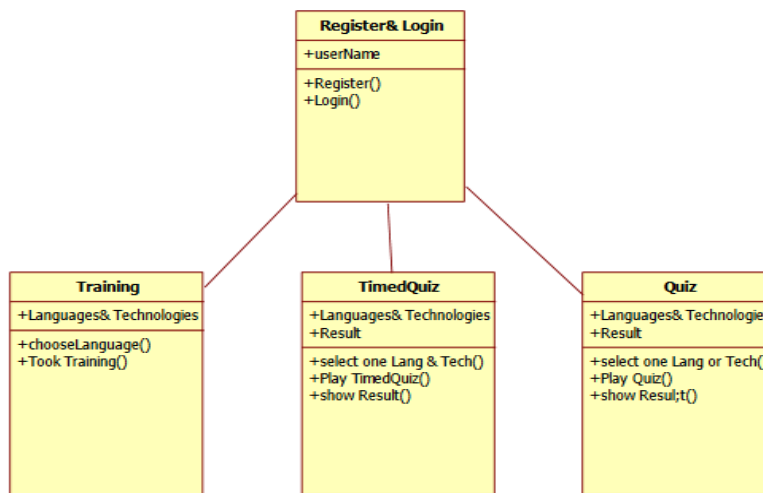


QUESTION ONE 30 MARKS

- a) Define the following terms as used in mobile application design and development:-
- i. Activity Manager **(1 Mark)**
 - ii. Mobile Application **(1 Mark)**
 - iii. Content Providers **(1 Mark)**
 - iv. Resource Manager **(1 Mark)**
 - v. Android Emulator **(1 Mark)**
 - vi. View System **(1 Mark)**
 - vii. Package Manager **(1 Mark)**
 - viii. Android SDK **(1 Mark)**
 - ix. Laragon **(1 Mark)**
- b) Describe the term system **(2 Marks)**
- c) Outline at least FOUR characteristics of a system **(4 Marks)**
- d) Which of the following are operating systems and which are applications: Microsoft Excel, Google Chrome, iTunes, Windows, Android, Angry Birds. **(3 Marks)**
- e) Identify the pros and cons of the following methodologies used in business application development;
- i. Waterfall Development Methodology **(4 Marks)**
 - ii. Parallel Development Methodology **(4 Marks)**
 - iii. Phased Development Methodology **(4 Marks)**

QUESTION TWO 20 MARKS

- a) What are three examples of information system hardware? **(3 Marks)**
- b) System analysis is a very important phase in business application development. Enumerate some FIVE skills of a successful systems analyst **(5 Marks)**
- c) Describe the phases involved in system development **(8 Marks)**
- d) The diagram below show a class diagram for a mobile app project being developed. Explain clearly what is involved in this class diagram.



(4 Marks)

QUESTION THREE 20MARKS.

- a) Methodology is a formalized approach to implementing the Software Development Life Circle. Describe at least FIVE criteria for selecting the appropriate methodology.

(5 Marks)

- b) Application testing is very crucial in a mobile business application development. You are required to describe how you can test an app while developing **(6 Marks)**
- c) A great user interface follows human interface design principles that are based on the way people, users, think and work, not on the capabilities of the device. List any SIX guidelines followed when designing a business application. **(6 Marks)**
- d) The text and input and other text related functions are used to edit, copy and paste text in the application. Here is an example of how edit text is used in the application.

<EditText

```
    android:id="@+id/editText1"
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:layout_weight="0.00"
    android:ems="10"
    android:hint="PlayerName">
```

Explain what happens at each and every line of the code above. **(3 Marks)**

QUESTION FOUR 20MARKS

- a) Why is it important to specify the device(s) to which the app will be delivered **(4 Marks)**
- b) What is an API in full? **(2 Marks)**
- c) Why is it important to consider the name to be given to a business application to be developed? **(2 Marks)**
- d) When designing and developing a mobile business application, it is important to outline a draft of the app. Describe some of the steps involved in outlining a draft of the app. **(4 Marks)**
- e) Explain some design consideration for a mobile application in regards to TEXT INPUT and TEXT OUTPUT? **(4 Marks)**
- f) When designing and developing a business application, the first step involves concept development. Describe at least FOUR aspects of concept development in mobile app development.

(4 Marks)

QUESTION FIVE 20 MARKS

- a) List any FIVE types of audience your app and its design should appeal to and serve
(5 Marks)
- b) Describe how a business application can appeal to and serve the target audiences.
(5 Marks)
- c) In recent years, mobile business application has gained popularity with the developers and the users. You are required to describe some of the common pitfalls that a mobile application developer is likely to encounter during the process of app development.
(10 Marks)