



Daffodil International University

Department of Computer Science and Engineering

Faculty of Science & Information Technology

Midterm Examination, Fall 2020 @ DIU Blended Learning Center

Course Code: CSE334 (Day), Course Title: Wireless Programming

Level: 3 Term: 3 Section: O-1, O-2, O-3, O-4, O-14

Instructor: MRN Modality: Open Book Exam

Date: Sunday (8 November 2020) Time: 09:00 AM - 01:00 PM

Four hours (4:00) to support online open/case study based assessment Marks: 25

Directions:

- Students need to go through the CASE STUDY shown in this exam paper.
- Analyze and answer specific sections based on your own thinking and work.
- Do not share as this will be treated as plagiarism by Blended Learning Center.

Answer all the questions. Figures on the right-hand side indicate full marks.

Suppose, you have been asked to design an android application which will contain two activities named **StartActivity** and **NextActivity**. In the **StartActivity**, you will have two EditText components and two buttons. The First EditText component will suggest entering your name, and the second one will suggest entering your student id(as string). Out of the two buttons, one will be named the “**Count**” button, and the other one will be the “**Go to Next**” button. If you press the **Count** button, a counter will increase for once. If you press the “**Go to Next**” button, you will be moved to the **NextActivity**. Before going to the **NextActivity**, it will pass your name, student id from the EditText components, and a value equal to the last count from the **Count** Button.

The **NextActivity** will contain one button named “**Process Info**” button. The **NextActivity** will also contain buttons equal to the last digit of your student id, on top of the “**Process Info**” button. (If your student id is 181-15-12349, the **NextActivity** will contain 9 buttons. If the last digit of your student id is 0, replace it with 3). The “**Process Info**” button will generate a value equal to the remainder of the last count from the **Count** Button and the last digit of your student id (for example, if your student id is 181-15-12345, and you have clicked the **Count** button 8 times, then the remainder of 8/5 will be 3. If the last digit of your student id is 0, replace it with 3).

[Please Turn Over]

The “**Process Info**” button will also generate a toast message which will contain your name (received from **StartActivity**), your student id(received from **StartActivity**), and the generated remainder value. All of these messages will be separated by a comma.

1. Briefly describe the states of the activity life-cycle which you encounter during the normal interaction of the StartActivity. [5]
2. Write down the XML code of all the activities separately. [10]
3. Write down the Java code of all the activities separately. [10]

[Good Luck]