Assessment for Application Development IIIA

2020

Due to the current CoVid-19 pandemic the academic calendar for 2020 has been revised as follows:

1) Application Development IIIA has been changed into a continuous assessment module.
2) The module is now an annual module.
3) Semester 1 ends on the 5 August 2020

With the above, the assessment for the course has changed as follows:

Assessment	**Weight**	**Due Date**	**Allow Resubmission**
Written Test	15%	Completed	Does Not Apply
Online Test 1	20%	29 June 2020	Does Not Apply
Capstone Project	35%	13 July 2020	• Groups scoring under 50% will be allowed 1 resubmission. • Resubmissions are capped at 50%
Online Test 2	30%	3 August 2020	Does Not Apply
Online Makeup Assessment	100%	7 – 11 September 2020 (Exact Date To be Confirmed)	A learner that has not completed any assessment because of a **bonified medical reason** OR A learner that has scored below 50% on their final mark will be allowed to write this assessment.

All dates above are tentative due to the fluid nature of the Covid-19 crisis. **Adequate notice will be provided to students should they be any changes to the above schedule.**

Capstone Project

Due Date: 13 July 2020

Background

You are required to write a system for the university that will store student information. The university would like the following pieces of information to be stored for each student:

- Student No
- First Name
- Last Name
- Email
- Home Address
- Mobile
- Upload photo of Student
- isActive – a flag indicating if the student is a valid

Design

The application needs to be scalable and must provide a fast response time. The design team has requested that the following technologies be used:

- A document database that data be stored in a document database
- Use of blob storage to store the student photo and place a link to the image in the document database.

Question

You are required to develop a Microsoft Azure-based web application that would allow the university to:

1) Add new students into their database.
    a. The application must also validate user input.
2) Edit student information.
    a. Search for a student by Name, Surname or Student No. (only search for active students)
    b. Select Student To be Edited.
    c. Validate input
    d. Save
3) View Student Information.
    a. Email student information in specific format to an email address
4) Delete students from their database.

Furthermore, the application must only be accessible by an administrator. The team has suggested that you use Azure Active directory to manage the Admin credentials (other technologies may be used). You are also required to use **Azure COSMOS** as the database backend of the application.

Quality

To ensure that the developer maintains quality. You are required to write unit test cases for each business case.

Variation

Each group working on this assignment will be allocated a variable from the list below. This variation will be assigned to your group when you submit your group details:

Variation 1	**Variation 2**
1) View Student Information. a. Email student information in **Excel** format to an email address	2) View Student Information. a. Email student information in **Word** format to an email address
Variation 3	**Variation 4**
1) View Student Information. a. Email student information in **PDF** format to an email address	2) View Student Information. a. Email student information in **HTML** format to an email address

Capstone Project Assessment Matrix

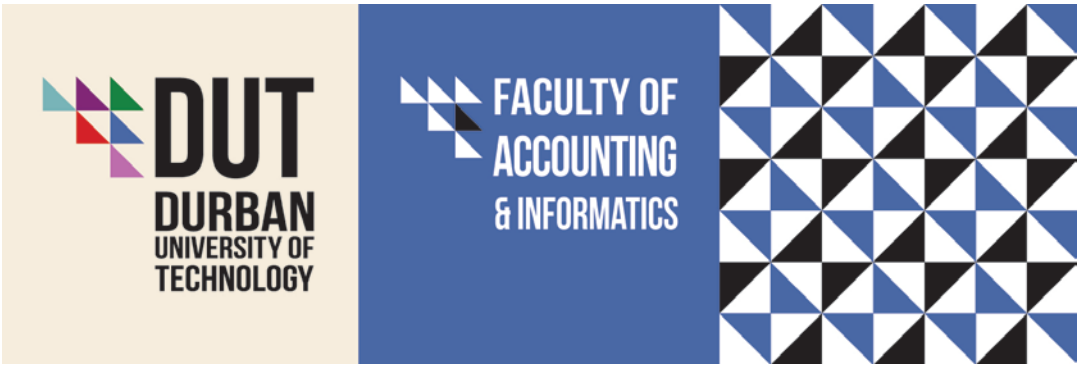
- A student in a group is required to work on at least one assessment area
- Activities cannot be assigned to an entire group
- A student completing more than one assessment activity will receive the higher scoring assessment mark.
- Resubmissions are capped at 50%. The lecture will inform groups of a resubmission date/time.
- Student's individual mark is calculated as follows:
    - Assume the student's total mark for the assessment area is 10
    - Assume the student scores Average (5) for that assessment area
    - His/her student mark would be ((5/10) *100)/2 = **25**
    - The student's individual mark is calculated as half of the group mark plus the student mark

GROUP NO:	

ASSESSMENT AREAS	Mark	Student No	Low	Average	Good	Excellent	Student Mark	Individual Mark
1. Data Structure	10		0	5	7,6	10	FALSE	0
2. Connect to COSMOS	10		0	5	7,6	10	FALSE	0
3. Able to add new student	10		0	5	7,6	10	FALSE	0
3.1 Validate on add	10		0	5	7,6	10	FALSE	0
4. Able to edit students	--	----------						
4.1 Search for student	10		0	5	7,6	10	FALSE	0
4.2 Display Student Info	10		0	5	7,6	10		

GROUP NO:	

ASSESSMENT AREAS	Mark	Student No	Low	Average	Good	Excellent	Student Mark	Individual Mark
							FALSE	0
	10		0	5	7,6	10		
4.3 Validate on edit							FALSE	0
	5	----------	0	2,5	3,8	5		
4.4. Save Student								
	5	----------	0	2,5	3,8	5		
5.Delete Student							FALSE	0
	10		0	5	7,6	10		
6.Variation							FALSE	0
	10		0	5	7,6	10		
7. Login							FALSE	0
Penalties								
8.Poor Module Design and Coding Practices, OOP and/or modularisation	-10		0	-5	-7,5	-10		
	-10		0	-5	-7,5	-10		
9.Use of Technology								
	-15		0	-7,5	-12	-10		
9.Unit Testing								
	-20		0	-10	-16	-20		
10.Deployment Slots								
11.Plagiarism (includes incorrect variation)	-100%							
12. Late Submission	-10		0	-5	-7,5	-10		
Group's Mark	0		0	0	0	0		



PLAGIARISM DECLARATION

Group No: _____

Student #: _____

DECLARATION

1. I know and understand that plagiarism is using another person's work and pretending it is one's own, which is wrong.
2. This assignment is my own work.
3. I have appropriately referenced the work of other people I have used.
4. I have not allowed, and will not allow, anyone, to copy my work with the intention of passing it off as his or her own work.

_____ _____

Signature Date

_____

Name (in capital letters)