

# CheckMate: Software Engineers Task Manager

SANJU KANUMURI,,  
HAFSA KHAN,,  
YOON LEE,,  
NANDINI YELLA,,  
MANAS KETHIREDDY,,

Given the fast-paced environment we live in, productivity and time management are essential to effectively manage tasks. Task management can be a challenge, and traditional methods such as handwritten to-do lists or basic digital notepads often fall short of the demands of modern life. Additionally, software engineering is a very collaborative field, resulting in many team projects and teamwork. In addition, coordinating tasks with colleagues and classmates is even more difficult. There is a lack of collaborative spaces that promote productivity and effective communication. This project proposes the development of a collaborative ToDo Application tailored specifically for software engineers to address the challenges they face in managing tasks and projects effectively.

Additional Key Words and Phrases: Software Engineering, Productivity, Task Manager, Communication

## ACM Reference Format:

Sanju Kanumuri, Hafsa Khan, Yoon Lee, Nandini Yella, and Manas Kethireddy. 2023. CheckMate: Software Engineers Task Manager. 1, 1 (September 2023), 2 pages. <https://doi.org/10.1145/nnnnnnn.nnnnnnn>

## 1 INTRODUCTION

In today's digital age, software engineering plays a crucial role in our lives. There is a software aspect in almost everything we use and do. Increasing the need for software engineers and companies. However, software teams often struggle with scattered tasks, poor communication, and disorganized workflows, which can slow down projects and miss opportunities for teamwork. Our "CheckMate" app is here to solve these problems. It's a one-stop solution for creating, organizing, and discussing tasks, ensuring everyone's on the same page. With real-time chat and code integration, it's not just a task manager; it's a game-changer for software teams, making work smoother and more efficient. Without the assets that our app provides compared to other software, there is much less organization and control over all your work. It is necessary to have realtime chat and code integration to improve communication so that when team members are working, there is much less overlapping work and unorganized ideas.

## 2 RELATED WORK

Jira: Jira is a widely used project management and issue tracking tool that caters to software development teams. It provides features for task management, project planning, and issue tracking, but its complexity and high cost can be

---

Authors' addresses: Sanju Kanumuri, , , , ; Hafsa Khan, , , ; Yoon Lee, , , , ; Nandini Yella, , , , ; Manas Kethireddy, , , , , .

---

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for components of this work owned by others than ACM must be honored. Abstracting with credit is permitted. To copy otherwise, or republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee. Request permissions from [permissions@acm.org](mailto:permissions@acm.org).

© 2023 Association for Computing Machinery.

Manuscript submitted to ACM

Manuscript submitted to ACM

prohibitive for smaller teams. It is a very good and helpful tool but it can have a confusing user interface and sometimes can be thought of as over micromanaging.

Trello: Trello is a simple and intuitive task management tool that is popular among software engineers. However, it lacks some of the specialized features needed for software development collaboration, such as code integration and task assignment.

"Collaboration in Software Engineering: A Systematic Review of the Literature" (2019): This research study highlights the significance of collaboration within software engineering teams. It emphasizes the need for specialized tools that can facilitate effective collaboration and task management among software engineers.

"Impact of task switching and work interruptions on software development processes" (2017). This study investigates the challenges software developers face when managing tasks across multiple projects and contexts. It underscores the importance of tools that can streamline task management and reduce context switching.

### 3 SOFTWARE ENGINEERING PROCESS

We will use the "Code and Fix" software engineering process. The "Code and Fix" approach is an adaptive methodology that puts emphasis on the rapid development of code followed by testing and immediate fixes. It is also ideal for working on small-scale projects in a group setting. It is characterized by a dynamic and flexible development process that doesn't rely on extensive planning and documentation upfront. Instead, development begins with coding, and as issues or requirements arise, they are addressed through fixes and improvements iteratively. This will allow our team to focus on the coding and address problems as they arise

### 4 CITATIONS AND BIBLIOGRAPHIES

[1]Treude, C., Storey, M. A., Weber, J. (2012). Empirical Studies on Collaboration in Software Development: A Systematic Literature Review.

[2] Tregubov, A., Boehm, B., Rodchenko, N., Lane, J. (2017). Impact of Task Switching and Work Interruptions on Software Development Processes.