QA Ask

Importent Link:

<https://amitshekhar.me/blog>

<https://leetcode.com/problems/longest-substring-without-repeating-characters/description/>

**Stellantis JD & Set of Questions**

Set1:

1. what is kotlin coroutines ? what are suspend functions?

2. what is kotlin dispatcher and scopes in coroutines ?

3. how can we use coroutines inside viewmodel and fragment classes?

4. what is dependency injection? which library you have used for DI?

5. What is clean architecture? how can we achieve it ?

6. Explain it using a task where we need to create a login flow for our app? design it using clean architecture

7. Have you used retrofit or any other similar library?

8. Have you used kotlin kts instead of gradle groovy commands?

9. Have you worked with different flavours in application and different modules in same android project?

10. How can we use livedata and viewmodels? explain types of viewmodel and livedata how they works with lifecycle of android components?

11. Did have you used rxjava lib in android? tell some operators which you used from it

12. Do you know about Koin library

13. Have you used Mockito, Uianimator, Roboelectric in your project?

14. Do you know sonarqube?

15. Have you used Jenkin and any similar tool for CI/CD?

16. Do you know agil methodology?

Set2:

1. How many Years worked on Kotlin ?

2. kotlin knowledge ?

3. StateFlow vs. Flow vs. SharedFlow vs. LiveData... When to Use What?

4. What is Clean Architecture ?

5. How to Apply Clean Arch?

6. Explain Layers of Clean Architecture

7. Testing : Mokito and Junit

8. Automation Test

9. What is dependency injection and Explain about Tools Used for this .

10. Have you done the Code Review ?

11. Important points to check while doing Code review .

12. Tools used for Code review ?

13. what is sonar cube ?

14. Purpose of Sonar Cube ?

15. Explain google play developer console ,why it is used ?

16. CI CD used ?? Tools used for CI CD ??

17. What is Jenkins ?

18. Regarding Work Structure ,

19. How the task are assigned within team .

20. How u get the task from manager and how u manage your team (jira can be used)

Set3:

1. Introduction

2. Designing application (getting profile information from server and rendering in the screen) using MVVM architecture

3. Corountine- difference between launch and async

4. How to write restful apis in couroutine

5. Data storage - how to use ROOM

6. build.gradle, what are basically mentioned in build.gradle

7. If any model is present in SDK how to communicate with those models

8. Google map API- how it is used

9. For unit test cases what can be used - example mockito

10. How to communicate with colleagues during code review

11. How colleague raise for code review - PR method

Set4:

1. var ,val difference in kotlin?

2. What is design pattern? Explain Design pattern builder, mvvm and singleton?

3. Room and sqlite?

4. What is late initialization?

5. Google map api how to used

6. Unit test using Mockito

7. What is companion object in kotlin?

8. Layered architecture have you used any of your project?

9. What are the scopes in kotlin in coroutine?

10. Explain clean architecture?

11. Have you done the Code Review ?Important points to check while doing Code review .

Tools used for Code review?

12. Why we use Sonar cube purpose?

13. Ajile methodology?

14. How colleague raise for code review?

15. What are the different flavours of build gradle that you worked with?

Set:5

1. Have u worked for specific OEM? Or u got chance to work different OEM(automotive domain)

2. Functionality of reverse camera

3. Api’s used

4. Communications to API’s

5. What is the information received for API’s

6. Callbacks

7. Livedata, stateflow, shared flow and flow when to use what?

8. Layout’s for camera

9. Data streamline

10. Have used any other design pattern apart from MVVM

11. Clean Architecture?

12. Have you done the Code Review ?what tool used ?

13. Have you used retrofit or any other similar library?

14. Have you used Mockito, Roboelectric in your project?

15. What is Jenkins used for?

16. How the task are assigned within team .

17. What is the team size?

Set:6

1. Clean Architecture

2. User Story, how to start the process after getting user story (how to determine the points between low, medium and high)

3. Code Review, which tool you used for evaluate?

4. CI/CD ( jenkins and process)

5. Firebase modules( remote config, crashlytics)

6. Unit Test( Mockito)

7. Coroutines and Flow

8. Dependency Injection

9. Google app developer console

10. SonarQube

11. ProductFlavour and buildtypes

12. Ajile methadology

13. Google map

14. Security process while login

15. Proguard rules

16. Service ( work manager

**Synicron**

1. What is buildling block of OPPS
2. What is diffrent b/w abtract and interface
3. What is compile time & runtime polymorphisum
4. Can we override the static method

