Mini Project Report

Project Title: Simple Task Manager – A SaaS App

Prepared by: Turki Thayid Altribane

Student ID: s202107529

University of Hail

Department of Software Engineering

## 1. Project Overview

This project is a Ruby on Rails SaaS application designed for managing personal or team tasks.

It applies Agile development methodologies such as Scrum, Test-Driven Development (TDD) using RSpec, and Behavior-Driven Development (BDD) using Cucumber.

## 2. Key Features

- Add, view, edit, and delete tasks

- Mark tasks as complete or incomplete

- Built-in validations for required fields

- Clean user interface using Rails views

- Full CRUD operations

## 3. Testing Implementation

- RSpec is used for model and controller unit testing.

- Cucumber is implemented for end-to-end behavior testing.

- Example scenario: 'Given I am on the tasks page, When I add a task, Then I should see it listed.'

## 4. Agile/Scrum Usage

- User stories are tracked in GitHub Issues.

- Issues are linked to milestones (MVP Release).

- A Scrum board (Kanban style) is used to manage workflow.

## 5. Deployment and Cloud-Readiness

- The app is structured to be cloud-ready and can be deployed on Heroku.

- The project includes the necessary configurations in the Gemfile and database setup.

## 6. Learning Outcomes

- Gained hands-on experience with Agile Scrum methodology.

- Practiced TDD and BDD approaches using RSpec and Cucumber.

- Built and managed a full-stack Ruby on Rails application.

- Understood the deployment lifecycle for SaaS applications.