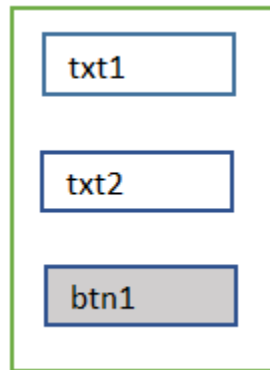


## C.A.T 2

### INSTRUCTIONS; *ALL QUESTIONS ARE COMPULSORY*

### QUESTIONS

- a) Explain the security features that you can include in a mobile application. **(2 marks)**
- b) A student at KCA University has created the below interface in Android Studio. The interface is made up of two text views and one button whose ids are **txt1**, **txt2** and **btn1** respectively as shown on the below interface.



- c) Generate an xml code that will be used to create the views for this interface using the Linear Layout, vertical orientation. **(6 marks)**

- d) Eliminate the errors in the following XML code **(4 marks)**

```
<?xml version="1.0" encoding="utf-8"?>
<resources
  <color name="opaque_red">#f00
  <string name="hello">Hello!</string>
```

- e) Write an Android app that has two buttons. The first button when clicked takes you to another activity with a text view, while the second takes you to [www.cuk.ac.ke](http://www.cuk.ac.ke). In your solution include the activity, layout and string.xml files. **(8 marks)**

- f) A student at KCA University studying mobile programming has decided to develop an Android application for grading. The application has the interface shown below;

GRADING SYSTEM		
UNIT	MARKS	GRADE
CCS 3060	<input type="text"/>	<input type="text"/>
CCS 3010	<input type="text"/>	<input type="text"/>

CCS 4070	<input type="text"/>	<input type="text"/>
CCS 3080	<input type="text"/>	<input type="text"/>
CCS 4060	<input type="text"/>	<input type="text"/>

MEAN SCORE	<input type="text"/>
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- i) **Declare** and **bind** each of the views/widgets used for entering marks, showing the grades and showing the mean score. (*Assume your own ids*). The views for entering marks are *EditTexts*, the views for displaying grades are *TextViews* and the view for displaying mean score is *TextView*. **(4marks)**
- ii) Write a method called **Grading** (using the; if statement) that can be used to grade the subjects on the interface. The method must have one parameter namely *marks*. Use the grading system shown below. **(6marks)**

Mark	Grade
40-49	D
50-59	C
60-69	B
70-100	A
0-39	F