No, we cannot override static methods because method overriding is based on dynamic binding at runtime and the static methods are bonded using static binding at compile time

1. Can we overload static method

Yes, we can overload static methods, we can have two or more static methods with the same name but with different parameters

1. What is volatile keyword in java

The volatile keyword in Java is used to indicate that a variable's value may be modified by multiple threads simultaneously. It ensures that the variable is always read from and written to the main memory, rather than from thread-specific caches, ensuring visibility across threads

A volatile keyword is used to modify the value of a variable by different threads. It is also used to make classes thread-safe. It means that multiple threads can use a method and instance of the classes at the same time without any problem. The volatile keyword can be used either with primitive type or objects

1. What is transit keyword in java

Transient in Java is used to indicate that a field should not be part of the serialization process. The modifier Transient can be applied to member variables of a class to turn off serialization on these member variables. Every field that is marked as transient will not be serialized..

transient is a variables modifier used in serialization. At the time of serialization, if we don't want to save value of a particular variable in a file, then we use transient keyword. When JVM comes across transient keyword, it ignores original value of the variable and save default value of that variable data type

1. What is diffrent b/w sealed class & sealed interface
2. What is scope funtion
3. What is inline funtion
4. What is lamda funtion
5. What is Higher order funtion
6. how many type of co-routing scope

Three

1. global Scope
2. lifeCycleScope
3. viewModelScope
4. how may way to lunch the co-routing

Two

1. lunch {}
2. async {}
3. how may type dispatcher in co-routing

Three type of Dispatcher

1. Default
2. Main
3. IO
4. how to check coroutine is running or not kotlin

isActive. Returns true when the Job of the coroutine in this context is still active (has not completed and was not cancelled yet) or the context does not have a Job in it

1. How to switch the context in co-routing

In Kotlin coroutines, you can switch the context (thread or dispatcher) in which a coroutine runs using the withContext function. The withContext function allows you to change the coroutine's execution context without blocking the coroutine itself.

To use withContext, you need to import kotlinx.coroutines.Dispatchers as it provides predefined dispatchers for common execution contexts

// Switching the context to Main dispatcher using withContext and pass your dispatcher/thred name on which you want to run

withContext(Dispatchers.Main) {

}

lifeCycleScope.launch {  
 // This code will execute in a different coroutine context (Default dispatcher)  
 println("Coroutine is running on thread: ${Thread.currentThread().name}")  
  
 // Switching the context to IO dispatcher or Main or Defult  
 withContext(Dispatchers.IO) {  
 println("Coroutine is running on thread: ${Thread.currentThread().name}")  
  
 // Simulate some IO operation  
 delay(1000)  
  
 println("Coroutine is running on thread: ${Thread.currentThread().name}")  
 }  
  
 // Back to the default dispatcher  
 println("Coroutine is running on thread: ${Thread.currentThread().name}")  
}

1. can write custome method in enum class

Yes we can write a funtion in ENUM class

1. what is cross-inline and no-inline in kotlin
2. Diffrent b/w AndroidViewModel and ViewModel
3. What is Diffrent type of context in android
4. What is diffrent type of Alert dialog

Three type fo Alert Dialog

1. **AlertDialog**: This is a simple dialog box that displays a title, a message, and some action buttons. It is the most commonly used type of alert dialog and provides a way to present information or prompt the user for a decision.
2. **ProgressDialog**: This is a dialog box used to show the progress of an operation that is taking place in the background. It typically includes a loading spinner and an optional message to inform the user about the ongoing task.
3. **DatePickerDialog and TimePickerDialog:** These dialogs allow the user to select a date or time, respectively, from a graphical interface. They are often used when an application needs to capture date or time information from the user.
4. What is builder design pattern
5. Find the dublicate number
6. Fin dthe highest number
7. What is Agalie methodologies
8. What is JIIRA

**ConceptQT**

1. What is view model
2. Which corotine scope you will use in case of calling api
3. Which all Design Pattern you used till now
4. How many way we can inject the the depandany in Android

