Bagel Devs' To-Do List

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1 ABSTRACT

 This proposal outlines the development of a desktop application called Bagel-To-Do to support software engineers in their work. Key features will help engineers track tasks, prioritize software projects, stay focused via productivity timers, and enable better collaboration through generation of notes for their standup meetings. An iterative approach gathering engineer feedback will ensure the tool meets their needs. Risks around version control and team cohesion will be mitigated through communication plans.

Additional Key Words and Phrases: Software Engineering, Productivity, Software, Engineering, Engineer, Software Engineer, Computer Science, Computers, Work

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2 INTRODUCTION

This document proposes the development of a desktop application called Bagel-To-Do that is designed specifically to support software engineers and improve their productivity. The motivation stems from the challenges engineers face working remotely including staying organized, focused, and aligned with the direction of projects and teammates.

The Bagel-To-Do application aims to help engineers by providing key features like task/project tracking to stay organized, prioritized todo lists to clarify work, concentration timers to enable deep focus, standup note generation to improve collaboration, and more. These capabilities directly target pain points in engineers' development workflow.

Requirements and features will be gathered directly from target users via interviews and prototypes with iterative feedback cycles. This engineer-centered approach will guide the build-out of functionality, user experience, and overall capability of Bagel-To-Do to best aid engineers' needs.

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Risks associated with software collaboration like code conflicts and communication issues will be mitigated through utilizing best practices in version control management and keeping transparency high across the remote team. By focusing closely on engineers' needs, the goal is for Bagel-To-Do to meaningfully improve productivity on both personal and team software projects.

3 RELATED WORK

 The section highlights the significance of task management tools in enhancing productivity for software engineers, drawing insights from research papers on team collaboration and task prioritization to inform Bagel-To-Do's development and features.

3.1 Task Management Tools

In the context of developing Bagel-To-Do, task management tools play a pivotal role. The insights drawn from the research paper "A study on task management system" inform the selection and understanding of these tools [3]. Todoist offers comprehensive task management functionalities, addressing the challenges of remote work with synchronized task tracking and collaboration features. Similarly, Trello's Kanban system aligns with the proposal's objective of improving task organization, providing a visual platform for managing tasks. Wrike also provides a drag-and-drop interface and strong collaboration features. However, while these existing tools offer valuable features, Bagel-To-Do aims to provide tailored functionalities such as concentration timers and standup note generation.

3.2 Insights from Task Management Research

The proposed Bagel-To-Do app aims to boost software engineers' productivity, drawing insights from the research paper "Enabling team collaboration with task management tools" [2]. The paper explores how task management tools aid collaboration by organizing tasks and tracking progress among team members. Furthermore, the research paper "Prioritizing tasks in software development: A systematic literature review" intersects with Bagel-To-Do's goals [1]. It underscores the importance of task prioritization in software development, ensuring essential goals stay focused. These findings align with our objectives, such as providing features like task tracking and prioritized lists to enhance collaboration, organization, productivity. Bagel-To-Do aims to bridge research insights with practical implementation.

4 SOFTWARE ENGINEERING PROCESS

For a relatively small application, such as a to-do list, iterating quickly and providing a working product are crucial. In light of this, the Prototyping software development model will be used. Individual group members or small teams will work on each feature, which will contribute to the rolling prototype.

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