

# **Tutorial Letter 103/1/2020**

## **Development Software IV**

### **IRM4724**

### **Semester 1**

### **School of Computing**

**IMPORTANT INFORMATION:**

This tutorial letter contains the questions for:  
Assignment 3

BAR CODE

## Instructions:

- ✚ Work through all the chapters in the prescribed book. You may also use sources outside the provided Learning Units and textbook. Please remember that you need to *cite* all external sources.
  - Should you cite external sources then follow a proper referencing system, e.g. *Harvard*. Take some time to figure it out. For instance should you use a word processor such as MS Word then use the Reference tool to assist you. Microsoft offers excellent assistance in showing you step by step how to use it (<https://support.office.com/en-us/home/>). Alternatively use software such as Mendeley ([www.mendeley.com](http://www.mendeley.com)) to assist you in the gathering of sources. Mendeley also offers various training documents and videos in the use and integration thereof with a word processor (such as MS Word).
  - DO NOT copy and paste content from external sources verbatim. It is plagiarism. Read through the different sources and documents, summarise it and then IN YOUR WORDS reflect on it. Refer to UNISA's rules and regulations in regards to plagiarism. [We have software, called *turnitin* that we use to determine whether content in a document is plagiarised.]
- ✚ Create a document in any word processor. Save it as *yourstudentnumber\_a3.xxx*. When you are done, generate a PDF version thereof. You will upload the PDF version of the document on myUNISA.
- ✚ Use a font that is easy to read, e.g. Arial or Times New Roman. Font size = 12. Paragraph Line Spacing = 1.5. Paragraph Full Justified.
- ✚ Your student number must appear on each of the pages (top left).
- ✚ Number each page (bottom right)
- ✚ Number your questions clearly.
- ✚ Include the list of external reference sources after the last question.

The purpose of this assignment is for you to reflect on the development opportunities that mobile applications offer.

The mark for each question is indicated in brackets.

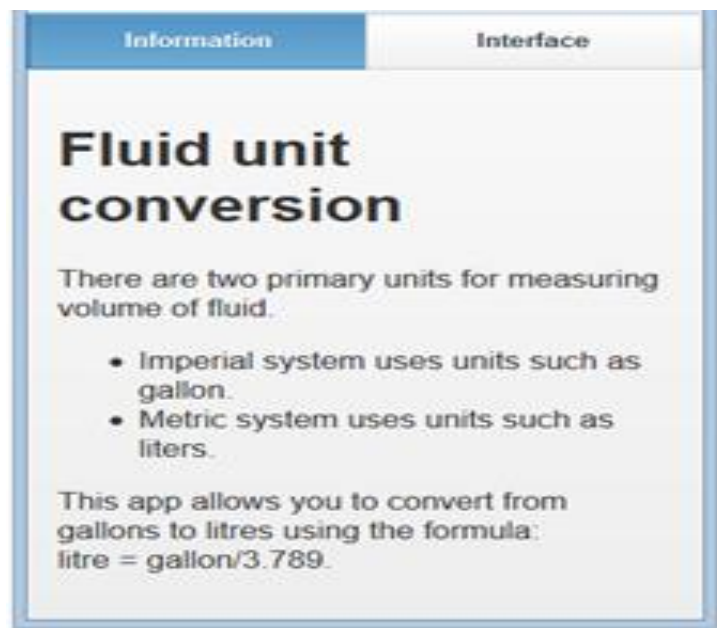
**Question 1****(15)**

Write HTML5 code that will create the following display:

Apple iOS	iPad	iPhone	iPod touch	
Google Android	Nexus 7	Samsung Galaxy Notes 8	Samsung Galaxy Notes 4	HP Slate 7
Blackberry OS	Blackberry Z10	Blackberry Q10		
Microsoft Windows Phone OS/RT	Nokia	Samsung ATIV	Surface	

**Question 2****(11)**

Provide the HTML5 code for a simple HTML5 document depicted in the diagram below.



**Question 3**

Match each term (Column 1) with the correct description from Column 2.

	COLUMN 1		COLUMN 2	
2.1	JavaScript	a.	Memory location in a program to store value that is used in computations.	[1]
2.2	High-level languages	b.	A program snippet that performs a particular task.	[1]
2.3	Compiled programs	c.	Programs that are translated one instruction at a time every time they are run.	[1]
2.4	Interpreted programs	d.	Programs that are translated once and translated copy is run many times.	[1]
2.5	Function	e.	Languages that use English-like words for computer programming.	[1]
2.6	variable	f.	A programming language popularly used for web programming.	[1]

**Question 4****[2]**

Write queries to DELETE the following.

4.1	All the books published by John Grisham.	[1]
4.2	All the books not published by John Grisham.	[1]

**Question 5****[24]**

Write a code for saving a new user on the MySQL server for the Thyroid app.

**Question 6****[30]**

The popularity of mobile enterprise apps and consumer-based mobile applications (apps) has grown tremendously in the last decade. Conduct some market research and create a table comparing the three major platforms in app development (Apple iOS, Android and Windows 8). Discuss your findings under the following headings:

- Interface and User Experience
- Applications
- Security

**Question 7 (Community Engagement Project)****[12]**

Either develop or selection a mobile application. Demonstrate this application to a community of your choice. Discuss the application created/selected and how this uplifted the selected community.

**TOTAL: 100**

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