There are three types of dependency injection —

1. Constructor injection,
2. Method injection,
3. Property injectio
4. What is Builder design pattern
5. How chhat is working
6. What is happed if you access the file storage without user parmission
7. Wha is different b/w lateinit and lazy
8. Can we declear lateinit variable as nullable

'lateinit' modifier is not allowed on properties of nullable types

1. Which type of erro will accure when we can acces the lateinit variable without initializing it

Exception in thread "main" kotlin.UninitializedPropertyAccessException: lateinit property xx has not been initialized

### If you declear the lazy with var keyword then what happened

var xyz : String by lazy{

"Abhishek"

}

Type 'Lazy<TypeVariable(T)>' has no method 'setValue(C, KProperty<\*>, String)' and thus it cannot serve as a delegate for var (read-write property)

### What to get call from child widget without passing the contex

1. What is Getx
2. Is Dart support fully OPS or not?
3. If support why Number is there

### Conneqtcorp => Flutter

1. What is Steam
2. What many way to implement stram
3. What is state of application
4. Why exit(0) is not prefered
5. What is draware
6. How to get device id or ime number
7. How we execute tow task Parallelly

Infoneo

1. What is widgit
2. What is stateless & statefull widgit
3. What is diffrent b/w Routing and Navigation
4. What is JDK, JVM, JIT, JRE
5. What is Dex file
6. What is DVM
7. What is DDMS
8. What is signin config
9. What is Java version you are using
10. What compile SDK version you ar using
11. What is diffrent b/w Java 8 & 11
12. What the major thing was introduce in java 8 & 11
13. What Android component
14. What is actvity
15. What is freagment
16. What is Content Provider
17. How to save data in Android & IOS
18. How To deploye app on play & app store
19. Process of Integration of FCM
20. What is actvity life cycle
21. What is diffrent b/w latinit & lazy
22. How to dclear singleton class in kotlin
23. How to declear static in kotlin
24. What is MVVM
25. What is Data Binding
26. What the thing you will keep in mind to develop the any application

**Quest-Global**

1. How to implement Parcelize in Android(Kotlin)
2. What is diffrent b/w apk and abd
3. What is trhe benifit with abd
4. Whta is lamda funtion and how to define the return type
5. Hwt ais Extention funtion
6. What is Higher Order funtion
7. What is MVVM
8. What is Clean Articheture
9. What is coroting and type of builder
10. How many way we can sent data b/w activity
11. What is Data binding
12. What is lazy funtion
13. What is Delegation in kotlin

**LNT**

1. is async task deprecated

Google is deprecating Android AsyncTask API in Android 11

1. How may way to ragister brodcast reciver
2. Static => from menifest file
3. Dynamic => from app component

1. How do you perform background opration in / from service class

Using handler and looper. Handler and Looper are often used together to implement asynchronous operations, background tasks, and UI updates in Android applications. They provide a way to schedule work on a particular thread and handle the results when the processing is complete.

1. What is Thread, MessageQues, Looper, Handler
2. **Thread** =>
3. **MessageQueue** => It is a low-level class, and it’s holding the list of messages to be dispatched by a Looper. Messages are not added directly to a MessageQueue, but rather through Handler objects associated with the Looper
4. **Looper** => It loops over a MessageQueue which contains the messages to be dispatched. The actual task of managing the queue is done by the Handler which is responsible for handling (adding, removing, dispatching) messages in the message queue.
5. a Looper is a class that allows you to create a message queue for a thread.
6. It is typically used to handle tasks and events in a sequential manner, without blocking the thread
7. A Looper runs in a continuous loop, retrieving messages from the message queue and processing them one by one.
8. The main purpose of a Looper is to enable message passing and event handling within a thread.
9. It provides a way for different components of an application to communicate and execute tasks asynchronously.
10. The Looper will take care of processing these messages or executing the runnables in the order they were added by Handler.
11. **Handler** => It allows you to send and process Message and Runnable objects associated with a thread's MessageQueue. Each Handler instance is associated with a single thread and that thread's message queue
12. It is used to send and process messages and runnable objects in a thread's message queue.
13. A Handler allows you to schedule tasks, delay execution, and perform other operations on the message queue. The Looper will take care of processing these messages or executing the runnables in the order they were added.

