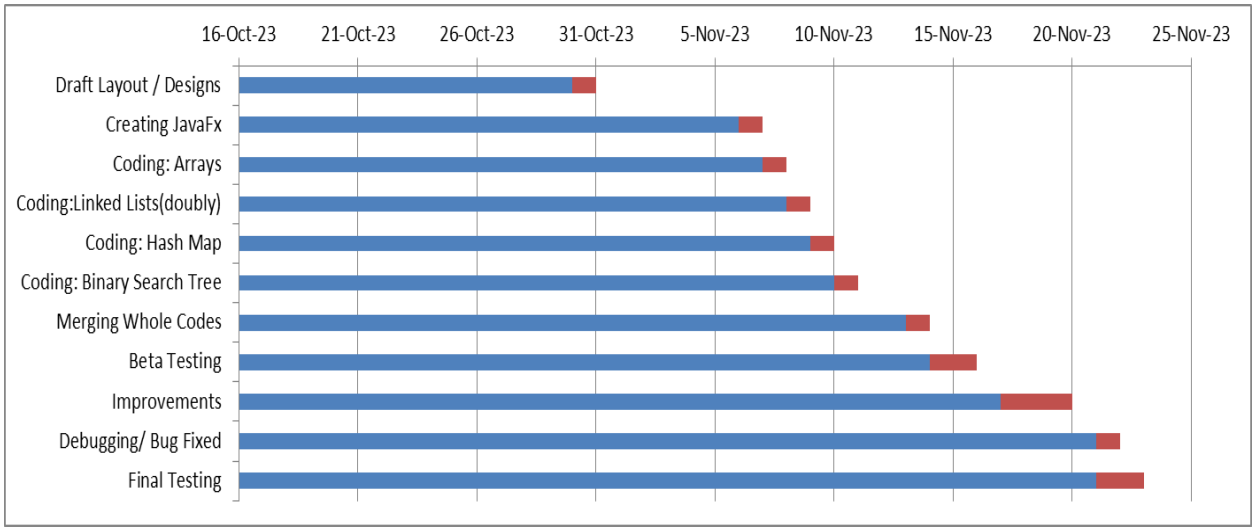
1. Create JavaFX (front end)
2. Setup back end(data structures to be used)
    a. Arrays
    b. Linked Lists(doubly)
    c. Hash Map
    d. Binary Search Tree
    e. Stack
3. Integrate front end with back end
4. Fix and debug if there are any

**Flowchart:**


Start
Input
add, delete, edit,
mark as done
If add
Yes
A. Change scene
B. Input necessary variables(date, description)
C. Add to queue list
No
Elif delete
Yes
A. Click/search task
B. Click delete button
C. Remove from queue list
No
Elif edit
Yes
A. click/search task to edit
B. Edit necessary variables
C. Click update button
No
Elif mark as done
Yes
A. Click/search task
B. Transfer from queue list to
stack list
End

## III. Deliverables

Each member will assist one another in completing the tasks presented in the graph, with the goal of meeting the expected due date. Each member possesses unique skills and abilities to perform and create the necessary code for the specified deliverables.




## IV. Evaluation

1. Task Completion: Compare the proportion of tasks that are finished on time to the total number of tasks assigned.

2. Reduction of Assignments: This measures how well the software helps the students successfully reduce their assignments or tasks in their list.

3. Progress Tracking: Determine if students can easily track their progress on assignments and see what tasks are pending or completed.

4. Error Minimization: To check whether the program helps the students to avoid usual mistakes such as missing deadlines or losing tasks and assignments.

5. Satisfactory: Obtain student's or user's feedback to determine how satisfied they are with the task manager's capabilities.

6. Rooms for Improvement: If the application helps students to more efficiently manage their time for projects and assignments and then make any necessary future enhancements.

7. Compatibility and Accessibility: To ensure that the tools are accessible by students who use a variety of devices (computers, laptops, mobile phones), operating systems, and gadgets.

## V. Conclusion

The Task Manager project is poised to provide students with a practical solution to the persistent challenges they face in file and task management. Recognizing the overwhelming nature of academic and personal responsibilities, the project aims to empower students through the development of a user-friendly Task Manager. By incorporating features such as priority levels, due dates, categories, detailed task descriptions, hierarchical task management, and tools for monitoring task completion and team communication, the project aspires to enhance student productivity and streamline their daily lives. This initiative is not only focused on addressing the unique needs of students but also seeks to offer a valuable solution to the broader community.

Effective collaboration among team members is pivotal in every phase of this project, from front-end programming to back-end data architecture and from user interface design to comprehensive testing. The team places great importance on implementing a robust evaluation approach to gauge user satisfaction, system performance, and task management efficiency. The success of this project hinges on its ability to simplify students' lives and enhance their task management skills. With a commitment to proactively address potential challenges, adherence to a well-defined schedule with specific checkpoints, and efficient resource allocation to meet the project's objectives, the team is determined to ensure the project's success.

In conclusion, the Task Manager project is a promising endeavor designed to alleviate the intricate challenges faced by students juggling multiple classes and managing their personal files. With a comprehensive feature set and a strong team dedicated to its realization, the project has the potential to make a substantial impact on the academic and personal lives of students while contributing to the broader community. The team's commitment to effective teamwork, rigorous assessment, and proactive issue resolution positions this initiative for a successful outcome, ultimately fulfilling its mission of enhancing student productivity and task management effectiveness.

## VI. References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