

**UNIVERSITY OF NORTH TEXAS  
COLLEGE OF ENGINEERING  
COMPUTER SCIENCE & ENGINEERING DEPARTMENT  
CSCE 5430 – Software Engineering  
Spring 2023  
Project 1 -Phase 1**

**Due Date for Project1 Phase1: Friday February 10, 2023, at 5:00 pm**

## **1 Overview**

Use case modelling in its fullest form is an excellent way of describing the functional requirements of a software system. Use cases themselves also provide a convenient location for recording most non-functional requirements.

This is a teamwork-based project (5 to 8 students per group). In this project, each team will build a complete use case model for the iFINANCE system comprising actors with descriptions, use cases with descriptions and a use case diagram.

## **2 Goals**

At the end of this project phase, you should be able to:

- Create and maintain a project workbook.
- Start a glossary.
- Understand the business and system requirements from an informal problem statement.
- Identify and describe system actors and use cases.
- Compose a use case diagram.

## **3 Creating a project workbook**

Consider the provided template word doc and rename it by adding your Group Number instead of the general Group “yourGroup#”. Also modify the document header, footer, and file properties to reflect your team identity. This document file will contain all the official documentations of your works during 5430-section# Project 1 phases, so that you, the instructor, and your TAs will always know where to look for the latest detail on your submission.

As the work progresses, you can add new sections to your workbook, or update existing sections. Don’t delete any sections – it’s useful to maintain a history trail. Ideally, we would like the maintenance of the workbook to be automated as much as possible – using tools like Rational Rose, or MS Visio. If your tool doesn’t import the diagram as image type, simply take a screenshot by pressing PrtSc button and then add it as an image in your Workbook.

## **4 Adding workbook sections for iFINANCE general term (Glossary)**

Every time a piece of business-specific jargon crops up, add a short description of it to the glossary section that has been added in your workbook. Also, every time you discover a synonym for an ‘official’ term, add that too.

The Glossary defines important terms used in the project. There is one Glossary for the system. This information is important to many developers, especially when they need to understand and use the terms that are specific to the project. The Glossary is used to facilitate communications between domain experts and developers.

## 5 Considering the problem statement

You have given a problem statement in the form of a case study document (see Appendix A). Read the discussion document now and make sure that you understand it. We will always refer to this appendix as the Project1 progresses; remember that you are not the iFINANCE client. So don't make any assumptions about the client's business, instead, ask them! (The TAs will be happy to play the role of the iFINANCE client.)

## 6 Adding workbook sections for the system actors

Add 'iFINANCE System actors' if it is not added already.

### 6.1 Identifying system actors

- Produce a list of candidate actors for iFINANCE .
- Write a short description of each iFINANCE actor.

## 7 Adding workbook sections for the system use cases

Add 'iFINANCE System use cases' if it is not added already.

### 7.1 Identifying system use cases

- Decide which use cases iFINANCE must support.
- Provide a short description of each use case.

## 8 Adding workbook sections for the system use case diagram

Add 'iFINANCE System use cases diagram' if it is not added already.

### 8.1 Showing the whole system as a use case diagram

Draw a diagram showing all iFINANCE actors outside the system (shown as a rectangle) and all the use cases inside. Connect the actors to the use cases in which they are involved. Can you spot any opportunities for 'include', 'extend' or 'specialize' relationships between your use cases? Could you build relationships by introducing some new use cases? If you can see ideal opportunities for introducing new use cases or relationships, do so now. But try not to introduce too much complexity just for the sake of reuse.

## 9 Hand in

By completing all the requirements in this project1 phase1, make sure you updated the table of content then submit your workbook through the Canvas by the due date mentioned above. All submitted projects will be checked for plagiarism.

## 10 Grading

Description	Points
Revision History	10
iFINANCE System Glossary	15
iFINANCE System Actors	20
iFINANCE System Use Cases	25
iFINANCE System Use Case Diagram	30
Total	100