**Wipro**

1. **ViewModelProvider.Factory :**

**ViewModelProvider.Factory is an interface which have create method**. The create method is responsible for creating our VeiwModel's instance

1. What is Repository

Repository is a class which purpose is to provide a clean API for accessing data. What that means is that the Repository can gather data from different data sources(different REST APIs, cache, local database storage) and it provides this data to the rest of the app

Example:

val homeViewModel = ViewModelProvider(this).get(CategoryListViewModel::class.*java*)

val viewmodel = ViewModelProvider(this, ProductListViewModelProviderFectory(ProductListRepository(\_retrofit ))).get(ProductListViewModel::class.*java*)

1. What is polymorphisum

The way of performing multiple task in different way is know polimorphisam .

Compile Time: Overloading

Run time: Overriding

1. How you can pass the data b/w two app

Through Deepling, Content Provider, AIDL(Best Approch)

1. What is service & type of service

Service is an application component which run in background for indefinit preiod of time and default it will run with the main thred.

A [Service](https://developer.android.com/reference/android/app/Service) is an [application component](https://developer.android.com/guide/components/fundamentals#Components) that can perform long-running operations in the background(without user intraction or UI but run with main thred). It does not provide a user interface. Once started, a service might continue running for some time, even after the user switches to another application. Additionally, a component can bind to a service to interact with it and even perform interprocess communication (IPC). For example, a service can handle network transactions, play music, perform file I/O, or interact with a content provider, all from the background

**Caution:** A service runs in the main thread of its hosting process; the service does **not** create its own thread and does **not** run in a separate process unless you specify otherwise. You should run any blocking operations on a [separate thread](https://developer.android.com/training/multiple-threads) within the service to avoid Application Not Responding (ANR) errors.

1. **Foreground service** : A foreground service performs some operation that is noticeable to the user. For example, an audio app would use a foreground service to play an audio track. Foreground services must display a [Notification](https://developer.android.com/develop/ui/views/notifications). Foreground services continue running even when the user isn't interacting with the app.

**Note:** The [WorkManager](https://developer.android.com/topic/libraries/architecture/workmanager) API offers a flexible way of scheduling tasks, and is able to [run these jobs as foreground services](https://developer.android.com/topic/libraries/architecture/workmanager/advanced/long-running) if needed. In many cases, using WorkManager is preferable to using foreground services directly.

1. **Background service**:A background service performs an operation that isn't directly noticed by the user. For example, if an app used a service to compact its storage, that would usually be a background service

**Note:** If your app targets API level 26 or higher, the system imposes [restrictions on running background services](https://developer.android.com/about/versions/oreo/background) when the app itself isn't in the foreground. In most situations, for example, you shouldn't [access location information from the background](https://developer.android.com/training/location/background). Instead, [schedule tasks using WorkManager](https://developer.android.com/topic/libraries/architecture/workmanager).

1. **boundservice**: A service is bound when an application component binds to it by calling [bindService()](https://developer.android.com/reference/android/content/Context#bindService(android.content.Intent,%20android.content.ServiceConnection,%20int)). A bound service offers a client-server interface that allows components to interact with the service, send requests, receive results, and even do so across processes with interprocess communication (IPC). A bound service runs only as long as another application component is bound to it.
2. How to create multiple tyep of apk

Through Build variant, Flavor & Sigin Configuractio

1. What is coroting and type of corouting

The difference is that the launch{} returns a Job and does not carry any resulting value whereas the async{} returns an instance of Deferred<T> , which has an await() function that returns the result of the coroutine

1. **Lunch** : fire and forget.

val job = GlobalScope.launch(Dispatchers.Default) {

// do something and do not return result

}

1. **Async** : perform a task and return a result

val deferredJob = GlobalScope.async(Dispatchers.Default) {

// do something and return result, for example 10 as a result

return@async 10

}

val result = deferredJob.await() // result = 10

1. What happed if i call some suspended & non suspended method from corouting
2. How you can create the instance of viewModel
3. What is Post & set method in LiveData

[**setValue()**](https://developer.android.com/reference/androidx/lifecycle/LiveData#setValue(T)): Sets the value. If there are active observers, the value will be dispatched to them. This method must be called from the main thread.

