

TaskFlow

A TODO List Messaging Application

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ABSTRACT

Software engineers can waste a bunch of time sending emails to tech leads and project managers about project specifics or what they need to do. TaskFlow is a TODO list messaging application that will make communication and task tracking easier and more efficient.

INTRODUCTION

Software engineering teams can end up wasting a lot of time sending emails about clarifying tasks. This could be asking questions about specific project requirements, what task should be worked on next, and more. With TaskFlow, tech leads and project managers will be able to send out interactive TODO lists. This will save time on the need to send a bunch of emails.

The lists will be interactive. Project managers (PM) will be able to send out customized individual TODO lists to team members. Developers will be able to check off a task and a PM will be able to see its status in real time. Developers can comment on TODO lists if they have any inquiries. PMs will be able to see these messages and reply through the app or make any necessary updates to the list. If the question is more urgent or requires immediate feedback integrations with Zoom or Microsoft Teams will be available. Tasks can be hierarchically organized to improve workflow. PMs can view active and completed TODO lists in a visual dashboard that will improve task tracking and organization. These TODO lists will improve the workflow of developers by allowing them to focus less on emails and more on their work and what they should complete

Ultimately TaskFlow is specialized method of communication for software developers. It will replace long chains of emails that become hard to read with a more clear and concise task messaging app.

RELATED WORK

Slack is a popular messaging platform that has gained traction in software development teams due to its less formal and time-

efficient nature compared to traditional email [1]. By allowing for real-time communication through channels and direct messages, Slack reduces the back-and-forth of emails, enabling team members to seek clarifications or provide updates more swiftly. This aligns with the goals of *TaskFlow*, which aims to further streamline communication by integrating task management directly into the messaging framework. While Slack facilitates communication, it lacks structured task management capabilities, which can lead to important tasks being overlooked or lost in chat threads. *TaskFlow* addresses this by providing an interactive TODO list feature, ensuring that tasks are clearly outlined and tracked alongside communication.

Jira, on the other hand, is a robust project management tool specifically designed for tracking and recording the progress of work in software development [2]. It allows teams to create detailed task lists, assign tasks to team members, and monitor the status of ongoing work. However, its complexity can sometimes hinder quick communication between team members. While it excels in task tracking, Jira does not prioritize immediate interaction or address the real-time inquiries that often arise during development.

SOFTWARE ENGINEERING PROCESS

For this project the team has opted to use agile methodologies to structure the workload. The team found that about one meeting per week was the optimal frequency to ensure team-members had ample time to provide significant changes. Also, the team agreed on rotating the responsibility of being the tech lead weekly to provide all members ample exposure to both sides of agile.

After the initial team meeting illustrated below where team members agreed on the meeting methodology the team broke up the software engineering process as following:

- **Requirements Gathering**
- **System Design**
- **Prototyping**
- **Development**

- **Testing**
- **Deployment**
- **Monitoring and Maintenance**
- **Documentation and Training**

REFERENCES

- [1] Slack. What is Slack? *Slack Help Center*.
<https://slack.com/help/articles/115004071768-What-is-Slack->.
- [2] Atlassian. All great projects. *Atlassian*. <https://www.atlassian.com/software/jira>.