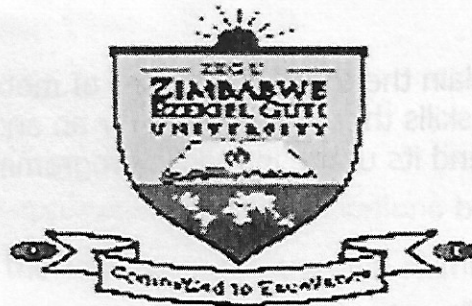


ZIMBABWE EZEKIEL GUTI UNIVERSITY



FACULTY OF HEALTH, SCIENCE AND TECHNOLOGY

Department of Digital Technology

Module: CDT208 Mobile Application Development

Exam Duration: 3 hours

End of Semester Examination 2021/2022

10 FEB 2022

Instructions

- (i) Answer all questions, the mark allocation for each question is shown in square brackets.
- (ii) Number your answers accordingly.
- (iii) The total marks for the examination is 100.
- (iv) The Examination consists of Section A and Section B
- (v) Answer Section A and any **two** Questions from Section B
- (vi) Write your section A in answer booklet provided
- (vii) Write section B on your computer and save your work in one folder

Section A – Theory Questions

[50 marks]

Question One

- (i) Identify and explain the three main types of mobile applications [6]
- (ii) Outline any five skills that are required for an android developer [5]
- (iii) What is an API and its usage in mobile programming [3]

Question Two

- (i) What are the different categories of apps ? [5]
- (ii) Identify and explain the five key components under the android application architecture [10]
- (iii) There are two types of intents namely explicit and implicit intent. Using java code explain the difference. [10]

Question Three

a. Briefly explain the following mobile application development terms

- (i) action
- (ii) adb
- (iii) container
- (iv) SDK [8]

b. Differentiate JVM from DVM [3]

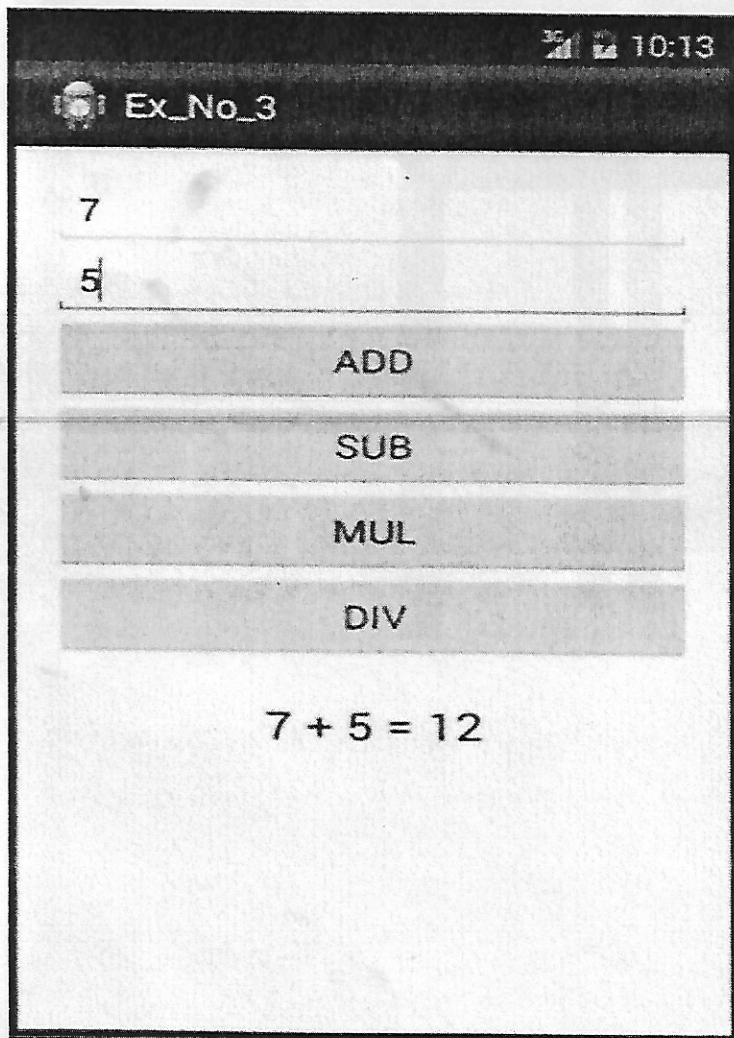
Section B- Practical Questions-

[50 marks]

Answer any two questions from section B

Question Four

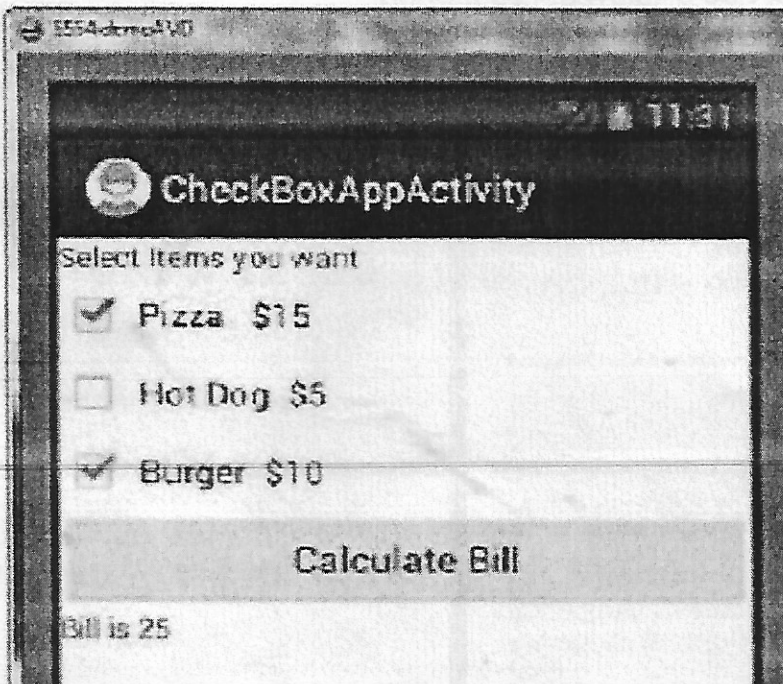
Design a native calculator application with specifications below and add functionality. The program must allow the user to enter any two numbers and upon clicking the choice button, the result must be displayed. [25 marks]



Question Five

Demonstrate your understanding of the **checkbox** control by designing the interface below and add functionality so that :

- a. The user must select items of choice from the checkboxes
- b. When the user clicks the button **calculate Bill** all selected items must be summed up and the result is displayed. [25 marks]



Question Six

Design the interface below that implements a spinner control. When the application executes the spinner must show all countries stated below. Add code so that when the user chooses the fruit then the fruit must be displayed as a toast message on the mobile. [25 marks]

