MFLOW

mdev | Canada

a PROject made by

Derrick Mangari

2025

Table of Contents

[Description 1](#_Toc199095334)

[Objectives 2](#_Toc199095335)

[Technology Used 2](#_Toc199095336)

[Logo 3](#_Toc199095337)

[Scope 3](#_Toc199095338)

[Functional Requirements: 3](#_Toc199095339)

[Non-Functional Requirements: 4](#_Toc199095340)

[Stakeholders 5](#_Toc199095341)

# Description

MFlow is a powerful and user-friendly application that helps users schedule their tasks on a calendar and fully customize task details to suit their preferences—ensuring top-tier organization and productivity.

# Objectives

* Ensure that it is accessible through mobile devices
* Enable users to create/edit/delete their tasks
* Allow tasks to be scheduled and display them in the calendar
* Support recurring tasks and subtasks
* Allow users to signup and login
* Allow users to customize how they want to display and categorize tasks
* Help users to keep track of their tasks through reminders, notifications and progress tracking.

# Technology Used

Frontend: Flutter

Backend: Java (Spring Boot)

Database: PostgreSQL

Cloud : Render

# Logo

# Scope

## Functional Requirements:

* Users can register, login with their email and password with proper authentication, they can logout, and attempt to reset their passwords
* Users will be able to create/edit/delete tasks to their liking and allowing them to set priorities, assign due dates, add a title and description, categories, mark tasks as completed or pending and add subtasks or check it as a recurring task
* Users will be able to view tasks in a calendar layout (daily/weekly monthly) and be allowed to add or delete tasks from schedule or remove a recurring task as an exception or remove all future recurring tasks also users will be able to see necessary info for tasks (such as priority level)
* Users will be able to make reminders to notify them when an upcoming task is due and will be allowed to customize their notifications preference
* Users will be allowed to search through tasks by title/description/date, users will be allowed to sort through dates and filter through priorities/status/due date/
* Users will be allowed to use the application offline the changes will then be made once the user is connected back online
* Users will be allowed to toggle between light and dark mode, users will be allowed to select their default view of the task list view and will be allowed to make a default priority for all tasks newly created
* Task Data will be synchronized through all devices connected to the account and users will be able to manually sync the data if automated sync fails
* User data will be securely encrypted using https (not sure how to do it without paying?) and users will only be able to see their own tasks data

## Non-Functional Requirements:

* The performance of the app will be no longer than 2 seconds for all actions
* The app will always be available unless there is maintenance involved
* The app will be usable offline using local storage
* The app will always be secure to not leak out sensitive data
* The app’s code will be clean and readable (with comments and documentation) and will be built with future upgrades in mind
* The app will work with both android and iOS and the backend will support Java Spring Boot
* The UI will be user friendly and will include light and dark mode

## Stakeholders

* Users: People who needs an application to keep themselves organized
* Website Admins: Individuals who manages the content, moderates user activity, and ensures the website runs smoothly.
* Developers: Responsible for creating and maintaining the website, ensuring that part compatibility, lists, and power calculations work correctly.

## Use Case: