

# Taskboard Manager

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## ABSTRACT

Our problem is that there are many software engineers that are working in teams and do not have a proper way to organize their tasks and keep track of their deadlines. This can apply to either software engineers working in the workplace or software engineering students working together on software engineering projects. There are many instances where software engineers are working on multiple projects at the same time. In these cases, it can become very difficult to remember the details of each individual project they are working on. It also can be difficult to keep track of all of the deadlines for all of the different products.

Our proposed solution is to create a Taskboard Manager that will help software engineers working in teams to better manage their team's goals, deadlines, and division of work. It will help them prioritize tasks, set deadlines for tasks, and assign certain tasks to certain team members. We did not receive any feedback from the abstract section from our proposal.

## INTRODUCTION

Almost every software company has their employees working in teams. Similarly, in many computer science projects, students often do projects and assignments in teams. Sometimes, these teams may have difficulty in terms of managing their workload. This can be problems with time management, division of roles, or remembering the details of their projects.

Our solution, which is the Taskboard manager will help software engineers keep track of all of the work they need to do on an individual level, but also help them remember what the rest of their team needs to do and the deadlines for all of their work. The Taskboard manager will allow team members to divide up their tasks, set deadlines for the tasks for all group members, and add notes to tasks to allow them to remember the key details for each task.

## MOTIVATING EXAMPLE

One motivating example for our product is a software engineering firm that has two projects, Project A and Project B due in a few weeks. Project A is due in one week and

Project B is due in two weeks. Person A and Person B are both working on Project A and Project B, but they both have different roles in the project. Our Taskboard app will let both users know which tasks they have in each project and when the project deadline is. It will also let them view certain details about each project, so they know what each project is about.

## BACKGROUND

In the context of our application, a task is anything that needs to be completed by a software engineer. In most workplaces, this refers to a project that they are working on. The deadline refers to when the task needs to be completed by.

## RELATED WORK

One example of related work to our project is Google TasksBoard [1]. TasksBoard is an application that allows users to add assignments or notes from any window and any device. The application allows for the ability to add descriptions and create subtasks with Tasks, which is a feature that we also wanted to implement in our own Taskboard. Another feature that the Google TasksBoard has similar to our product is the ability to set due dates to tasks. However, there were features such as assigning people to tasks that Google's TasksBoard does not have that we wanted to have in our taskboard.

## DESCRIPTION OF IMPLEMENTATION

We used swift UI primarily for the GUI of our taskboard. We used it to create a super basic login/home screen and then our actual taskboard as well, which is made up of a panel of buttons to add users, tasks, and task groups, along with a button to remove task groups. The middle of the board is where all the task groups and tasks are, and the right side contains the currently selected task. We chose this implementation because it visually breaks up the board into different actions. The left side deals primarily with the creation of new objects for the task board. The right side of the board is where the finer details such as the due date and other notes about the task are displayed and the features of the task can be edited. The center is the main point of our task board and contains all of the tasks that have been added to the board. Because we couldn't find other task boards that allowed the user to sort the tasks by the group assigned to them we chose to sort the tasks this way.

## **DEPLOYMENT PLAN**

We would use a canary deployment strategy for our project. We believe that this would be the most efficient way to deploy the product because we would get good feedback from the users of the product. By starting off by just deploying the product to a few users, we think that we can get valuable feedback which will help us realize the strengths and weaknesses of the product. We would maintain the product after deployment by adding fixes to any issues that users encounter.

## **DISCUSSION**

There are certainly more features and changes that we can add to our project to improve it. One such example of a feature is allowing different users to communicate with each other directly on the taskboard by leaving messages for their team members. This can help make communication more efficient, as they can see all of their tasks and the communication about each task all in the same place. Another feature that can be useful would be to allow users to make requests to change tasks. Sometimes, a user may not be satisfied with a task that they are assigned, so a feature to request their boss or manager to change their task can be useful for them.

## **CONCLUSION**

We believe that our product will help many software engineers that are working on teams stay on track with their tasks. So far, we have a prototype with some of the main features implemented. We think this product will improve the efficiency of many software engineers in the workplace in terms of getting their work completed as well as improve collaboration between teammates.

## **REFERENCES**

[1] Google. <https://tasksboard.com/>