# **TaskMaster**

## All-in-One Task Management Solution

Daniel Lanigan djlanigan@vt.edu

Alexander Georgiev <u>alexandersg@vt.edu</u>

Akshath Majumder <a href="mailto:akshath@vt.edu">akshath@vt.edu</a>

Prahaara Malli SH prahaara 08@vt.edu

### **Abstract**

Task management has become one of the world's most tedious and challenging organizational assignments for many across the globe. This has naturally become increasingly challenging due to the proliferation of tasks, organizational difficulties, and overwhelming workloads. This document allows us to propose the development of "TaskMaster", an all-inone alternative to addressing the pressing issues at hand.

The problem can be characterized by an abundance of tasks which often leads to disorganization as individuals struggle to prioritize these tasks effectively resulting in reduced productivity and increased stress levels. The proposed solution in this document known as "TaskMaster" emerges as a comprehensive solution to these conflicts. The goal of "TaskMaster" is to offer streamlined prioritization allowing users to easily focus and identify high-priority tasks. Additionally, the solution provides seamless organizational features making sure that the tasks are neatly organized and accessible. Most importantly, "TaskMaster" alleviates a sense of organization, relieving the pressure of large workloads and providing users with faith in a solution that will aid them in staying on course.

This document provides an overview of software engineering tasks and processes involved in the creation of "TaskMaster" This includes requirements, design, development, testing, and deployment. It highlights the importance of the organization and different methods/processes that are seen in the software world and deploys them into the making of this application.

Ultimately, "TaskMaster" aims to power individuals and organizations to be able to do their daily or large-scale tasks efficiently, resulting in increased productivity across the board.

## 1 Introduction

In today's fast-paced world, the value of managing time efficiently and keeping track of tasks cannot be overstated. Everyone, from students to professionals managing projects and deadlines, faces the ongoing challenge of staying organized. The plethora of tasks can easily become overwhelming, leading to missed deadlines and increased stress levels. This is where the need for an effective solution becomes crucial. Traditional methods like sticky notes are archaic, while most apps lack the balance between a user-friendly interface and the customization needed to cater to individual needs.

Our application Task Master is a to-do app designed keeping in mind that every individual's task management needs are unique. Task Master aims to offer a tailored experience, empowering users to take control of their time and tasks with utmost ease and efficiency.

Customization and Flexibility: Task Master allows users to customize their task lists, set priorities, and categorize tasks, making it a versatile tool adaptable to various needs.

Real-Time Synchronization: Whether you are on your laptop, tablet, or smartphone, Task Master ensures that your tasks are updated in real-time across all devices(cross-platform compatibility), enabling seamless task management on the go.

Intuitive Interface: With a focus on user experience, Task Master will have an intuitive and straightforward interface that makes task management simple, allowing users to focus on what truly matters—their tasks.

### 1.1 Related Work

While researching our project, we found that using lists in our daily lives can be a game-changer. We found many studies which explained that "writing down what you have to do unburdens the brain, making you more productive" (Manag). Seeing this we decided that this was one of the biggest drivers of how we wanted to create this app for the future, a way to write down our tasks and make us more productive.

While conducting more research, we discovered that numerous apps share similarities with our desired functionality. We drew inspiration from these apps but aimed to introduce a unique twist that sets our solution apart. Many of these existing apps lack effective task-to-category organization features and, "Some will find the lack of other organizational options limiting" (Pot). With this in mind, we want to make a way to categorize each task under a topic. This way we can ensure that each of our tasks has a category associated (Ex: School, Work, CS 3704, etc.)

Along with this, we wanted to make sure we followed what has made other apps better than most and found that the 3 categories were the most import, "[1.] Input — a quick and simple way to add what you need to do. [2.] Management and Priority — make sure you won't miss your due dates. [3.] Output — help you complete your to-dos" (Mordechay). Using these strategies would certainly help and make sure we are meeting the quality of other similar apps while also offering our twist to the idea.

### 1.2 SE Processes

The software engineering process our team will be using is the prototyping model. The prototyping

model is designed around creating many designs of the application to appease the customer in their vision. While our team will not have a specific customer to reference, we plan on designing the task manager and then looking at it from a generic customer's point of view and then deciding what to change. We will have to look at it from both the functionality of the task manager and if all of the functions we implemented are needed and simple for the average user as well as the design and layout of the application itself. We want to make sure the formatting is the best for the user and this software engineering process allows us to make many changes without disrupting our project.

## References

(Manag)https://www.aafp.org/pubs/fpm/issues/2022/0 100/p5.html

(Pot) <a href="https://zapier.com/blog/why-you-hate-every-to-do-list-app/">https://zapier.com/blog/why-you-hate-every-to-do-list-app/</a>

(Mordechay) <a href="https://medium.com/@liatmord/why-to-do-list-apps-suck-and">https://medium.com/@liatmord/why-to-do-list-apps-suck-and</a> heres-how-we-fixed-it-dda05c336a87