

Topic: Command Line Based Task Manager Planner

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1. Problem Statement/ Current Condition

- Many programmers struggle staying focused or are entangled in a messy workflow, to which a surge of task management apps appeared. However, many of these applications rely on resource-intensive frameworks such as react, are only available for smartphones or the web or their abundance of features become overwhelming.
- Many programmers are more accustomed to the use of applications from the terminal, which in turn such applications are low-resource in consumption
- Sometimes programmers want a simple tool, not a full-fledged app whose most of their features won't be used and in the end of the day, it gets in the way of the programmer's workflow

2. Goal Statement/ Target Condition

- The goal is to develop a ncurses CLI task manager planner where programmers can prepare their day-to-day workflow and track their to-do lists with ease, all from their terminal. Furthermore, this schedule planner synchronizes with a database, which allows a programmer to move their workflow on any machine they work on.
- It is aimed at programmers and developers
- It must not get in the way nor have a cluttered UI
- It must allow developers to extend it to scripts if they so desire.

3. Cause Analysis

4. Countermeasures/ Action Plan

1. When running `$ <command-app-name>` on their terminal, developers (who would be referred as users) will see a calendar and, on the side, a to-do list of the current day, nothing obtrusive nor resource intensive
2. If entering a day on the calendar, the user would see their appointments or to-dos for that given day. Users could write, edit or delete the tasks they want to work on. If the task is not completed by the end of the deadline the user has set, the task is simply passed to the next day with an urgency tag, so nothing is left behind
3. Users don't need to always open the cli, each day a notification is sent to remind users of their deadlines, urgent tasks, and others.
4. Data is saved on a database if the user so desires, so when moving to another computer, the user can simply log into their account and see his tasks there.

5. Check/Evaluate

- The app's success is determined in terms of the number of developers installing the app, as well as an improvement over the developer's workflow / time management. Furthermore, as we (the students) are also developers, an early sign of success would be if we utilized the app for our day-to-day planning and improved our workflow.
- A failure however would be quite the opposite: few devs installing the app, and the app itself becoming cumbersome and inconvenient for developers of somewhat lacking for their needs.

6. Verify/Standardize

Problem

Developers struggles on organizing their workflow

WHY

1

Some developers have a hard time managing their time. Those who can manage their time struggle with current planning apps

2

Planning schedule apps are either cluttered of features or resource intensive

3

Planning apps are focused on a general use, people have different ways to plan their schedule or workflow. A developer may just want a simple todo list or kanban for a given day of the week and simply see it and forget about after is done. If it is not done, it simply passes for the next day, and only sees that, no extra toolbars or any other nonsense

- Continuous success would be ensured by promoting the app among peers, colleagues and developers, as well as keeping updates frequent. This will be mostly possible if the app is open source on GitHub, where developers can post issues as well as requested features (if both possible to implement and follow a minimalist approach)
- Furthermore, because the app will be open sourced, it will be easier to receive feedback from both peers and other developers, including possible contribution on bug fix or issue reports.
- The app developers (us, the students) shall finish this project with new skills and improved existing ones on the use of the OCaml programming language, as well as communication skills and time-management skills.
- Finally, at the end of the course, we students would have skills, a project and knowledge which the industry requires, opening the doors for internships, COOPs and even part-time work on MANGA industries.