[**postValue()**](https://developer.android.com/reference/androidx/lifecycle/LiveData#postValue(T)): Posts a task to a main thread to set the given value. If you called this method multiple times before a main thread executed a posted task, only the last value would be dispatched.

| **setValue()** | **postValue()** |
| --- | --- |
| The setValue is a class that holds observable data. | The postValue() requires certain observable values |
| Live data is lifecycle-aware. | postValue() is not lifecycle aware. |
| The postValue method’s responsibility is to post or add a task to the application’s main thread whenever the value changes | The postValue method’s responsibility is to post or add a task to the application’s main thread whenever the value changes |
| The value will be updated whenever the main thread runs. | The value will be updated whenever the main thread runs later |
| You cannot use setValue if you are working in a background thread | You can use postValue if you are working in a background thread |
| The value is changed immediately | The value is changed after an interval |
| In the case of setValue() the said value is called twice, and the value is updated twice, and the observers are notified about the updated data twice. | In the case of postValue(), the value will be updated twice, and the number of times the observers will receive the notification is determined by the main thread’s execution. |

1. What is Thred & Way to create thred

A **Thread** is a very light-weighted process, or we can say the smallest part of the process that allows a program to operate more efficiently by running multiple tasks simultaneously.

1. By Creating sub class of Thred and override the run method and call strat method through current object
2. By Implemantion Runnable interface : by implementing the runable interface and override the run method and call strat method through current object
3. What is diff B/W start & run in thred

**New Thread creation:**When a program calls the [*start()* method](https://www.geeksforgeeks.org/start-function-multithreading-java/), a new thread is created and then the *run()* method is executed. But if we directly call the *run()* method then no new thread will be created and *run()* method will be executed as a normal method call on the current calling thread itself and no multi-threading will take place.

**Multiple invocation:**In Java’s [multi-threading concept](https://www.geeksforgeeks.org/multithreading-in-java/), another most important difference between *start()* and *run()* method is that we can’t call the *start()* method twice otherwise it will throw an[*IllegalStateException*](https://www.geeksforgeeks.org/how-to-solve-java-lang-illegalstateexception-in-java-main-thread/)whereas *run()* method can be called multiple times as it is just a normal method calling. Let us understand it with an example:

1. What is diffrent b/w thred & corouting

One can think of a **coroutine** as a light-weight thread. Like threads, coroutines can run in parallel, wait for each other and communicate. The biggest difference is that coroutines are very cheap, almost free: we can create thousands of them, and pay very little in terms of performance.

True **threads**, on the other hand, are expensive to start and keep around. A thousand threads can be a serious challenge for a modern machine.

1. Write a program to check Given number is Prime or not

fun isPrimeNoOrNot(no: Int){

var isPrime = true

for(i in 2..<no){

if(no % i == 0){

isPrime = false

}

}

println("given number: $no is prime? $isPrime")

}

1. Write a program for get Reverse number from given number

fun getReverserNo(no: Int){

var actualNO = no;

var revNo = 0

while(actualNO != 0){

val mod = actualNO % 10

revNo = revNo \* 10 + mod

actualNO = actualNO / 10

}

println("given no: $no reverse is: $revNo")

}

1. What is abstract
2. What is Interface
3. What is diff b/w abstract & interface
4. Given two strings s and t, return true if t is an anagram of s, and false otherwise. An Anagram is a word or phrase formed by rearranging the letters of a different word or phrase, typically using all the original letters exactly once.

Input: s = "anagram", t = "nagaram"

Output: true

Input: s = "rat", t = "car"

Output: false

class Solution {

fun isAnagram(s: String, t: String): Boolean {

var temps = false

if(s.length == t.length ){

temps = false

for(sv in s){

var count = false

for(st in t){

if(sv.equals(st) && !count){

count = true

}

}

if(count){

temps = true

}else{

temps = false

}

}

}

return temps

}

}

1. What will be output for below code

**ANS: System.out.println("Child's show()");**

class Parent {

void show() { System.out.println("Parent's show()"); }

}

// Inherited class

class Child extends Parent {

// This method overrides show() of Parent

@Override void show() {

System.out.println("Child's show()");

}

}

// Driver class

class Main {

public static void main(String[] args){

Parent obj1 = new Child();

obj1.show();

}

}

1. We have an open class P which have Prinx() method and we inhirit from child class C which have method with same name Prinx() but we are not override it or declear ovveride keyword. What happend???

