CS473 Mobile Device Programming

MID TERM –REVIEW

Lessons for Midterm Examination

Lesson – 1 – Introduction to Android
Lesson – 2 – Kotlin Fundamendals
Lesson – 3 – Creating First App
Lesson – 4 – Views, Layouts, Resources and Lifecycle
Lesson – 5 – Intents
Lesson – 6 – User Input Controls
Lesson – 7 – Menus, Fragments, Tab layout with Swipe views, and Material Design

Course Resources : www.online.cs.mum.edu

Reading Resources : Lecture PPT and Demo Code

Important points about Exam

1. The Midterm examination held on 12/07/2019 – Saturday Morning.
2. The midterm will be timed. It will begin at 9.45 am and will end at 12:00 noon.
3. Midterm should be closed book.
4. Bring Pencil/Pen, Eraser and necessary things. You are responsible to keep your writing desk neat and clean. [Use waste paper to keep the pencil sharpened dust].
5. Mobile should be in Silent or Swich off mode. You are not allowed to keep the mobile. So bring backpack to keep your belongings. Keep the backpack infront of the dias.
6. Necessary hints and API will be given in the question paper itself.
7. The Midterm contains the following
    a. True or False
    b. Multiple Choice Questions
    c. Questions and Answer with clues having concepts, definition,applications etc.,
    d. Digram Questions – Refer Lecture PPT
        i. Android Architecture (Lesson-1)
        ii. Android Project Explorer Structure (Lesson 3)
        iii. Android Activity Life Cycle (Lesson 4)
        iv. Fragment Life Cycle (Lesson 7)

e. Pool Puzzle. Code will be given to you with blanks. Pool filled up with answers. You must choose the correct answer from the pool to fill the blanks.

f. Programming Question.

i. Lesson-2 – Simple Function Implementation (Kotlin functions like finding fast and last digit of given number, finding maximum etc.,)

ii. OnClick implementation, Design and startup code will be given.

1. Simple Button click task (Example Click the button to open another activity, arithmetic operations etc.,)

iii. Lesson-5-How to work with Explicit Intents and pass data and retrieve result

iv. Lesson 7 – Creation of Fragments

Skip the below topics for the Midterm examination

a) Lesson 6 – Day 2 - RecyclerView

b) Lesson 7 – Day 2 - Tab Layout & NavigationDrawer

Example

1. True or False and Multiple Choice Questions similar like your Quiz-1

2. Sample Questions and Answer with clues category

Match the definition from the given clues.

[Android Virtual Device (AVD), Layout, Style, Gradle, Activity]

a) **Activity** describe what your app does, and how it interacts with the user.

b) **Layout** helps to organize the UI components.

c) **Gradle** is the native build system for Android Studio.

d) **Android Virtual Device (AVD)** is a device configuration that is run with the Android emulator.

e) A **Style** is a collection of attributes that specify the look and format for a View or Window.

3. Pool Puzzle examples

```
class MainActivity : AppCompatActivity() {
   private _____var  strings : Array<_____>
   override fun onCreate(savedInstanceState: Bundle?) {
      super.onCreate(savedInstanceState)
      setContentView(_____)
```

```
    strings = _____.getStringArray(R.array.countries);
    val adapter = _____<String>(_____, android.R.layout.simple_spinner_item,
strings)
    actv.setAdapter(_____)
    actv.threshold = 1
}
```

Answer Pool
getResources() ArrayAdapter lateinit String
R.layout.activity_main this adapter

Answer :

```
 override fun onCreate(savedInstanceState: Bundle?) {
    super.onCreate(savedInstanceState)
    setContentView(R.layout.activity_main)
    strings = getResources().getStringArray(R.array.countries);
    val adapter = ArrayAdapter<String>(this, android.R.layout.simple_spinner_item, strings)
    actv.setAdapter(adapter)
    actv.threshold = 1
}
```