Module 4 - Project Design and Outline

Brady Chin

Colorado State University Global

CSC501-1: Management for the Computer Science Professional

Dr. Jonathan Vanover

August 11th, 2024

Project Overview

Project Name: Project Management API using Python and Blockchain Technology

Project Manager: Brady Chin

Start Date: January 1st, 2025

End Date: December 31st, 2025

Project Description: This projects will be a project management API using python and blockchain technology. This API will have secure and decentralized project management functionalities such as task tracking, resource management, and milestone tracking. Using blockchain technology provides security and verifiability.

Project Scope

In-scope items of this project include the development of the API using Python and the integration of blockchain technology. Task tracking, resource management, and milestone tracking will also be implemented. There will be an easy to understand user interface and the deployment will be on various cloud platforms.

Goal Alignment

The goal of this project will be to develop a secure and decentralized project management API using python and blockchain technology. The end product will be user-friendly and give users an enhanced project management tool to give them a competitive advantage.

Budget

	Monthly Cost	Details
Employee costs	$ 50,000	Salaries of managers, developers, blockchain experts, IT security
Development Tools	$ 5,000	Python libraries, blockchain platforms
Infrastructure	$ 10,000	Cloud hosting, database services, domain hosting

	Monthly Cost	Details
Misc	$ 2,000	Unexpected costs
Total	**$ 67,000**	

Resources

Team:

	Description
Project Manager	Oversees the project. Manages timeline and team communication
Blockchain Engineers	Integrate Python API with Blockchain
Software Developers	Develop Python API
Upper management	Oversees each team and ensure their departments are aligned
IT Security	Ensure that company and user security is not compromised
Quality Control Team	Test API and ensure product is meeting quality standards
UI/UX Designers	Design user interface

Technical Resources:

	Description
Python Libraries	Necessary python libraries for software developers
Blockchain platform	Ethereum
Cloud Platform	Apple iCloud, Google Cloud, AWS for hosting
Version Control	GitHub

Stakeholder Analysis

	Current	**Desired**
Project Manager	Leading	Leading
Blockchain Engineers	Supportive	Leading
Software Developers	Supportive	Leading

	Current	Desired
Upper management	Neutral	Leading
IT Security	Resistant	Neutral
Quality Control Team	Neutral	Supportive
UI/UX Designers	Supportive	Supportive
Investors	Unaware	Supportive
Customers	Unaware	Supportive

Timeline

	Start Date	End Date	Duration
Project Initiation	January 1, 2025	January 31, 2025	4 weeks 2 days
Planning	February 1, 2025	February 28, 2025	3 weeks 6 days
Execution	March 1, 2025	September 30, 2025	30 weeks 3 days
Monitoring	October 1, 2025	November 30, 2025	8 weeks 4 days
Closure	December 1, 2025	December 31, 2025	4 weeks 2 days

Change Requests

This project will use an Agile methodology to allow for changes to be made throughout the life span of the project. As the project progresses, team members will notice that there may be areas that could be improved on or features that need to be added or removed. As a result, the following change request process is as follows:

1. **Submission:** A team members will submit a change request**.**

2. **Review:** The project manager will review the change request. Meetings will be held if needed to ensure that the team agrees with the change request and is able to carry out their responsibilities.

3. **Approval/Rejection:** After discussing with all team members, the project manager will determine if this is a viable change request and will approve or reject it.

4. **Implementation:** If the change request is approved, the project manager will make the necessary updates for the timeline, budget, and resources.