DEPARTMENT OF COMPUTING

COMP2750/COMP6750 2021 – ASSIGNMENT THREE (25%)

Applications Modelling and Development

Application Development
Multiple submission dates

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Overview of Assignment-3

This assignment focuses on the development and testing aspects of a mobile application.

Task Descriptions

Task 1: Application Development Demo and Viva (15 marks) (Group Task)

You will be developing an application for SFFS that you have been working on through the other assignments. Please ensure you watch the video that demonstrates the development specifications. It is on Echo.

Task 1 outlines the requirements that needs to be implemented in the application.

1. **A Welcome heading** displaying the name of the system
2. **An image of your choice** displayed below the heading
3. **Food** dropdown:
   In the first dropdown, provide three (3) food items. They should contain values like this
   'Fries-$10'
   'Tacos-$15'
   At least 2 of the food items, should have the same price.
   For simplicity reasons, we will assume price to be a double-digit value without any decimal point.
4. **Drinks** dropdown:
   In the second dropdown, provide three (3) drink items. They should contain values like this
   'Coke-$6'
   'Pepsi-$5'
   At least 2 of the drink items, should have the same price
   For simplicity reasons, we will assume price to be a single-digit value without any decimal point.
5. **Choose Quantity** dropdowns:
   For each of the chosen item, there is a corresponding quantity. Quantity will have numbers between 1 and 5.
6. **Calculate** button:
   Once the values are selected, when calculate button is clicked, it should display the total cost in a label below with a label
   > Total cost of the order: $ CostValue
7. **'App developed by names of the group members'** as label at the bottom of the app

Note: An empty layout of the app is provided in the assignment folder. **You are not allowed to add extra screens** . However, if you want to add extra details on the screen, that is acceptable. You have to change the **look & feel of app**. The application should work **without crashing and must display the right output**.
This task is due for submission on Monday Week13 (31/05/2021 at 10am).
All group members need to attend the workshop in week 13. During this demonstration, you will be asked questions based on the code to test each group's understanding of the system. If you are

not present for the discussion component, you will be awarded zero marks. For the online groups, a working microphone and headphones are important since you will have to communicate with the tutor. Being able to hear and talk back to your tutor is a requirement.

Task 2: Exploring Mobile Application development (15 marks) (Group Task)

What is native mobile application development? What is cross-platform mobile application development? Provide examples of frameworks used in each of the above. Compare and contrast the two exploring the advantages and drawbacks. You must use references and citation as part of this report. You are required to use headings

Word limit: around 750 words per group member. This task is due for submission on Monday Week14 (07/06/2021 at 10am). Please submit your answers as a pdf document. Rename your file to your GroupName E.g. Group99.pdf

Task 3: Testing (70 marks) (Individual Task)

A thorough testing document has to be created with different possibilities of testing. Four clearly documented test cases must be written with test values and results filled in (pass/fail). You tests will be checked against the group project to check the results. Also add around 500 words explaining your choice of the tests- what they are and why is it important?

For SFFS what are the different tests that can be carried out? For instance, unit testing is crucial for any system. In the context of SFFS, how would it be applicable?

This task is due for submission on Monday Week14 (07/06/2021 at 10am). Please submit your answers as a pdf document. Rename your file to your full name E.g. Anakin_Skywalker.pdf

Note: you can submit early, and as many times as you want up until the deadline. Consider submitting something early as a backup in case things go wrong at the last minute.

Marking Criteria

Task 1 (out of 15)	
Existence of elements (out of 4)	
Welcome heading?	/0.5
Image?	/0.5
4 dropdowns?	/1
Calculate button?	/1
Text to display the cost?	/0.5
App developed by message	/0.5
Total	**/4**
Functionality (out of 11)	
All dropdowns filled with correct elements?	/2
Correct programming logic? (Calculation of total cost)	/5
Total cost of the order displayed correctly	/2
Effort in changing the look and feel of app	/2

	Total	**/11**
	Task 2 (out of 15)	
Explanation of native app development with advantages and drawbacks		/5
Explanation of cross platform development with advantages and drawbacks		/5
Compare and contrast the two types of mobile app development		/5
	Total	**/15**
Individual Components		
Task 3 (out of 70)		
Each Test Case (out of 10)		
Tests detailed well?		/5
Shows results (pass/fail)		/1
Includes expected results		/1
Clearly documented with set up, steps?		/2
Choice explanation		/1
	Total	**/10**
Types of testing (out of 30)		
Different types of testing (in the context of SFFS)		**/30**
Assignment submitted online after deadline? (10% penalty per day)		