

Final Exam - Module A

Due May 11 at 11:59pm**Points** 18**Questions** 18**Time Limit** 30 Minutes

Instructions

See the home page for the topics that the final exam will cover. This module has 18 question and you have 30 minutes to complete them.

Attempt History

	Attempt	Time	Score
LATEST	<u>Attempt 1</u>	28 minutes	18 out of 18

Score for this quiz: **18** out of 18

Submitted May 2 at 6:33pm

This attempt took 28 minutes.

Question 1

1 / 1 pts

Android Development uses:

- ☐ A mix of Java (or Kotlin) and JSON
- ☐ A mix of Java (or Kotlin) and Swift
- ☒ A mix of Java (or Kotlin) and XML
- ☐ A mix of Java (or Kotlin), XML, and JSON

Correct!

Question 2

1 / 1 pts

If you want your application to send a user to another app based on an action you want to perform, you should use:

- ☐ a custom content provider
- ☐ a layout inflater
- ☐ a saved bundle
- ☒ an implicit intent

Correct!

Question 3

1 / 1 pts

How does the Android system know if an application is capable of handling a particular action?

- ☐ the action will appear as a string constant in the activity that can perform it
- ☐ the action will be listed in the application's menu resource
- ☒ the application will advertise it in its manifest
- ☐ the application will register the action with Android's action manager

Correct!

Question 4

1 / 1 pts

A sensor is a device that measures a physical property and converts it into something that can be read by an observer.

- ☒ True

Correct!

☐ False

Question 5

1 / 1 pts

Which of the following is NOT a benefit of Kotlin over Java?

- ☐ Kotlin has better built-in null safety checks than Java
- ☐ Kotlin has more functional language features than Java
- ☒ Kotlin is better optimized for the JVM than Java
- ☐ Kotlin tends to be more concise than Java

Correct!

Question 6

1 / 1 pts

Assume that x is an integer with a value of 3. Does the following code compile and run in Kotlin?

```
when (x) {  
    x % 2 == 1 -> print("x is odd")  
    else -> print("x is even")  
}
```

- ☐ Yes, the code will print "x is odd"
- ☒ No, the (x) argument should not be there

Correct!

Question 7

1 / 1 pts

In a fragment, where is the view-binding typically initialized?

- ☐ at the top of the file (same place where it is declared)
- ☐ onCreate
- ☒ onCreateView
- ☐ onViewCreated

Correct!

Question 8

1 / 1 pts

How is a view model associated with a fragment?

- ☐ the fragment is declared in the view model using the fragment's unique ID
- ☐ the fragment's hosting activity associates the fragment with the view model in the support fragment manager
- ☒ the view model is declared in the fragment using a ViewModelProvider (or the viewModels function if using Android KTX)
- ☐ the view model is declared in the fragment using the view model's constructor

Correct!

Question 9

1 / 1 pts

In the Room component library, what does an @Entity class represent?

Correct!

- ☐ a row in a database table
- ☒ a table in a database
- ☐ an entire database
- ☐ SQL queries for a database

Question 10

1 / 1 pts

A ViewModel instance survives Activity/Fragment recreation (for example, on device rotation).

Correct!

- ☒ True
- ☐ False

Question 11

1 / 1 pts

Consider the following code from CriminalIntent.

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

What is the type of `crimeIdLiveData`?

- ☐ LiveData<Crime>
- ☐ LiveData<UUID>

Correct!

- ☐ MutableLiveData<Crime>
- ☒ MutableLiveData<UUID>

Question 12**1 / 1 pts**

In the CrimeDetailFragment class of the CriminalIntent application, where do we save the crime to the database?

Correct!

- ☐ onDestroy
- ☐ onPause
- ☒ onStop
- ☐ onViewCreated

Question 13**1 / 1 pts**

In the Gallery app, which Flickr API method did we use to obtain our photos?

Correct!

- ☐ flickr.galleries.getList
- ☐ flickr.galleries.getPhotos
- ☒ flickr.interestingness.getList
- ☐ flickr.photos.geo.photosForLocation

Question 14**1 / 1 pts**

In the Gallery application, what is the purpose of classes FlickrResponse and PhotoResponse?

- ☐ they help the thumbnail downloader handle messages (tasks)
- ☐ they help the UI layer display information in the recycler view
- ☐ they help us build the request URL that is sent to Flickr
- ☒ they help us deconstruct the JSON string into Kotlin objects

Correct!**Question 15****1 / 1 pts**

Which of the following statements is NOT true about the `fetchUrlBytes` method below? (The method is from the `FlickrApi` interface in the Gallery application.)

```
@GET  
fun fetchUrlBytes(@Url url: String): Call<ResponseBody>
```

- ☐ `@GET` does not have an argument because `@Url` tells Retrofit to use the specified url instead
- ☐ A `Call` object represents a single web request that you can execute (in this case, a GET request)
- ☐ `ResponseBody` is a type that holds the body of a raw HTTP response
- ☒ The `fetchUrlBytes` method is implemented in `FlickrFetchr`

Correct!

Question 16**1 / 1 pts**

Where in PhotoGalleryFragment is ThumbnailDownloader initialized?

- ☐ in the bind method of the inner PhotoHolder class
- ☐ in the onBindViewHolder method of the inner PhotoAdapter class
- ☒ in the onCreate method
- ☐ in the onViewCreated method

Correct!**Question 17****1 / 1 pts**

In the Gallery application, where does the Google map key reside?

- ☒ AndroidManifest.xml
- ☐ MapViewFragment
- ☐ PhotoMapFragment
- ☐ strings.xml

Correct!**Question 18****1 / 1 pts**

In the Gallery application, what is the main view that is held by the gallery fragment?

Correct!☐ grid view☐ image view☐ list view☒ recycler viewQuiz Score: **18** out of 18