

# COMP 433: Term Project

**PHASE 2:** Requirements Engineering (Elicitation & Discovery)

*Revision 2*

Due on May 3, 2021 at 2:00 PM

**250 Points** (30% Overall)

# 1 Phase 2: Requirements Engineering (Elicitation & Discovery)

This phase is split into two tasks as follows.

## 1.1 Task 1: User and System Requirements

**Category:** *Team Task and Individual Task*

Based on your research conducted in **Phase 1**, your team should develop a list of *user requirements* for the assigned business. Remember, each user requirement represents a different (business) service, function or aspect of the business. The required number of user requirements that needs to be documents must be at least *thrice* the number of team members. For example, a team with 4 members is expected to deliver at least 12 user requirements. The documented user requirements must be non-trivial ones and define the core services (functions) of the business.

Once the user requirements are developed, each team member must pick at least 3 user requirements and develop detailed *system requirements*. Remember, system requirements are detailed requirements for each of the user requirements, describing the system perspective for each.

When distilling the user and system requirements, the following principles should be applied to listed user and system requirements:

- Specific requirements should be stated in conformance with all the characteristics: correct, unambiguous, complete, consistent, ranked for importance and/or stability; verifiable, modifiable, traceable.
- Specific requirements should be cross-referenced to requirements that relate.
- All requirements should be uniquely identifiable.
- Careful attention should be given to organizing the requirements to maximize readability.

## 1.2 Task 2: Other Nonfunctional Requirements

**Category:** *Team Task*

In **Task 1**, you may have listed many nonfunctional requirements as part of user and system requirements. In this task, you team should list any other nonfunctional requirements that is not listed in the previous task. For example, if there are performance requirements for the product under various circumstances, state them here and explain their rationale, to help the developers understand the intent and make suitable design choices.

When distilling the nonfunctional requirements, the following principles should be applied:

- Specific requirements should be stated in conformance with all the characteristics: correct, unambiguous, complete, consistent, ranked for importance and/or stability; verifiable, modifiable, traceable.
- Specific requirements should be cross-referenced to requirements that relate.
- All requirements should be uniquely identifiable, measurable and specific as possible. For example, “95% of the transactions shall be processed in less than 1 second” rather than, “An operator shall not have to wait for the transaction to complete.”
- Careful attention should be given to organizing the requirements to maximize readability.

### 1.3 Phase 2 Deliverable

For submission, each **team leader** is required to submit a modified version of the shared template for *Software Requirements Specification* (SRS) document as follows:

1. (5 points) A single PDF file named **TeamName-SRS-Phase2.pdf**
2. (10 points) Updated cover page with proper details about the project and team.
3. (5 points) Updated revision history for proper revision tracking.
4. (70 points) Updated Section 1 (Introduction) and Section 2 (Overall Description) based on conducted research in **Task 1** and **Task 2**.
5. (130 points) Updated Section 3 (User and System Requirements) based on developed user and system requirement in **Task 1**. *You must specify the name of the team member responsible for developing each set of system requirements.*
6. (30 points) Updated Section 4 (Other Nonfunctional Requirements) based on developed nonfunctional requirements in **Task 2**.

**Report Writing Style:** It is important to have a clear structure to the submitted report. Headings and subheading are particularly helpful in a report as they act as signposts for the reader. The style of report should be concise, giving precise detail. Flowery language or vague terms should not be used. Data may be presented as charts, graphs or tables, if appropriate.