Productive Project Manager for UTM CSCI 352

Aaron Alden and Spencer Karpati

Abstract

For our semester project, we would like to implement our own version of a project manager. Our target audience is any group of people that are working on either small or large-scale projects that are more complex in scope and need sufficient time management. Features could include a calendar, member-to-member communication, deadline reminders, etc. So far, we have determined what we want to do for our project and will now begin to figure out design patterns and high-level implementation.

1. Introduction

1.1. Background

Initially, we found it challenging to decide what we wanted to do for our project. We realized that being that this is our first time doing a project of this scope, we recognized that planning out the implementation of a large project could prove difficult if not properly planned/tracked well. This led us to want to build a project revolving around project planning and management. With it, we hope that it will be able to improve overall efficiency and productivity between individuals and the group as a whole.

1.2. Impacts

With this application, our goal is to ensure that teams use their time and resources efficiently and that productivity is consistent with the overall expectations and timelines of the project. We want the user experience to be straightforward and easy to use without unnecessary complications or distractions. We hope that by starting early, we can make design decisions that aren't bloated but streamline the usage of the application.

1.3. Challenges

The biggest challenge of the project would be the networking aspect as we want to implement a chat room and use voice chat for team members to speak with each other as well as make sure the user UI is simple and user-friendly to make the application more accessible. We will look into this further as we get closer to implementation.

2. Scope

We believe that the application should have a complete suite of tools for making sure that project reminders/deadlines are sufficiently communicated to the user and that the user or team of users can segment their workflow across periods of the project's lifespan to consider the project to be finished. This will include a calendar with planning tools, notifications for communicating upcoming deadlines and messages received, and user-to-user text and voice communication. Our two initial stretch goals are:

- 1) A built-in voice chat with feature(s) such as letting you know if you are speaking too loud into the microphone.
- 2) A "Dark Mode" feature allows the user to use a darker contrast menu for user accessibility.

2.1. Requirements

2.1.1. Functional.

2.1.2. Non-Functional.

- 2.2. Use Cases
- 2.3. Interface Mockups
- 3. Project Timeline
- 4. Project Structure
- 4.1. UML Outline
- 4.2. Design Patterns Used
- 5. Results
- **5.1. Future Work**