# COMP3297 Introduction to Software Engineering Department of Computer Science The University of Hong Kong

# Iteration 1 Task Sheet AB Credit (HK) Staff Development Platform

# **Iteration 1 Overview**

Your general objectives in the first iteration are to:

- understand the problem and ensure the scope is clear and agreed upon;
- identify, in broad terms, the required features of the SDP;
- identify stakeholders and their interests;
- identify the majority of use cases, and describe a small number of key scenarios in detail;
- understand any important non-functional requirements and any other constraints or functionality that does not fall naturally into the use case descriptions;
- identify major risks and establish a mitigation strategy.

Thus, your major goals are to develop an initial understanding of what to build, to establish the Vision and Scope of the project, and develop initial ideas about what might prevent success. Work also begins on the use-case model.

Normally, you would also examine feasibility, devise at least one candidate architecture, and produce rough project plans and estimates. In the SDP project, because of the course constraint of having all groups work on the same project simultaneously, you may assume that these issues have already been resolved.

#### **Iteration 1 Deliverables**

# 1) Vision and Scope Document

The nature and scale of the SDP project allows us to omit or combine various sections of the Vision and Scope template. Use the template as a guide, but modify the contents of your document as follows:

## 1 Business Requirements

1.1 Background, Opportunity and Customer Needs

Combine template sections 1.1, and 1.2.

Omit 1.3, 1.4 and 1.6. You can assume that these parts of the business analysis were performed when the SDP was proposed. 1.7 may contain "None" if no assumptions/dependencies have been identified

# 2 Scope and Limitations

# 2.2, 2.3 Scope of Initial and Subsequent Releases

For this project we have a single product release: Release 1. If all the features you list in 2.1 will be included in this release, then simply state that fact. If there are features in 2.1 which won't be included in the product, then add Release 2 to represent future development and show what functionality will be included in Release 2 (that is, in later releases) but excluded from Release 1.

2.4 Limitations and Exclusions

May contain "None" until limitations/exclusions are identified

#### 3 Business Context

# 3.1 Stakeholder Profiles

Include columns 1 (Stakeholder), 2 (Major value) and 4 (Major interests) only. Indicate which stakeholders are users and which are non-users, if any.

*Omit the section" Project Priorities" (labelled 3.2 in the template).* 

#### 3.2 Deployment Considerations

A renumbered section 3.3. Don't repeat information that you will provide in the Supplementary Spec- just summarize here.

Remember, the Vision and Scope Document should be quite short.

#### 2) User Interface Prototypes

Your prototypes need not be functional. Paper prototypes are often better during these early stages of development while you are exploring ideas with your teammates and users, and developing a better understanding of requirements. You must arrange to review your prototypes with your clients during the iteration.

Your prototypes should show rough UI layout and flow. An effective way to develop prototypes and to communicate with users is to sketch storyboards showing the sequence of frames/screens involved in executing use cases. That is, show users how they will use your system to perform their tasks. In general you should develop storyboards for the main success scenarios of the use cases you describe in detail (see *Deliverable 3*).

# 3) Use-Case model (Partial)

- a) To write your use cases, follow the Use-Case Template posted on our Moodle page but with the set of modifications described below. In your model you must describe two or three use cases in detail. Those use cases will be those whose implementation will mitigate the major risks in the project and/or deliver core functionality. If you can achieve that with two of your use-cases, then no need to describe a third case. Confirm with your clients during the review of your UI prototypes that you have identified suitable case(s). For each, you must provide a fully-detailed description of the main success scenario and all alternate success scenarios. We do not require you to describe failure scenarios or exception handling. Also indicate your reasoning in selecting these particular use cases for detailed treatment.
- b) Construct System Sequence Diagram(s) for the main success scenario of each detailed use case 2 or 3 SSDs in total.
- c) For the remaining use cases, list only their names and a summary of the main success scenario that is, describe them using the Brief Format.

# 4) Supplementary Specification

Base this document on the UPEDU template, the Eeles reference, and suggestions given in class. If any section of the template is not relevant for the SDP you may omit it.

## 5) Risk List

List the 4 biggest risks you feel you face in this project together with suggestions for dealing with them (that is, your mitigation strategy). Also indicate your assessment of the exposure associated with each risk on a scale of 1 (very minor) to 10 (massive). They can be a mixture of technical and non-technical risks.

Risk Lists are usually very brief – just a few lines for each risk. You can adapt the table form shown during our first Team Exercise.

#### 6) Glossary (Preliminary)

**Handin Method:** Hand in via Moodle, all deliverables zipped into a single file. Submit one set per project group, with two hard copies delivered later in class.

**Deadline:** October 11 (Tuesday) 23:55