'prix' hides member of supertype 'DG' and needs 'override' modifier

open class P(){

open fun prix(){

println("Parrent")

}

}

class C: P(){

// override fun prinx()

fun prix(){

println("Child")

}

}

1. We have an open class P which have Prinx() method and we inhirit from child class C & override the same name of parent classs Prinx() but we are declear private as access / visisbility. What happend???

Cannot access 'prix': it is private in 'C'

Modifier 'override' is incompatible with 'private'

Cannot weaken access privilege 'public' for 'prix' in 'P'

Modifier 'private' is incompatible with 'override'

open class P(){

open fun prix(){

println("Parrent")

}

}

class C: P(){

// override fun prinx()

override private fun prix(){

println("Child")

}

}

1. What happend if your declear lazy block with var keyword

var xyz : String by lazy{

"Abhishek"

}

Type 'Lazy<TypeVariable(T)>' has no method 'setValue(C, KProperty<\*>, String)' and thus it cannot serve as a delegate for var (read-write property)

1. Suppose you have an parent class P without declear open and we are extending from child class C. Then what happen

This type is final, so it cannot be inherited from

1. What is diff b/w suspended & non suspended funtion

A suspending function is simply a function that can be paused and resumed at a later time. They can execute a long running operation and wait for it to complete without blocking.

1. **runBlocking** use case :

override fun onCreate(savedInstanceState: Bundle?) {

super.onCreate(savedInstanceState)

setContentView(R.layout.main\_activity)

Log.i(TAG,"Outer code started on Thread : " + Thread.currentThread().name);

runBlocking {

Log.d(TAG,"Inner code started on Thread : " + Thread.currentThread().name + " making outer code suspend");

myMethod();

}

Log.i(TAG,"Outer code resumed on Thread : " + Thread.currentThread().name);

}

private suspend fun myMethod() {

withContext(Dispatchers.Default) {

for(i in 1..5) {

Log.d(TAG,"Inner code i : $i on Thread : " + Thread.currentThread().name);

}

}

**OUTPUT:**

I/TAG: Outer code started on Thread : main

D/TAG: Inner code started on Thread : main making outer code suspend

// ---- main thread blocked here, it will wait until coroutine gets completed ----

D/TAG: Inner code i : 1 on Thread : DefaultDispatcher-worker-2

D/TAG: Inner code i : 2 on Thread : DefaultDispatcher-worker-2

D/TAG: Inner code i : 3 on Thread : DefaultDispatcher-worker-2

D/TAG: Inner code i : 4 on Thread : DefaultDispatcher-worker-2

D/TAG: Inner code i : 5 on Thread : DefaultDispatcher-worker-2

// ---- main thread resumes as coroutine is completed ----

I/TAG: Outer code resumed on Thread : main

1. **launch** use case :

override fun onCreate(savedInstanceState: Bundle?) {

super.onCreate(savedInstanceState)

setContentView(R.layout.main\_activity)

Log.i(TAG,"Outer code started on Thread : " + Thread.currentThread().name);

GlobalScope.launch(Dispatchers.Default) {

Log.d(TAG,"Inner code started on Thread : " + Thread.currentThread().name + " making outer code suspend");

myMethod();

}

Log.i(TAG,"Outer code resumed on Thread : " + Thread.currentThread().name);

}

private suspend fun myMethod() {

withContext(Dispatchers.Default) {

for(i in 1..5) {

Log.d(TAG,"Inner code i : $i on Thread : " + Thread.currentThread().name);

}

}

}

**OUTPUT**

10806-10806/com.example.viewmodelapp I/TAG: Outer code started on Thread : main

10806-10806/com.example.viewmodelapp I/TAG: Outer code resumed on Thread : main

// ---- In this example, main had only 2 lines to execute. So, worker thread logs start only after main thread logs complete

// ---- In some cases, where main has more work to do, the worker thread logs get overlap with main thread logs

10806-10858/com.example.viewmodelapp D/TAG: Inner code started on Thread : DefaultDispatcher-worker-1 making outer code suspend

10806-10858/com.example.viewmodelapp D/TAG: Inner code i : 1 on Thread : DefaultDispatcher-worker-1

10806-10858/com.example.viewmodelapp D/TAG: Inner code i : 2 on Thread : DefaultDispatcher-worker-1

