

Vision Document

QuestBoard

CSCI 4600 – Project: Phase 1

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1: Introduction

1.1 Purpose

This document lays out the vision for QuestBoard, a platform designed to help teams manage their workload by providing a simple way to view and track tasks and deadlines through an intuitive visual interface. This document identifies the needs of potential end users and any constraints upon the project. Both stakeholders and members of the development team will also be laid out within this document.

1.2 Scope

QuestBoard aims to provide a structured and engaging way to manage tasks across teams or individuals. QuestBoard will allow for the creation and management of tasks presented as “Quests” and will utilize a user-friendly interface to clearly display quests and progress towards completion or milestones. This project is intended to be a standalone web application that meets the needs of end users without relying on a 3rd party.

2: Positioning

2.1 Problem Statement

Many people often struggle to maintain a consistent pace when working towards their goals, as a lack of structure or motivation stemming from not having a clear visual sense of progress. Many of the current tools in the market focus on deadlines or lists of tasks that can seem daunting and harm the long-term engagement of a user.

2.2 Business Opportunity

QuestBoard aims to fill this gap by providing an intuitive display that allows maintaining their view on tangible progress, helping to limit the loss of motivation. By visually representing tasks as a quest, users will be able to see consistent progress towards their goals, rather than focusing exclusively

on the distance to their end goals. Through this approach, users should be able to focus on how far they've come, rather than how far they must go, and feel a sense of accomplishment, which will sustain motivation.

3: Stakeholder and User Descriptions

3.2 Stakeholder Summary

Stakeholder	Represents	Role	Skills
Software Architect	Development team member Anthony Chapman	Responsible for system structure and design consideration and makes decisions on the tools utilized for development.	Experience with Java, Server-sided web development, API development, and architecture planning.
Software Architect	Development team member Mason Allen	Responsible for contributing to software architecture and design decisions with a focus on front-end and testing frameworks.	Experience with Java, JavaScript, Playwright, and React.
Project Manager	Development team member Jesus Roman	Responsible for planning, managing the team, deciding priorities, and coordinating interactions with customers/users	Experience with Java, JavaScript/TypeScript, React, software design, and architecture planning.
Requirements Engineer	Development team member Rostyslav Karmanov	Responsible for conducting evaluation of user stories, defining and managing requirements. Takes	Experience with Java, JavaScript/TypeScript,

		part in developing and testing. Acts as a bridge between “what people want” and “what is done”.	Docker, and architecture planning.
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3.3 User Summary

Name	Description	Stakeholder
Project Manager	Users responsible for overseeing projects, tasks, and deadlines. These users will ensure that project goals are defined and completed by developers according to investor specifications within the allotted time frame.	Project Owner / Organization Leader
Project Contributor	Users who are assigned tasks for the project are responsible for completing them by the due date. These users will stay up to date with the project tasks and timelines, as well as report on their work and contributions.	Development Team
Project Investor/Consumer	Users who have an interest in the project’s progress and direction, but not in the development. Features and specifications may be partly defined by the Investors/Consumers. These users will not interact	External Stakeholders/Investors

	with the system except to stay informed on the status and progress of the project.	
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4: Product Overview

4.1 Product Perspective

QuestBoard is a standalone web application designed to make task management intuitive and engaging. It uses a quest-based interface to transform traditional task lists into a game-like experience, thus helping to maintain motivation and productivity.

QuestBoard is designed primarily for small teams and individual users. It's not a program intended to replace enterprise-level tools, but rather a tool that provides a simplified and engaging alternative for smaller groups and teams. It's meant to be used in small-group environments such as academic projects, where users can access simply QuestBoard through a support web browser.

4.2 Summary of Capabilities

Customer Benefit	Supporting features
Increased motivation and engagement	Quest-based task interface, visual progress tracking, and gamified completion milestones.
Project visibility	Dashboard with task status, progress bar, and deadline notifications.
Effective team collaboration	Role-based access control, discussion boards, file attachments, and comments for tasks.
Flexible management	Self-assignment capabilities, priority levels, search and filtering.

4.3 Assumptions and Dependencies

1. Users have basic computer literacy skills and know English.
2. User's OS is Windows.
3. Users have access to modern web browsers with enabled JavaScript and can receive notifications.
4. Users have access to mouse and keyboard setup.
5. Development team can setup local server infrastructure that can maintain the project.
6. Development team has experience in Java, JavaScript/TypeScript, React, Playwright and Docker.

5: Product Features

5.1 Task Management Features

QuestBoard will provide a user-friendly interface with several features that will allow small teams to manage assignments for projects and manage the teams assigned to those projects. These features include:

1. Teams can be managed by inviting other users into a "Team"
2. Account registration to differentiate between members
3. Roles with different permissions can be assigned to team members
4. Tasks can be posted to a task board, with a text description, image, and/or other relevant files, alongside being assigned a priority level and a deadline
5. Team members can be assigned to tasks, or they can voluntarily assign themselves to a posted task
6. Tasks can be organized into folders that only specific roles can access, and special access can be granted/revoked for members outside that role
7. A search bar to filter and search specific tasks based on their title or keywords in their description

5.2 Communication Features

QuestBoard will also feature several communication features to aid in project completion, which focus on allowing team members to provide feedback and input to one another. These features include:

1. Common boards that allow posts and comments to discuss aspects of the project that may not be relevant to any one specific task
2. Private boards for private communications, where only specific roles and/or people can view and comment
3. Tasks on the task board will have their own individual comment sections where team members can provide feedback or input

5.3 Completion Tracking Features

Questboard will provide several features to track the completion of tasks and the overall completion of the project. These features include:

1. Notifications to remind assigned team members of due dates for incomplete tasks
2. A calendar to view all past and future task deadlines
3. A progress bar that shows the overall percentage of tasks completed for a project; specific tasks can be weighted to count for a higher percentage based on the team's estimate of its difficulty or time required

6: Constraints

Ideally, QuestBoard would be hosted on a public domain by a service provider, as well as utilize a cloud provider for data storage and access. However, due to the costs associated with these services, it will instead be hosted locally with a Linux server and accessed via VPN.

9: Other Product Requirements

1. A short user manual will be provided with an application to help new clients familiarize themselves with QuestBoard as quickly as possible.