ASSESSMENT 2 BRIEF	
Subject Code and Title	MIS605 Systems Analysis and Design
Assessment	Design Specification
Individual/Group	Individual
Length	2500 words +/- 10%
Learning Outcomes	The Subject Learning Outcomes demonstrated by successful completion of the task below include: a) Identify, critically evaluate and recommend information systems solutions for inefficiencies in business processes, procedures and work practices using data and process modelling techniques. b) Formulate, validate and document business requirements for a medium-scale information system development project and effectively communicate these requirements to the stakeholders. c) Demonstrate the ability to effectively analyse, design and develop information systems using Unified Modelling Language (UML) models.
Submission	**For 12-week Duration:** Due by 11:55pm AEST Sunday end of Module 4.2 (Week 8) **For 6-week Duration:** Due by 11:55pm AEST Sunday end of Module 4.2 (Week 4)
Weighting	40%
Total Marks	100 marks

Task Summary

Based on your responses to questions in Assessment 1, perform process and data modelling and develop and document a number of design diagrams including context diagram, level 0 and level 1 data flow diagram and entity relationship diagram.

Context

In Assessment 1, you performed a comprehensive requirement analysis for the case study that was given to you. With an in-depth understanding of the functional requirements of the system, you are now required to perform further analysis through process and data modelling.

Process modelling and data modelling can be used to provide deeper understanding of a system thus they are an integral part of system analysis. Process modelling models processes in a system while data modelling helps in identifying the data that flows through the processes.

Instructions

1. Please read case study provided to you by your facilitator. Note that every piece of information provided in this case study has a purpose.

2. The solution that you provided in assessment 1 and the feedback of your Learning Facilitator against assessment 1 would also serve as an input to assessment 2.

3. Please answer the following questions:

Question 1 (15 mark).

Create and provide a Context Diagram for the given case study.

Question 2 (20 mark).

Create and provide a Level 0 Data Flow Diagram (DFD). The Level 0 DFD should contain all the major high-level processes of the System and should show how these processes are interrelated/interacting.

Question 3 (24 mark).

Select three important processes from Level 0 DFD and provide their decomposition (Level 1 DFD).

Question 4 (20 mark).

For the given case study, provide an Entity Relationship Diagram (ERD). Provide the logical model only!

Question 5 (5 mark).

For the given case study, identify the data stores including the files that are not part of ERD.

Question 6 (16 mark).

Translate the ERD you developed in Task 4 into a physical relational database design. Use some database tool such as Microsoft Access to create your database and submit diagram that you made using this tool. Normalise your database design to the Third Normal Form (3NF).

Word Count and Layout

- The word count of this assessment is 2500 words +/- 10% but this assessment focuses largely on diagrams. The text in this assessment would largely be the explanation of the diagrams.
- Please provide all your answers in a MS word document.
- All diagrams must be drawn using any diagramming tool but the same should be copied to MS Word document.
- Please note that you are NOT required to copy the questions over to the MS Word document. Use the question number to indicate which question your answer relates to.
- The recommended font size is 12 with 1.5 line spacing.
- You can make assumptions where necessary but please outline them very clearly.

Referencing

It is essential that you use appropriate APA style for citing and referencing research. Please see more information on referencing in the Academic Skills webpage.

Submission Instructions

Please submit the written assessment via the Assessment link within Assessment 2. The Learning Facilitator will provide feedback via the Grade Centre in the LMS portal. Feedback can be viewed in My Grades.

Academic Integrity

When submitting their assessment task, students will be asked to declare the academic integrity of their assessment by completing and signing an assignment cover sheet. You can find the assignment cover sheet here

All students are responsible for ensuring that all work submitted is their own and is appropriately referenced and academically written according to the Academic Writing Guide. Students also need to have read and be aware of Torrens University Australia Academic Integrity Policy and Procedure and subsequent penalties for academic misconduct. These are available at https://www.torrens.edu.au/policies-and-forms.

Students also must keep a copy of all submitted material and any assessment drafts.

Special Consideration

To apply for special consideration for a modification to an assessment or exam due to unexpected or extenuating circumstances, please consult the Assessment Policy for Higher Education Coursework

and ELICOS and, if applicable to your circumstance, submit a completed Application for Assessment Special Consideration Form to your Learning Facilitator. These documents are available at https://www.torrens.edu.au/policies-and-forms.

