Midterm Module B

Due Mar 23 at 11:59pm   **Points** 20   **Questions** 20
Time Limit 30 Minutes

Instructions

This midterm covers BNR chapters 1-12. It may also have question from the CriminalIntent slides created by Dr. K.

Many questions relate to how GeoQuiz (similar to MultiQuiz) and CriminalIntent (similar to DreamCatcher) are implemented. Also, make sure you have a good understanding of the life-cycle functions before you take this.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	29 minutes	17 out of 20

Score for this quiz: **17** out of 20
Submitted Mar 19 at 7:11pm
This attempt took 29 minutes.

Question 1   **1 / 1 pts**

The criminal intent application that we have looked at so far uses a hosting activity and two fragments (a list-view and a detail-view). Since the hosting activity never holds more than one fragment, can we code the application using two activities (a list-view and a detail-view) instead of two fragments?

○ No, activities cannot observe live-data - we need a fragment for that

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Correct!

⊙
Yes, provided we use intent extras to pass data between activities instead of fragment arguments

○ No, activities cannot use a recycler view - we need a fragment for that

○
Yes, but in addition to the list-view and detail-view activities, we still need a hosting activity (so 3 activities total)

Question 2   1 / 1 pts

Hardcoding text in Android makes localization (adapting your software to different languages) more difficult. Instead, you should place your text in this file:

Correct!

◉ strings.xml

○ local.xml

○ localize.xml

○ text.xml

Question 3   0 / 1 pts

Uninstalling an app deletes its database.

orrect Answer

○ True

ou Answered

◉ False

Question 4   1 / 1 pts

What are the four main layers in an application with a Room Library from top to bottom?

○ Fragment / LiveData / DAO / Entity

Correct!   ◉ UI Controller / ViewModel / Repository / Database

○ Application / ViewModel / Database / Repository

○ ViewModel / Repository / DAO / Database

Question 5   1 / 1 pts

In an application with two activities, which lifecycle functions (at a minimum) must be invoked when switching from one screen (Activity A) to another (Activity B).

Correct!   ◉ onPause of Activity A and onResume of Activity B

○ onStop of Activity A and onStart of Activity B

○ onPause of Activity A

○ onStart of Activity B

Question 6   1 / 1 pts

What is one of the differences between using view-bindings in an Activity and using view-bindings in a fragment?

○ There is no difference

Correct!

◉ Fragment binding uses an extra variable, _binding, which is null before the fragment's view is created and after the view is destroyed

○ The fragment binding is initialized in the view-model, rather than in the fragment itself

○ Fragment binding uses the layout of the hosting activity, rather than using its own (fragment) layout

Question 7   1 / 1 pts

Which folder contains the database for BNR's CriminalIntent app?

Correct!

◉ /data/data/com.bignerdranch.android.criminalintent/databases

○ /apps/com.bignerdranch.android.criminalintent/databases

○ /apps/data/criminalintent

○ /databases/com.bignerdranch.android.criminalintent

Question 8   0 / 1 pts

In the CriminalIntent application from BNR, which class calls the onCrimeSelected function from the Callbacks interface?

○ CrimeHolder

◉ CrimeListFragment

○ CrimeFragment

○ MainActivity

Question 9   1 / 1 pts

When using constraint layout, suppose you see the following code inside of a view object

`app:layout_constraintTop_toBottomOf=...`

What should you expect to see on right side of the equals sign?

(Hint: "Top" and "Bottom" are relevant to this question)

○ parent

○ The ID of the current view object

◉ The ID of another view object

○ wrap_content

Question 10   1 / 1 pts

How do you add an ID to a button in a layout file?

○ android:text="@string/my_button"

Correct!

○ android:id="@+id/my_button"

○ android:id="@string/my_button"

○ android:id="my_button"

Question 11

1 / 1 pts

This type of file is made up of definitions written in XML. It defines a set of UI objects and their positions on screen.

○ resource

Correct!

● layout

○ view-group

○ activity

Question 12

0 / 1 pts

Which of the following is NOT true about LiveData objects?

○ You can set up your Activity or Fragment to observe a LiveData object (so they will be notified when results are ready)

orrect Answer

○ You can pass LiveData to the database through insert and update functions

ou Answered

○
You can configure queries in your Room DAO to return LiveData objects

○ LiveData objects enable passing data between threads

Question 13   1 / 1 pts

This file lists module dependencies and is used by Android's build tool

○ Application (ex: CriminalIntentApplication)

○ AndroidManifest.xml

○ Repository (ex: CrimeRepository)

Correct!

◉ build.gradle

Question 14   1 / 1 pts

What Activity lifecycle function is used for inflating widgets and putting them on screen, getting references to inflated widgets, and sometimes setting listeners on widgets to handle user interaction?

○ onCreateView

○ onResume

○ onStart

Correct!

◉ onCreate

Question 15

1 / 1 pts

Which of the following lifecycle functions does a Fragment have but an Activity does NOT have?

Correct!

◉ onCreateView

○ onCreate

○ onStop

○ onShutdown

Question 16

1 / 1 pts

In Android's MVC architecture, an Activity is a kind of controller.

Correct!

◉ True

○ False

Question 17

1 / 1 pts

Consider the following variable and its initialization in CrimeDetailViewModel:

```
var crimeLiveData: LiveData<Crime?> =
    Transformations.switchMap(crimeIdLiveData) { crimeId ->
        crimeRepository.getCrime(crimeId)
    }
```

When will getCrime be called?

○ every time the variable crimeLiveData is accessed

○ when the variable crimeLiveData is first accessed

Correct!

◉ when the value in crimeIdLiveData changes

○ when the variable crimeIdLiveData is first accessed

Question 18   1 / 1 pts

In the CriminalIntent application from BNR, which of the following classes takes an argument of type List<Crime> in its constructor?

○ CrimeListFragment

○ RecyclerView

○ CrimeHolder

Correct!

◉ CrimeAdapter

Question 19   1 / 1 pts

What does a Bundle object contain?

○ Activity preferences

Correct!

◉ key-value pairs

○ a list of String objects

○ application settings

Question 20   1 / 1 pts

RecyclerView requires a LayoutManager to work.

Correct!

◉ True

○ False

Quiz Score: **17** out of 20