



Daffodil International University
Department of Computer Science and Engineering

Faculty of Science & Information Technology

Midterm Exam Examination, Spring 2021 @ DIU Blended Learning Center

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

Level: 3 Term: 3 Section: All

Instructor: All Modality: Open Book Exam

Date: Monday 11 March, 2021 Time: 09:00AM-11:30AM

Two and half hours (2:30) 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 thinking and word.**
- **Do not share as this will be treated as plagiarism by Blended Learning Center.**

Do you know the secret of your student id? Your student id has some inner meaning. For example, one student having this student id **(182-15-12345)**. Every number separated by the **hyphen (-)** has some special meaning. Let me explain you one by one. The first portion contains 182. The first two digits (18) indicates in which year a student has admitted and the last digit (2) indicates the semester. So, 182 means a student has admitted into DIU in **summer 2018**. Now come to the second portion, which contains 15. This is the code of the department of CSE. Every department in DIU has a unique department code. Moreover, the last portion contains 12345, is the student number of that student. **Department Codes and Semester mapping are given below.**

Now your job is to design an android application which will contain two activities named **StartActivity** and **InfoActivity**. In the **StartActivity**, you will have three EditText components and a button. First EditText component will suggest entering your **Name**, the second one will suggest entering your **student id (as string)**, and the third one will suggest you to entering your **mobile number (as string)**. The button will be named as the **"Go to Next"** button. If you press the **"Go to Next"** button, you will be moved to the **InfoActivity**. Before going to the **InfoActivity**, it will pass your name, student id, and mobile number from the EditText components. The **InfoActivity** will contain one button named **"Process Info"** button and a TextView. After pressing the **Process Info** button, it will do some work in the background with the data it received from the **StartActivity** and show some text in the TextView. It will analyze the mobile number that has received from the **StartActivity**. Based on the last digit of the mobile number it will analyze the student id and show a message in the TextView. Samples are given below.

Case	Student id	Message
If the last digit of the mobile number is Even	171-15-35124	Hasan has admitted in spring 2017.
If the last digit of the mobile number is Odd	171-14-35124	Hasan has admitted in Software Engineering Department.

***** Here "Hasan" is a random name. You have to use the name that will be taken as an input from StratActivity. And also mention your phone number on the top of your UI design**

Now answer the following questions according to the above scenario:

1. Briefly describe component of of Android app with easy example(don't try to copy). **[05]**
2. Draw the UI of the proposed APP with all proper details (indicate view type and view id name of both activities) and Write down the **XML** code of all the activities. **[10]**
3. Write down the **Java** code of all the activities. **[10]**

Semester Mapping:

Number	Semester Name
1	Spring
2	Summer
3	Fall

Example: 183 Means Fall 2018

Department Codes:

Department Name	Department Code
CSE	15
Software Engineering	14
BBA	13
English	12
Pharmacy	11