Project Proposal

[Group Project Support Tool]

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# Revision History

| Revision | Date | Author | Details of Change |
| --- | --- | --- | --- |
| 1 | 6/20/2022 | Rajesh, Dheeraj, Joseph | First Draft of the proposal document |

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# Motivation

Group projects within a corporate or academic setup are everyday occurrences. Organization of work based on stakeholder availabilities and equitable distribution of work is necessary while working with a tool. Tools are required to manage project responsibilities when working on group projects. This project proposes to offer collaborative project management for groups with features like calendar, messaging, and file sharing for group members.

# General Information

Complete each of the questions below to the best of your ability.

| Question | Answers |
| --- | --- |
| Proposed Target date of implementation? | 8/1/2022 |
| Importance of target date? | team intend to complete the project before the end of semester |
| Is this a new item or an enhancement to an existing item? | The tool is developed as a new initiative and has no prior implementation |

# Needs / Problem Statement

The app would help in task management and creating a pipeline to facilitate passing code, assets, etc., from one person in the group to the other.

The problem that this project intends to address is the project collaboration pipeline. Organizations and students regularly work on multiple projects. Each project has its own set of stakeholders, team members, and leaders. As the number of stakeholders increases, the communication channel and management of time and resources becomes more complex and challenging.

The new tool facilitates the improved project management workflow with team members collaborating on various tasks; therefore, the tool can significantly improve productivity. This will also lead to higher profits if the tool is used within a corporate organization.

# Proposed Solution

**Efficient Task Management & Planning**

The tool will provide the ability to quickly maintain and establish the hierarchy of tasks for effective completion. Task management will also offer the dependency and sequencing abilities to highlight the task priority for better task management. This tool will help assign tasks to team members and monitor their performance.

**Streamline Team Workflow**

Project tasks come in various sizes and complexities. Some jobs require more resources and parallel simultaneous assignments of work. The tool will provide these abilities to create a cohesive and streamlined workflow.

**Documents, Contacts, and Calendars Management**

Maintaining the documents, timelines, resource availability, and contacts are essential to group project management. The tool will create a centralized repository of the document, resources, and project timeline, which stakeholders can readily and quickly view and edit with proper authorization.

**Project Status Tracking**

Planning requires proper tracking of the current status of the project and its dependencies. Therefore it is essential to collect and assess data about team members and resources. In addition, it helps leaders to make accurate time assessments about project timelines and milestones. This tool will provide capabilities for proper recording and tracking of project status both at the individual and project level.

# Key Requirements

| # | Key Requirement | Priority  (Must Have, Nice to have, Future Consideration) |
| --- | --- | --- |
|  | Manage a calendar that would indicate the available slots for different students | Must have |
|  | Find common open spots for the team to meet | Must have |
|  | Managing milestones | Must have |
|  | Managing checkpoints | Must have |
|  | Assessment of percentage of individual completion of task | Must have |
|  | Assessment of completion of whole project | Must have |
|  | Creation of common project template | Nice to have |
|  | Ability to create own customize template | Nice to have |
|  | Individual profile creation | Future consideration |
|  | Create project specialization profile | Future consideration |

# Proposed implementation platform

Our team intends to implement the project requirement on a web-based platform. There are many different web platforms and frameworks under consideration. Dot NET which is A free, cross-platform, open-source developer platform for building web applications. It provides capabilities to use multiple languages, editors, and libraries to build web-native applications which can also be extended to mobile and desktop.

The team is considering the alternative framework- "Spring"- a complete programming and configuration model framework for Java-based enterprise web applications. This framework will provide infrastructural support for enterprise application "plumbing” so that developers and teams can focus on application-level business logic and not worry about deployments.

# Technical challenges

The team currently has multiple technical challenges that need assessment. First, a large learning curve is associated with learning a new framework because of the skill gap between resources and the proposed solutions. Second, there is an unclear requirement in terms of the timeline and possible scope of the project. The team is still in the beginning stage of analyzing project deliverables and the features that will be part of the final deliverables. Third, we envision frequent changes in project scope, requirements, and deliverables based on stakeholder requirements. Finally, we believe that resource constraints may lead to the limited implementation of the project scope.

# Team composition

| **Name** | **Association** | **Skills** |
| --- | --- | --- |
| Harvey Siy | Executive Sponsor | Leadership |
| Dheeraj Varandani | Team Member | Java, UX Design, PhotoShop, Wireframing |
| Joseph Williams | Team Member | Java, C, Python |
| Rajesh Kumar | Team Member | Project Management, ASP.NET, C#, Database Administration, MS SQL Server |