BIT216 - Assignment 3

Release date: 10 January 2022

Due date: 28 March 2022 by 11.59pm

Output: Design and Testing Document

Prototype 2

Value: 15%

Late Penalty: 5 marks per working day

Expected Learning Outcomes Assessed

- CLO1: Develop a prototype by applying software engineering principles and tools available to the software developer (C6, PLO6, MQF3d)
- CLO2: Apply techniques to manage software project timelines (C5, PLO1, MQF1)
- CLO3: Demonstrate effective communication skills to make design and development decisions through written and oral demonstration (C3, PLO5, MQF3c)

Rationale

This task was designed to give students the opportunity to continue coding and testing the system from Assignment 2.

Task 1: Design Specification (Individual)

Include any update(s) made in the design specification document (in Assignment 2 e.g. wireframes, data dictionary etc) and from the requirements documents you created in Assignment 1 (i.e. SSD, contracts, ERD etc)

Task 2: Coding and Testing (Individual)

This task has been designed to develop students' ability to go on to the second iteration. Students are required to continue coding and conduct testing. You are encouraged to apply a testing tool such Selenium. A test analysis report will summarise your test cases.

You will also need to provide generic screen shots of all your use cases.

Task 3: Review (Individual)

Each team member required to answer the following questions:

- Did the group meet the objectives defined in Assignment 1?
- What went wrong and what went right?
- What you would have done differently?

Task 3: Attach a clear screen shot of Gantt Chart Gantt Chart and compare with the baseline (identified in Assignment 1 or 2) to reflect on the work completed (timelines of milestones/deliverables and resource management)

Presentation and Collaboration

At the end of assignment 3, prepare 5-10 minutes presentation of your system. In this task you are also required to show evidence of how you have collaborated your coding (Github) with your team member.

General Marking criteria and Submission Requirements

- All documentation must be word processed using Times New Roman font size 12 with 1.5 spacing.
- Your report should consist of the following:
 - 1. Assignment Cover Sheet
 - 2. Design and Testing Documentation (*Reminder: Ensure proper referencing have been included in your reports*)
- A Final Compiled report to be submitted to LMS Turnitin: Turnitin Online Submission -Assignment 3 Resubmission is NOT permitted.
- Submit the Application for Late Assignment Submission together with the *Assignment Cover Sheet* if there is a need for an extension in the submission. A penalty of 5 marks will be imposed per working day if
 - o late submission form is not included.
 - o reason for extension is not given.
 - o extension is not granted.

- You are expected to adhere to the Academic Integrity Policy. All referencing and citation should use APA Style (7th Edition preferred).
- You do not need to submit the similarity report. Turnitin similarity reports will be generated by the lecturer and penalties will be imposed for similarity **exceeding 15%.** You may be subject to additional penalties according to the Academic Integrity Policy.

The following criteria will be used to assess this task:

1. Follow up from Assignment 1 and 2

- Updates on the analysis/design documentation
- Problems faced in Iteration 1 and the solutions

2. Iteration 2 (Individual with the exception for Integration and System Testing)

- Identification of the remaining use cases to be developed by each
- Algorithm/Identification of plug-ins (optional)
- Screen Shots (samples for each case for Iteration 1 and 2)
- Test Objectives
- Test Plan, Method & Tools
- Test Cases: Unit Testing (Individual), Integration Testing (Group work), System Testing (Group Work)
- Test Analysis Report
- Review (answering the following questions)
 - 1. Did the group meet the objectives defined in Assignment 1?
 - 2. What went wrong and what went right?
 - 3. What you would have done differently?
- Gantt Chart Gantt Chart—compare with the baseline (identified in Assignment 1 or 2) to reflect on the work completed (timelines of milestones/deliverables and resource management) Justify your current timelines as opposed to the planned gantt chart.

3. Presentation

You will be required to present your

- a) Title of the project + Team Members
- b) Demonstration of Prototype 2 should have the following:
 - Use Cases in Iteration 2
 - Use Cases in Iteration 1 (if there are updates focus on the updates)
 - Gantt Chart/GitHub

Note: Refer to Appendix A: Marking scheme for mark allocations.