10806-10858/com.example.viewmodelapp D/TAG: Inner code i : 3 on Thread : DefaultDispatcher-worker-1

10806-10858/com.example.viewmodelapp D/TAG: Inner code i : 4 on Thread : DefaultDispatcher-worker-1

10806-10858/com.example.viewmodelapp D/TAG: Inner code i : 5 on Thread : DefaultDispatcher-worker-1

1. **async** and **await** use case :

override fun onCreate(savedInstanceState: Bundle?) {

super.onCreate(savedInstanceState)

setContentView(R.layout.main\_activity)

Log.i(TAG,"Outer code started on Thread : " + Thread.currentThread().name);

job = GlobalScope.launch(Dispatchers.Default) {

innerAsync = async {

Log.d(TAG, "Inner code started on Thread : " + Thread.currentThread().name + " making outer code suspend");

myMethod();

}

innerAsync.await()

innerAsync2 = async {

Log.w(TAG, "Inner code started on Thread : " + Thread.currentThread().name + " making outer code suspend");

myMethod2();

}

}

Log.i(TAG,"Outer code resumed on Thread : " + Thread.currentThread().name);

}

private suspend fun myMethod() {

withContext(Dispatchers.Default) {

for(i in 1..5) {

Log.d(TAG,"Inner code i : $i on Thread : " + Thread.currentThread().name);

}

}

}

private suspend fun myMethod2() {

withContext(Dispatchers.Default) {

for(i in 1..10) {

Log.w(TAG,"Inner code i : $i on Thread : " + Thread.currentThread().name);

}

}

}

**OUTPUT**:

11814-11814/? I/TAG: Outer code started on Thread : main

11814-11814/? I/TAG: Outer code resumed on Thread : main

11814-11845/? D/TAG: Inner code started on Thread : DefaultDispatcher-worker-2 making outer code suspend

11814-11845/? D/TAG: Inner code i : 1 on Thread : DefaultDispatcher-worker-2

11814-11845/? D/TAG: Inner code i : 2 on Thread : DefaultDispatcher-worker-2

11814-11845/? D/TAG: Inner code i : 3 on Thread : DefaultDispatcher-worker-2

11814-11845/? D/TAG: Inner code i : 4 on Thread : DefaultDispatcher-worker-2

11814-11845/? D/TAG: Inner code i : 5 on Thread : DefaultDispatcher-worker-2

// ---- Due to await() call, innerAsync2 will start only after innerAsync gets completed

11814-11848/? W/TAG: Inner code started on Thread : DefaultDispatcher-worker-4 making outer code suspend

11814-11848/? W/TAG: Inner code i : 1 on Thread : DefaultDispatcher-worker-4

11814-11848/? W/TAG: Inner code i : 2 on Thread : DefaultDispatcher-worker-4

11814-11848/? W/TAG: Inner code i : 3 on Thread : DefaultDispatcher-worker-4

11814-11848/? W/TAG: Inner code i : 4 on Thread : DefaultDispatcher-worker-4

11814-11848/? W/TAG: Inner code i : 5 on Thread : DefaultDispatcher-worker-4

11814-11848/? W/TAG: Inner code i : 6 on Thread : DefaultDispatcher-worker-4

11814-11848/? W/TAG: Inner code i : 7 on Thread : DefaultDispatcher-worker-4

11814-11848/? W/TAG: Inner code i : 8 on Thread : DefaultDispatcher-worker-4

11814-11848/? W/TAG: Inner code i : 9 on Thread : DefaultDispatcher-worker-4

11814-11848/? W/TAG: Inner code i : 10 on Thread : DefaultDispatcher-worker-4

**Network18**

1. **Sealed class**

Sealed classes and interfaces represent restricted class hierarchies that provide more control over inheritance. All direct subclasses of a sealed class are known at compile time. No other subclasses may appear outside the module and package within which the sealed class is defined.

A sealed class defines a set of subclasses within it. It is used when it is known in advance that a type will conform to one of the subclass

Sealed classes are used for representing restricted class hierarchies wherein the object or the value can have value only among one of the types, thus fixing your type hierarchies. Sealed classes are commonly used in cases, where you know what a given value to be only among a given set of options.

