

Software Engineering, Spring 2025  
PROJECT DESCRIPTION: GUC INTERNSHIP SYSTEM  
**MILESTONE 1 - PART 1**

MS 1-Part 1 without AI: Deadline 22 Feb, 2025 11:59 PM

MS 1-Part 1 with AI Improvement: Deadline 1 March, 2025 11:59 PM

Please read the following instructions carefully:

- Remember that **AI use is detectable**. The use of ChatGPT before the improvement of Milestone 1 - Part 1 **will result in a ZERO for Milestone 1 - Part 1**.
- Any case of **plagiarism or cheating** will result in a zero for the entire Milestone.
- It is **YOUR responsibility** to ensure that you have:
  - Read and understood **everything** in the project description (this document).
  - Access from your Product Manager on your GitHub repository **before the deadlines**.
  - Submitted before the deadlines stated above for each milestone and each part.
  - Submitted **ALL** the correct files for Milestone 1- Part 1 and Milestone 1- Part 2 on your GitHub repository (it does not matter who submits these from the team).

Good luck! =D

# 1 Theme

You need to build a system that handles all the GUC internship report submissions as efficiently as possible focusing on the internship application, enrollment, assessment and evaluation.

The first milestone is split into 2 parts:

- Milestone 1 - Part 1 without AI
- Milestone 1 - Part 1 with AI Improvement

Milestone 1 will focus on **Requirements Engineering**, where you are required to write a set of complete and consistent **functional requirements** for a **web application** based on the case description provided below. The requirements should be documented, actionable, measurable, testable, traceable, related to identified software needs, and **defined to a level of detail sufficient for system design**.

# 2 Case Description

GUC students must complete a 3-month internship before they are eligible for graduation. Many students manage to find internships on their own, while others may refer to the SCAD office for help. Consequently, the process of finding and completing an internship through the SCAD office includes the following:

- Companies inform SCAD of internship opportunities, where internships offered can have a duration that starts with one month and extends until 6 months. Internships can be paid or unpaid.
- Students need to navigate announcements made by companies recruiting interns until they find a suitable opportunity and apply for it.
- Companies during the filtration process typically check CVs and conduct interviews before they offer internships to candidate students.
- If accepted, students proceed with their intern jobs until they conclude the tasks required.
- After the internship is successfully done, there are two types of evaluations that take place:
  - Companies evaluate the intern across several metrics and dimensions, and the intern evaluates the company in a free form feedback text.
  - Students can recommend the company to other interns, and they are required to provide input on the faculty courses that helped them the most during the internship.

- The intern is then required to create a report designed by SCAD. The report has sections that provide an overview of the company's business and market stand, the tasks performed by the intern, and the feedback about the company's work environment and the helpful courses, together with the student's recommendation.

### 3 Overview

You need to construct a web application (you may assume that it is connected to the university's database) to help **students, Faculty academics, companies and the SCAD office** take care of the tasks mentioned in Section 2 above, where the entire process is digitized. In addition to the features that are specific to this system, you can also ask yourselves:

- What can make it easier to be sure only real companies access the system? Who can have a role in ensuring this (by only allowing actual companies to join)?
- Are there other already existing systems that have features that can help make this system more efficient and less reliant on physical applications?

#### 3.1 Requirements - First Submission (due 22 Feb, 2025 11:59 PM)

You will be required to write **50 Functional Requirements without any use of AI**.

The functional requirements will be written in the form of **user stories** and they **must** cover the following modules and their sub-modules:

- Profile and Identity Module
  - Student Profiles and Customization
  - Company Profiles and Customization
- Internship Search and Recruitment Module
  - Internship Listings
  - Internship Applications
- Evaluation and Reporting Module
  - Company Evaluations
  - Intern Reports

"Without any use of AI" means you will manually as a team produce the requirements by brainstorming different ideas and asking the Dr and the TAs questions about the system.

"Modules" are groups of related functions performing specific tasks.

"Sub-modules" are smaller, more specific components of the larger modules.

You are required to include in your first submission:

- The Excel sheet with 50 functional requirements without use of AI called "**Team-name-MS1-P1-A**". For example, if your team name is "The Expendables", your Excel sheet should be named "the-expendables-MS1-P1-A".
- Your Excel sheet should follow the Excel sheet template on the CMS named "RequirementsTemplate.xls".

**Note that if we suspect any AI use in this part, you will receive a zero in Milestone 1 - Part 1.**

### 3.2 Requirements - Second Submission (due 1 March, 2025 11:59 PM)

After submitting these files, you can improve the 50 functional requirements by prompting ChatGPT for improvements. The ChatGPT prompts and conversations you use are important and should be attached to your submission.

You are required to include in your improved with AI submission:

- The Excel sheet with 50 functional requirements improved with ChatGPT called "**Team-name-MS1-P1-B**". For example, if your team name is "The Expendables", your Excel sheet should be named "the-expendables-MS1-P1-B".
- Your Excel sheet should follow the Excel sheet template on the CMS named "RequirementsTemplate.xls".
- The link(s) to the conversation(s) with ChatGPT that produced the requirements (up to 5 separate chats).

**Note that your submission will be compared with the prompts sent to ensure they match. If they do not match you will receive a zero in Milestone 1 - Part 1. There must also be a noticeable difference between the 2 submissions.**

## 4 Objectives

- Learn how to analyze a problem scenario.
- Learn the process of requirements engineering and deriving requirements' specifications.
- Learn to research the whole scope of a given task using any relevant content. For example, textbook(s), Doctors, TAs, and online resources.
- Learn how to manually write requirements.
- Learn how to properly prompt ChatGPT to form a cohesive set of requirements for the problem description.

## 5 Deliverables

In Milestone 1 - Part 1, you are required to submit 2 filled Excel sheets of well-written **user stories** that cover the following:

- You must have **exactly 50 unique user stories in each Excel sheet covering the modules mentioned in Section 3.1**. You are free to add more modules and sub-modules. If you write more than 50 requirements, we will only look at the **first** 50 requirements in each of your submissions. Any requirements after requirement number 50 **will be ignored**. Therefore, be sure not to have any duplicated requirements.
- For each user story to be considered valid and counted towards your requirements, it has to follow the following rules:
  - Clear
  - Consistent and coherent with other requirements
  - Implementable, testable, and deployable
  - The CRUD (create, read, update, and delete) of any business entity will be considered as **only one** user story.
  - User stories with the same action and intent but different stakeholders should be written as "As a stakeholder1/stakeholder2/stakeholder3, I should be able to [action] so that I can [intent]". This will be considered **one** requirement of the 50 requirements.

**ANY SUBMISSIONS OF MS1 BY EMAIL WILL NOT BE ACCEPTED. ALL MS1 SUBMISSIONS MUST BE ON THE GITHUB REPOSITORY.**

Also note that in the template, there are examples of functional and non-functional requirements to show you the format of how to write requirements. **These examples are not related to your project so please be sure to remove them in your submissions.**

The grading of this assignment will be broken down alongside the previously mentioned specifications as follows:

- Accuracy (clarity, precision and completeness of the specification)
- Presentation (organization and consistency of the document)
- Composition (format, spelling and usage of English)

**Note that you will be given the higher of the 2 grades after you submit both submissions.**