Appendix A: Marking Scheme

Student ID 1 :

Student ID 2 :

A. Follow-up (CLO1)

LO	Assessment Area	Poor	Satisfactory	Good	Excellent	Marks	
	Identification of Problems and Solutions [4]						
CLO1	Analysis/Design Updates [5] - Wireframes - ERD/DD - etc						
	Screen Shots [5]					Student 1	Student 2
Sub-total (/14 marks)							

B. Tests Document (individual)

LO	Assessment Area	Poor	Satisfactory	Good	Excellent	Ma	rks
	Test objectives [3]					Student 1	Student 1
CLO1	[2] Test Plan (includes) Tests methods specification evaluation Schedule Testing – Using Selenium Unit Testing [4]						
	Integration Testing [3]						
	• System (func and nonfunc) [5] Side File to be included for func testing						
	Tests analysis report [4]						
	Conclusion/Review [5]						
	Sub-total (/26 marks)						

C. Documentation, Presentation and Collaboration

LO	Assessment Area	Poor	Satisfactory	Good	Excellent	Marks	
CLO3	Documentation (Design and Testing) [5]						
CLO2	Project Management [5] • Gantt Chart					Student 1	Student 2
CLO3	Presentation[10]						
Sub-total (/20 marks)							

D. Collaboration and System Implementation

LO	Assessment Area		Satisfactory	Good	Excellent	Ma	rks
CLO1	 Application operation success rate [15] System functional/partially functional /not working Adequacy of the levels of complexity of the design Validations in place 					Student 1	Student 2
	Quality of software produced:[15]						
	Collaboration via Git[10] • push/pull/branch/merge/issue (evidence of collaboration) – not uploads						
Sub-total (/40 marks)							

		Student 1	Student 2
Academic Integrity Penalty	(As per Academic Integrity Policy)		
Late Submission	5 marks per day (days)	(-)
	TOTAL		

Comments:			

Feedback

A. Follow up

Analy	ysis / System design:	
	Analysis & Design	not clearly defined / not updated
	Problems/Solutions	not found
	Screen Shots	not consistent with the design/not found
B. 1	Tests Docume	nt
	Tests objectives	not clearly defined / insufficient / lacking in proper labelling
	Test methods, specs.	not clearly defined / insufficient / not found/No automated tools used
	Tests results	not clearly defined / insufficient / not found
	Tests analysis report	not clearly defined / insufficient / not found
	Review	no reflection on objectives / not found
C. Do	ocumentation	
	Format	table of contents not found/inconsistent font size/no proper headings
	Spelling/Grammer	spelling mistakes/sentences are not comprehensible/sentences too long
	Gantt Chart	not updated
D. Sv	stem and Collaboratio	on
	Prototype	did not meet functional req/did not meet non functional req/not working/
	1 Tototype	Poor design of screen layouts/poor interaction or navigation/difficult to use
	Use of GIT	no evidence of use/minimum use

RUBRIC FOR ORAL PRESENTATION - PROTOTYPE II

Category	Exemplary (5 Points)	Advanced (4 points)	Proficient (3)	Developing (2 points)	Not evident (1 point)
Layout Does your website have An attractive and usable layout? Is it well organized?	 The website has an exceptionally attractive and usable layout. It is easy to locate important elements. 	 The website has an attractive and usable layout. It is easy to locate important elements. 	 The website a usable layout but boring. It is easy to locate important elements. 	 The website has a cluttered or confusing layout. It is difficult to locate important elements. 	 The website has an unusable layout. It is difficult to locate important elements.
Navigation Is your website easy to navigate forward and backwards with working links?	Links are clearly labelled, consistently placed, and allow the reader to easily move from page to page	Links are labelled, and allow the reader to easily move from page to page	Links allow the reader to move from page to page but some links seems to be missing.	Links are labelled but are broken	• Missing links
Theme and Consistency and Creativity Does the prototype have a consistent font, colour and style theme?	 Website uses a consistent colour scheme throughout the website. Pages are all related Ideas are creative and innovative 	 Website has a colour scheme. Less than 3 fonts are used Graphic elements enhance and support presentation of the content 	 Website has a colour scheme but not all pages are the same. Less than 3 fonts are used Good use of graphics/design elements 	 Website has randomly chosen elements throughout. More than 3 fonts are used. Minimal use of design elements, lots of text 	 Website has no colour scheme Pages are unrelated More than 3 fonts are used. Use of elements does not support the content of the website
Functionality Does the prototype meet user requirements?	All functionalities are in place and are working	All functionalities in place but with minor errors	Partial functionalities are working	Only 1 functionality is working	None of the functionalities are working