**Document 1: Project Charter**

**Cover Page**

- Team Number: 22
- Team Members: Juan Florez, Seth Hartzler, Andrew McLain, Lucy Yang, Yitian Zhu
- Project Title: Infinite Task Leveling

## 1. Problem Statement

Students often use task management systems such as Google Calendar to juggle multiple assignments and group activities, but a purely task-focused system lacks incentives for students to complete tasks and keep using the system. A natural solution is to turn the task management system into a game, something few students dislike. While programs such as Habitica and TaskHero have already combined the RPG genre with task management systems, Infinite Task Leveling will go a step further and provide satisfying game progression and a more comfortable user interface.

## 2. Project Objectives

- Provide a single platform for students to track all their academic tasks, including homework, projects, and study sessions, and help students improve their time management.
- Offer a user-friendly interface that is intuitive and easy to navigate, minimizing the learning curve for students.
- Increase accountability and collaboration among student groups by allowing tasks to be assigned and shared.
- Allow customization of task categories and labels so students can tailor the system to their unique study habits.
- Provide analytics and progress tracking to help students reflect on their performance and improve study strategies.
- Keep students using the system with gamified elements such as levels, achievement badges, and a customizable “hero” character.
- Provide satisfying game progression that encourages long-term use of the task management system

## 3. Stakeholders

- Users: students who want to organize their tasks who struggle with task/time management
- Development Team: Juan Florez, Seth Hartzler, Andrew McLain, Lucy Yang, Yitian Zhu
- Project Coordinator: James Ouyang

- Project Owners: Juan Florez, Seth Hartzler, Andrew McLain, Lucy Yang, Yitian Zhu

**4. Project Deliverables**

- Users can create/read/update/delete tasks and adjust priority, due date, assignees, and category.
- Tasks can be broken down into subtasks.
- Users receive notifications and reminders via email or app based on task urgency and deadlines.
- Users can share tasks with friends/coworkers.
- Ability to attach files or links to tasks for easy access to relevant resources and materials.
- Ability to form teams with other users to streamline collaboration.
- Calendar readout displaying upcoming tasks within a particular window.
- Users can set recurring tasks with custom intervals to automate regular academic responsibilities.
- The system provides smart suggestions based on past activity to help users plan future tasks efficiently.
- Dashboard displays task completion stats and progress trends to help users stay motivated.
- JavaScript and TypeScript with responsive design, following the MVC pattern for clean and scalable code.
- Java with Spring Framework, providing business logic and REST APIs via Spring MVC.
- MySQL for data storage; GitHub Actions for CI/CD aligned with Scrum practices.

Gamifying:

- Each player has a customizable “hero” character who can level up and grow “stronger” through increasing different stats and unlocking different abilities.
- Ability to earn “exp” and receive rewards for completing tasks.

- Major group tasks can be synced to a “boss raid”.