



FACULTY/COLLEGE	College of Business and Economics
SCHOOL	School of Consumer Intelligence and Information Systems
DEPARTMENT	Department of Applied Information Systems
CAMPUS(ES)	APB
MODULE NAME	Development Software
MODULE CODE	DSW2B01
SEMESTER	Second
ASSESSMENT OPPORTUNITY, MONTH AND YEAR	Supplementary Summative Assessment Opportunity November 2019

ASSESSMENT DATE	November 2019	SESSION	08:30 – 12:30
ASSESSOR(S)	Mr. Ronny Mabokela		
MODERATOR(S)	Dr Mpho Raborife		
DURATION	3 hours (180 min)	TOTAL MARKS	100

NUMBER OF PAGES OF QUESTION PAPER (Including cover page)	2
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INFORMATION/INSTRUCTIONS:

- This is a closed-book assessment.
 - There are four (4) questions. **Answer ALL questions.**
 - Read the questions carefully and answer only what is required.
 - Number your answers clearly and correctly as per the question paper.
 - Write neatly and legibly on both sides of the paper in the answer book, starting on the first page.
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QUESTION 1**[25 MARKS]**

- 1.1 Draw and explain the **Graphic User Interface** architecture called **MVC** patterns for mobile application. (10)
- 1.2 The application framework layer provides many higher-level services to applications and the application developers are allowed to make use of these services in their applications. Describe the five (5) key services under the application framework. (5)
- 1.3 Explain the difference between **implicit** and **explicit** intent. (4)
- 1.4 Draw a neat diagram to clearly describe the **user interface design** process. (6)

QUESTION 2**[25 MARKS]**

- 2.1 Describe the three (3) types of fragments and three (3) states to handle the fragment lifecycle. (6)
- 2.2 Name and explain any six (6) essential characteristics of mobile applications. (6)
- 2.3 A layout is defined as a visual structure of the **user interface** such as the UI of the activity of widget. Describe any five (5) common layouts in mobile apps. (6)
- 2.4 What is a fragment? Describe how you will go about creating a fragment in an android application. (7)

QUESTION 3**[25 MARKS]**

- 3.1 Android fragments have their own lifecycle very similar to an android activity. Briefly explain ten (10) fragment lifecycle method in android application. (10)
- 3.2 Describe any five (5) principles of **user interface designs** that are used when designing a mobile app. (5)
- 3.3 Show how do you can declare a **class** in the **AndroidManifest.xml** file? (4)
- 3.4 Resources offer several advantages to an android application. Describe the three (3) reasons why resources offer an advantage to an android application. (6)

QUESTION 4**[25 MARKS]**

- 4.1 During planning of a mobile application development, a client might hold multiple myths in mind, which are required to be clarified before stepping ahead towards development phase. Describe in detail the five (5) myths about mobile application development. (5)
- 4.2 Services are commonly used for tasks that are performed in the background, such as time-consuming calculations, downloading files, playing music, and so on. Briefly describe the four (4) types of android services found in a android application. (4)
- 4.3 What is Parsing? Explain XML Parsing with a suitable example. (5)
- 4.4 What is use of **Android Manifest** file in android application and why do you need the file? (6)
- 4.5 Describe why Mobile applications are much better than Mobile websites. (5)