

- Project Title: Task Organizer and Tracker

- Problem Statement

-A ton of students struggle with procrastination, so we plan to solve that by creating an application that reminds them on a day to day basis, tracks, and organizes their tasks. The main idea we have to make our application unique is to make it fun to use. So, we plan to do that by adding awards. Like, badges or streaks. Maybe even small goals or quests every day from completing or adding a number of tasks. Other features like a built in calendar or online note-taking aspects could be a possibility. To ensure that the user puts in a task and remember to do it. Originally we thought of the use of notifications. But, the previous additions of quests, badges, or streaks could make the user motivated to input and do a task.

- Project Objectives

- Organizes the users tasks
- Remind the user of their tasks daily
- Gives in-app awards to the user if they input and do their task

- Planned features

- Input a task
- Organizes tasks
- Gives awards if user completes or inputs tasks

- Planned Inputs and Outputs

- Inputs
  - Input task and due date
- Outputs
  - Organized tasks
  - Awards achieved

- Logic Plan

```
BEGIN

    INITIALIZE task_list as empty
    INITIALIZE streak_counter = 0
    INITIALIZE badges = empty

    FUNCTION add_task(task_name, due_date)
        APPEND task_name with due_date to task_list
    END FUNCTION

    FUNCTION organize_tasks()
        SORT task_list by due_date
    END FUNCTION

    FUNCTION remind_user()
        FOR each task in task_list
            IF task is due today AND not completed
                DISPLAY reminder notification
            ENDIF
        ENDFOR
    END FUNCTION

    FUNCTION complete_task(task_name)
        MARK task_name as completed
        streak_counter = streak_counter + 1
        CALL check_rewards()
    END FUNCTION

    FUNCTION check_rewards()
        IF streak_counter == 5
            ADD "5-day streak badge" to badges
        ELSE IF streak_counter == 10
            ADD "10-day streak badge" to badges
        ENDIF
    END FUNCTION

    LOOP daily
        CALL remind_user()
        WAIT for user input (add_task / complete_task / view_tasks)
        CALL organize_tasks()
    END LOOP

END
```