

Assessment Details and Submission Guidelines					
Unit Code	BN209				
Unit Title	Trimester 1, 2019 – Software Engineering				
Assessment Type	Assignment 1				
Assessment Title	Group Assignment				
Purpose of the assessment (with ULO Mapping)	<ul> <li>Define System requirement through requirement elicitation and workshops</li> <li>Explain the process for, and execute, verification and validation of system requirements</li> <li>Apply use case, data and process modelling techniques to specify system requirements</li> </ul>				
Weight	15%				
Total Marks	75				
Word limit	6-8 A4 Pages				
<b>Due Date</b>	Friday Week 7: 10 <sup>th</sup> May, 2019 23:55				
Submission Guidelines	<ul> <li>All work must be submitted on Moodle by the due date along with a completed Assignment Cover Page.</li> <li>The assignment must be in MS Word format, 1.5 spacing, 11-pt Calibri (Body) font and 2 cm margins on all four sides of your page with appropriate section headings.</li> <li>Reference sources must be cited in the text of the report, and listed appropriately at the end in a reference list using IEEE referencing style.</li> </ul>				
Extension	If an extension of time to submit work is required, a Special Consideration Application must be submitted directly on AMS . You must submit this application three working days prior to the due date of the assignment. Further information is available at:  http://www.mit.edu.au/about-mit/institute-publications/policies-proceduresand-guidelines/specialconsiderationdeferment				
Academic Misconduct	Academic Misconduct is a serious offence. Depending on the seriousness of the case, penalties can vary from a written warning or zero marks to exclusion from the course or rescinding the degree. Students should make themselves familiar with the full policy and procedure available at: <a href="http://www.mit.edu.au/aboutmit/institute-publications/policies-procedures-and-guidelines/Plagiarism-Academic-Misconduct-Policy-Procedure">http://www.mit.edu.au/aboutmit/institute-publications/policies-procedures-and-guidelines/Plagiarism-Academic-Misconduct-Policy-Procedure</a> . For further information, please refer to the Academic Integrity Section in your Unit Description.				

#### Purpose of the assessment:

The purpose of this assignment is to produce and submit a consolidated FIRST VERSION of the Software Requirement Specification (SRS) Document Prototype for your chosen project.

Form a team of exactly 4 people and write a Software Requirements Specification, based on a selected project.

#### **Projects Selection:**

Students can choose/select any website/application/system/software with enabled database component as a reference for their project from the following domains (industries) to investigate, analyses, and design:

- Hotel Booking System
- Library Management System
- Car Rentals System
- Online enrolment System
- Entertainment System (movies, songs, Books and games)
- Online Shopping System
- Real Estate System
- Parking lot booking system
- Student information chat bot

### Task:

Once students select their project, they need to do in-depth analysis for the project to complete Software Requirement Specification document and then propose design process with few basic model that relate to their selected project using UML. Students need approval from lecture/tutor for their selected project.

#### **Guidelines:**

Follow the IEEE 830-1998 Recommended Practice for Software Requirements Specifications as your guide. Entire document reading is recommended before starting your project.

Another good source of guidelines for software requirements specifications is:

http://www.processimpact.com/articles/qualregs.html

#### Format:

SRS document should follow the template of the IEEE standard.



#### Assignment 1 SRS document should include the following:

- 1. The SRS Document Version 1.0 (Templates and guideline are available on MOODLE):
  - a) Introduction
  - b) Project Planning
  - c) Scope
  - d) Aims and Objectives
  - e) Glossary
  - f) Document Overview
  - g) Product Description
  - h) Software Development Process
  - i) Functional and non-functional requirements
  - j) Technical assumptions and constraints
  - k) References
- 2. The Design models should include:
  - a) Use Case Diagram
  - b) Activity Diagram
  - c) Basic Class Diagram
  - d) Context Diagram/ Data flow diagram / flowchart
  - e) Entity Relationship Diagram

An up to date copy of the Project Activity Journal where you show the weekly working of the group.

### **Team submission:**

This is a group assignment hence, only one member from a group will upload the ONE ZIP FILE on MOODLE.

### **Submission guidelines:**

The report should have a consistent, professional, and well-organized appearance. Your report should include the following:

- 1. Cover page must identify students' (name and number), teaching staff, and assignment.
- 2. The pages of the assignment must be clear on each page.

Prepared by: Ameet Kumar Moderated by: Dr. Reza March 2019

### **Marking Guide:**

All team members are expected to contribute equally and are awarded the same group marks. However, a group member might be marked individually if there is an evidence based on the reporting by other group members of a minimum contribution or participation by a team member. Marker's comments below along with the marks will explain if you have been marked individually.