TORRENS UNIVERSITY AUSTRALIA

Assessment Rubric

Assessment Attributes	Fail (Yet to achieve minimum standard) 0-49%	Pass (Functional) 50-64%	Credit (Proficient) 65-74%	Distinction (Advanced) 75-84%	High Distinction (Exceptional) 85-100%
Question 1: Create and provide a Context Diagram for the given case study. 15%	The student has no understanding of what a context diagram is.	The student has very limited understanding of what a context diagram is.	The student has some understanding of what a context diagram is but the solution is not in sync with the given case study.	The student has clear understanding of what a context diagram is but the representation is mostly incorrect. The solution, however, is in sync with the given case study.	The student has clear understanding of what a context diagram is. Representation is mostly correct and the solution is in sync with the given case study.
Question 2: Create and provide a Level 0 Data Flow Diagram (DFD). The Level 0 DFD should contain all the major high-level processes of the System and should show how these processes are interrelated. 20%	The student has no understanding of what a Level 0 DFD diagramming is.	The student has very limited understanding of what a Level 0 DFD is.	The student has limited understanding of what a Level 0 DFD is. Representation is partially correct and the solution is not in sync with the given case study completely.	The student has clear understanding of what a Level 0 DFD is. Representation needs improvement, however the solution is in sync with the given case study.	The student has clear understanding of what a Level 0 DFD is. Representation is mostly correct and the solution is in sync with the given case study.
Question 3: Select three important processes from Level 0 DFD and provide their decomposition (Level 1 DFD). 24%	The student has no understanding of how DFD decomposition is done.	The student has very limited understanding of how DFD decomposition is done.	The student has clear understanding of how DFD decomposition is done. The solution, however, is not in sync with the given case study completely. DFDs are not balanced.	The student has clear understanding of how DFD decomposition is done. The solution is in sync with the given case study but the DFDs are not balanced.	The student has clear understanding of how DFD decomposition is done. The solution is in sync with the given case study and the DFDs are balanced.

Assessment Attributes	Fail (Yet to achieve minimum standard) 0-49%	Pass (Functional) 50-64%	Credit (Proficient) 65-74%	Distinction (Advanced) 75-84%	High Distinction (Exceptional) 85-100%
Question 4: For the given case study, provide an Entity Relationship Diagram (ERD). Provide the logical model only! 20%	The student has no understanding of what a logical ERD is.	The student has very limited understanding of what a logical ERD is.	The student has clear understanding of what a logical ERD is but the solution is not in sync with the given case study.	The student has clear understanding of what a logical ERD is and the solution is in sync with the given case study.	The student has clear understanding of what a logical ERD is. Representation is mostly correct and the solution is in sync with the given case study.
Question 5: For the given case study, identify the data stores including the files that are not part of ERD. 5%	The student has no understanding of what data store/ file system is and how it relates to ERD.	The student has very limited understanding of what data store/ file system is and how it relates to ERD.	The student has clear understanding of what data store/ file system is and how it relates to ERD. The solution is however not in sync with the given case study.	The student has clear understanding of what data store/ file system is and how it relates to ERD. The solution is partially in sync with the given case study.	The student has clear understanding of what data store/ file system is and how it relates to ERD. The solution is completely in sync with the given case study.

Assessment Attributes	Fail (Yet to achieve minimum standard) 0-49%	Pass (Functional) 50-64%	Credit (Proficient) 65-74%	Distinction (Advanced) 75-84%	High Distinction (Exceptional) 85-100%
Question 6: Translate the ERD you developed in Task 4 into a physical relational database design. Use some database tool such as Microsoft Access to create your database and submit diagram that you made using this tool. Normalise your database design to the Third Normal Form (3NF). 16%	The student has no understanding of what an ERD (physical relational database design) is. Diagram is not provided using a database tool.	The student has very limited understanding of what an ERD (physical relational database design) is. Diagram is provided using a database tool.	The student has clear understanding of what an ERD (physical relational database design) is but the solution is not in sync with the given case study. Diagram is provided using a database tool. Solution has major normalisation issues.	The student has clear understanding of what an ERD (physical relational database design) is and the solution is in sync with the given case study. Diagram is provided using a database tool. Solution is not fully normalised.	The student has clear understanding of what an ERD (physical relational database design) is. Representation is mostly correct and the solution is in sync with the given case study. Diagram is provided using a database tool. Solution is fully normalised.