# Task Management System for Capstone Projects

## 1. Introduction

This project involves developing a web-based task management system tailored for student groups working on capstone projects. The system will assist in organizing tasks, tracking progress, and managing deadlines within project teams. The users of this system include students (as team members), team leaders, and project supervisors.

## 2. Functional requirements

### a. Overall description

The system should provide features for managing tasks, tracking progress, and facilitating communication within teams.

### b. Public features

These features are available to all visitors to the site:

* **Home page:** The starting page of the system, which provides an overview of its capabilities.
* **About us:** Information about the system and its purpose.
* **Contact us:** A page where visitors can send inquiries or feedback.

### c. Common features

These features are accessible to all registered users:

* **User login:** Authenticate users to provide access to authorized features.
* **User registration:** Register new users (students, supervisors).
* **Reset password:** Allow users to reset their passwords if forgotten.
* **Change password:** Enable users to change their login passwords.
* **User profile:** View and edit user profiles.

### d. Student features

These features are available to student team members:

* **Task dashboard:** View all assigned tasks and their statuses.
* **Create task:** Add a new task to the project.
* **Edit task:** Modify existing tasks.
* **Delete task:** Remove tasks that are no longer needed.
* **Task details:** View the details of a specific task.
* **Task comments:** Add or view comments on tasks.
* **Upload files:** Attach files to tasks for better context.
* **Team progress:** View the overall progress of the project.
* **Request supervisor review:** Request feedback or approval from the supervisor on task completion.

### e. Team leader features

These features are available to team leaders:

* **Team management:** Manage team members, assign roles and responsibilities.
* **Task assignment:** Assign tasks to specific team members.
* **Task monitoring:** Monitor the status and progress of tasks.
* **Deadline management:** Set and adjust deadlines for tasks.
* **Team communication:** Send messages or announcements to all team members.

### f. Supervisor features

These features are available to project supervisors:

* **Project overview:** View a high-level summary of the project’s progress.
* **Review tasks:** Review and provide feedback on completed tasks.
* **Approve/reject tasks:** Approve or reject tasks based on the quality of work.
* **Progress reports:** Generate and view reports on the team’s progress.
* **Direct messaging:** Send messages to individual students or the entire team.

## 3. Other requirements

* **Configuring information:** System settings like task categories, user roles, and notifications should be configurable by the system admin.
* **User input data formats:** Input fields should be validated for data types, length, and required formats (e.g., date format for deadlines).