Team Name:		Marked by:
Team members:	Marks/50 (15%)	Comments

### Assignment #1 SRS Document = 50 Marks (10% of the 15% total)

SRS	Description of the section	Marks
Introduction	In this subsection, describe the purpose of the particular SRS and specify the intended audience for the SRS	05
Project Planning	<ul><li>Time and Cost Planing</li><li>Resource Planning</li></ul>	08
Scope, objectives and goals	<ul> <li>Explain the software product(s) to be produced</li> <li>Describe the relevant benefits, objectives, and goals of the project</li> <li>Product Description</li> </ul>	06
Software Development Process	<ul><li>Selection Criteria</li><li>Advantages and disadvantages</li></ul>	06
Specific requirements	Functional and non-functional requirements	10
assumptions, constraints	assumptions, and constraints	5
Appendices, references , Glossary	IEEE style	5
Presentation	Appearance, grammar, clarity etc.	5
Total		50



### Assessment #1 MS Access Prototype = 25 Marks (5% of the 15% total)

### During Lab Classes (Week 02- Week 06)

Access DB	Description of the section	Marks
Use case Diagram	full system Use Case Diagram showing all major functionalities	5
Activity Diagram	Draw activity diagram At least any three user scenario	5
class diagram	full system class diagram ( for web application web-based class diagram )	5
Context Diagram	full system Context diagram or Data flow diagram or flow chart	5
ER Diagram	Full system ER diagram	5
Total		25



## Marking Rubric for SRS document: Total Marks 50

Grade/Mark	HD 80% -100%	D 70%-79%	C 60%-69%	P 50%-59%	Fail <50
	Excellent	Very Good	Good	Satisfactory	Unsatisfactory
Introduction	summarized and set	Generally easy to follow, with some deficiencies.		Some relevance and briefly presented.	This is not relevant to the assignment
Project Planning	Planning of resources with time and cost covered and properly described	Most of the Planning of resources with time and cost covered and properly described	Some of the Planning of resources with time and cost not covered or not properly described	resources with time and cost are	Poor, not acceptable
Scope, objectives and goals	All topics are pertinent and covered in depth.	Most topics are pertinent and covered in depth	Correct, with some deficiencies	OK, with some obvious shortcomings.	Poor, not acceptable
Software Development Process	Properly described Selection Criteria with Advantages and disadvantages	Most of the Selection Criteria Advantages and disadvantages were discussed	some of the Selection Criteria Advantages and disadvantages were discussed	OK, with some obvious shortcomings.	Poor, not acceptable
Specific requirements	Requirements are all covered and properly specified	Most requirements are covered and properly specified	Some requirements are missing or not properly specified	OK, with some obvious shortcomings.	Poor, not acceptable
Assumptions and constraints	Very well defined	Most of the areas defined	Some areas defined	OK, with some obvious shortcomings.	Poor, not acceptable
Appendices References and glossary	Excellent use of sources. Accurate referencing. Obvious that outstanding effort made	Very good effort	Good effort made but not outstanding	Acceptable	Poor, not acceptable
Presentation	Excellent, outstanding effort made	Very good effort	Good effort made but not outstanding	Made some effort, but only acceptable	Poor, not acceptable



Marking Rubric for Access database: Total Marks 25

Grade/Mark	HD 80% -100%	D 70%-79%	C 60%-69%	P 50%-59%	Fail <50
	Excellent	Very Good	Good	Satisfactory	Unsatisfactory
Use Case Diagram	All possible actors and user scenario with clear diagram and connection	Most of the actors and user scenario with clear diagram and connection	Most of the actors and user scenario but diagram and connection not clear	some of the actors and user scenario but diagram and connection not clear	Poor, not acceptable
Activity Diagram	All activities of selected user scenario with clear diagram and connection	Most of the activities of the selected user scenario with clear diagram and connection	most of the activities of the selected user scenario with unclear diagram and connection	Some of the activities of the selected user scenario with unclear diagram and connection	Poor, not acceptable
Class Diagram	All possible classes their connection with clear diagram and connection	Most of the possible classes their connection with clear diagram and connection	Most of the possible classes their connection with unclear diagram and connection	some of the possible classes their connection with unclear diagram and connection	Poor, not acceptable
Context diagram	Present the full system and its environment showing all the interacting entities with clear diagram and connection	Present the most of the system element and its environment the interacting entities with clear diagram and connection	Present the most of the system element and its environment the interacting entities with unclear diagram and connection	Present the some of the system element and its environment the interacting entities with unclear diagram and connection	Poor, not acceptable
ER Diagram	All possible entities and their relationships with clear diagram and connection	Most of the possible entities and their relationships with clear diagram and connection	Most of the possible entities and their relationships with unclear diagram and connection	some of the possible entities and their relationships with unclear diagram and connection	Poor, not acceptable

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