INFOSYS 220 ASSIGNMENT 2

USE CASE MODELLING
Semester 1 2017 Individual Assignment

Due date: **Sunday 23 April 12 noon**
Weighting: 7 **% of the final grade**

ASSIGNMENT GUIDELINES

OBJECTIVE

To demonstrate understanding of UML modelling and functional requirements as part of a System Proposal.

SUBMISSION

Submit a single .doc, .docx, or .pdf file for all tasks and the original use case diagram file (e.g., .mdl file) to Canvas before the assignment due date and time. No printed submission is required.

ACADEMIC HONESTY AND INTEGRITY

This is an individual assessment. **Do not work in a way which could result in parties submitting the same or very similar work.**

In attempting this assignment you agree to adhere to all the principles and practices of academic honesty and integrity for the University of Auckland outlined here: https://www.auckland.ac.nz/en/about/learning-and-teaching/policies-guidelines-and-procedures/academic-integrity-info-for-students.html. Any form of cheating, plagiarism, assistance in cheating, unfair collaboration, or **other behaviour deemed to be academic misconduct will not be tolerated**. Academic misconduct will be dealt with according to the University's Student Academic Conduct Statute.

ASSIGNMENT TASKS

BACKGROUND

You have been assigned a dedicated scope to elicit as a business analyst in the project team. The scope is specified by the project's steering committee and project sponsor. Your task is to understand the requirement of a mobile platform that makes grocery shopping easy and enjoyable. Below are requirements gathered from the Planning Phase.

System Requirements:

a. One of the most common issues of mobile grocery shopping identified is the difficulty to find products. Large image and logical display order should be used in the system.

b. Customers should be able to maintain their profile information in the system.

c. Customers can log, update, view and delete their shopping list.

d. Customers' preferred store information can be managed any time in the system by customers.

e. When a recipe is selected from the recipe library, system will convert the ingredient of the recipe into shopping list for customers.

f. Customers can manage the selected recipe in the system.

g. Customers' profile information, shopping information and preferred recipes information will be managed under a central menu called "Easy shopping" for customers' convenience.

h. Before they start to use the easy shopping menu, customers should set up the number of family members, dietary preference, preferred store and delivery preference in the system.

i. A weekly shopping report can be generated at any time when it is requested.

j. Due to the budget, this mobile app will only be made available on Android and iOS.

k. Administrators should be able to manage the recipe library in the system any time they want.

l. Once the shopping list is paid, the system will pass the delivery detail to logistic companies automatically.

m. Administrators should be able to edit, update and delete delivery information before the scheduled delivery date.

n. Administrators should be able to verify products' pricing and quality in the partner stores in the system.

o. The system will automatically update the product pricing to match the selected preferred store daily.

p. Customers and administrators should be able to manage the system with or without internet connection. Any updated information will be synchronized when internet connectivity is resumed.

q. Customers should be able to track the delivery progress in the system.

You **should use the assignment template provided** for this assignment. You can download the template from **Canvas**.

1. **Requirements Definition Report (10 marks)**

   You are required to prepare a requirements definition report by:

   a. Re-writing the system requirements (above) to meet the requirements definition format.
   b. Re-organise the re-written system requirements into functional and non-functional requirements.

2. **Use Case Model (30 marks)**

   a. Draw a Use Case Model **from your Requirements Definition Report.**
      - Model functional requirements only.
      - Only model use cases with actors.
   b. Insert your use case model into the correct section in the template. Your model must be clearly legible.

3. **Use Case Documentation (15 marks)**

   a. Write the use case documentation for **one main use case** from your model from Task 2. Your documentation is expected to be detailed and well thought-out.

4. **Activity Diagrams (15 marks)**

   a. Draw an activity diagram to demonstrate the process for **the use case** documented in Task 3.
      - If your use case includes many branching activities, focus on the main activity.
   b. Insert your activity diagram into the correct section in the template. Your diagram must be clearly legible.

Notes:
- Mark penalties will be incurred for failure to meet submission requirements.

Assignment 1 is the first of several assignments which are based on the FoodFriends' scenario. The overall task is to understand FoodFriends' strategy and present a Business Case in favour of your project being accepted and initiated. This is a simulation of part of the planning phase. This assignment will allow you to experience the key activities required to achieve preliminary investigations required. To simplify the task (by limiting the scope), we have asked each student to choose only one area (platform) and come up with a system that satisfies the needs of that area. Your project scope and conveyor solution details will together provide the information necessary to plan, analyse, and design a full-featured system. This occurs in the Group Assignment.

Assignment 2: This is a simulation of part of the analysis phase. You will explore an area of the project by modelling relevant users' requirements and relevant processes. The use of modelling tools will help you better understand what type of solution is needed to satisfy the business problem.

Group Assignment Proposal: You will form groups of 4 or 5 with people from the same lab to work on a proposal for a solution (system) for a single platform from Friendfriends. You can combine your Assignment 1 and 2 ideas and decide which of the group members' ideas would be most interesting to continue working on. You will submit your system's proposal and plans for approval before continuing.

Group Assignment Final Deliverable: You will design and produce a prototype for the proposed solution. You will be required to complete reports, models, and diagrams in order to develop, validate, and document your solution's prototype.

Presentation: You will present your solution as a group to your classmates and several staff members. Presentations take place in week 12 in your lab during your lab time.

CHANGE HISTORY

Initial 2017-02-26: Draft

Update 2017-03-10: Due date and marks

Updated 2017-03-10: Matching marking rubrics marks

Task	Marking criterion	Mark allocated
1. Requirements Definition Report	• Requirements definition report is well written and provided	**10**
2. Use Case Model	**Consistency with the given scope.** • No extra UC(s) / actors / elements present For each main use case: • Actor(s) presented • Use case(s) presented • Correct relationships used	**15**
	Technical correctness, e.g. • System boundary present • System well named • Correct UML 2.0 notation used • Generalisation used correctly • Legible Model presented	**15**
3. Use Case Documentation	**Overall quality** considering if a decent, thoughtful attempt has been made. • Header section (no errors or inconsistencies) • Detail/thoughtfulness of steps • Flow and logic	**15**
4. Activity Diagram	**Overall technical correctness** • Consistent with use case documentation • Modelling rules followed, e.g. correct use of notation • Legible Diagram presented	**15**

Mark penalties will be incurred for failure to meet submission requirements.