1. **Extention Function:**

Kotlin gives the programmer the ability to add more functionality to the existing classes, without inheriting them. This is achieved through a feature known as extensions. When a function is added to an existing class it is known as Extension Function

Kotlin extension function **provides a facility to "add" methods to class without inheriting a class or using any type of design pattern**

1. **Inline funtion :**

Inline function **instruct compiler to insert the complete body of the function wherever that function gets used in the code**

The use of inline function enhances the performance of higher order function. The inline function tells the compiler to copy parameters and functions to the call site

1. **Higher Order Funtion**

Higher order funtion is a funtion which can accept funtion as parameter and can retrun funtion as output.

//Lamda funtion

val sum = { x: Int, y: Int -> x + y }

//Nurmal funtion

fun addTowString(n1: String) : String {

return "Abhishek $n1";

}

//Calling higher order funtion with three param and one lambd funtion and one normal funtion

myHigherOredrFunction(5, 10, "Rai", sum, ::addTowString)

fun myHigherOredrFunction(n1: Int, n2: Int, str1: String, f1: (Int, Int) -> Int, f2: (String) -> String ){

val res1 = f1(n1, n2)

val res2 = f2(str1)

println("sum of two number is $res1 $res2")

}

1. **Diff b/w lateinit and lazy**

**lateinit** : The “lateinit” keyword in Kotlin as the name suggests is used to declare those variables that are guaranteed to be initialized in the future.

We wish to declare a variable but don’t want to initialize it during creation because we are certain that before going for the execution, it’ll definitely be initialized at some point in the program. And it’s will not be nullable type.

lateinit var myVariable: String

myVariable = “Abhishek”

**Lazy**: lazy one time inisilizatiuon and once inisialize that value can ba use from next time. Lazy will be uses with only val keyword not with var, lateinit, const.

At times we have some classes whose object Initialization is very heavy and causes our whole program to be delayed.

val name : String by lazy{

"Ok"

}

1. **Diff b/w var, val and const**

|  |  |  |
| --- | --- | --- |
| **var** | **val** | **const** |
| A variable declared with `var` is mutable. | A variable declared with `val` is immutable.  A variable declare using **const val** keyword will be Top-level or member of an **object or a companion object.** | A variable declared with `const` is immutable. |
| Values are assigned at run time. | Values are assigned at run time. | Values are assigned at compile time. |
| A variable declared with `var` can be assigned primitive data types. | A variable declared with `val` can be assigned primitive data types. | A variable declared with `const` can be assigned  Primitive data types. |
| A variable declared with `var` can be assigned a function  .  var Car\_1 = "BUGATTI" | A variable declared with `val` can be assigned a function.  val Car\_1 = "BUGATTI" | A variable declared with `const` cannot be  assigned to a function.  const val Car\_1 = "BUGATTI" |

1. **Diff b/w Sealed & Enum class**

In some sense, sealed classes are similar to enum classes: the set of values for an enum type is also restricted, but each

Enum constant exists only as a single instance, whereas a subclass of a sealed class can have multiple instances, each with its own state.

enum classes can't extend a sealed class (as well as any other class), but they can implement sealed interfaces.

Sealed classes allow us to create instances with different types, unlike Enums which restrict us to use the same type for all enum constants

In a sealed class, we can simply add multiple custom constructors depending on what we need. Furthermore, we can define multiple functions with different names, parameters, and return types. In an enum class, however, we can't define different functions in each enum constant.

1. **Some important predefile List funtion**

list.asSequence()

.takeWhile { it >= 0 } // a -1 signals end of the dataset (break)

.map { it + 1 } // increment each number

.filterNot { it % 5 == 0 } // skip (continue) numbers divisible by 5

.map { it - 1 } // decrement each number by 1

.filter { it < 100 } // skip (continue) if number is >= 100

.drop(5) // ignore the first 5 numbers

.take(10) // use the next 10 numbers and end

.forEach {

// do work on the final list

}

1. **What is app/apk Profiling**

Fixing performance problems involves identifying areas in which your app makes **inefficient use of resources** such as the **CPU Analysis**(Which thred & process taking huge CPU), **Memory Analysis(**Java, Native, Graphic, Stack, Code, Others => how & when once is taking more memory), Energy(CPU & Network taking more energy).

1. **What is app/apk analyzer**
2. Using the APK Analyzer can reduce the time you spend debugging issues with DEX files and resources within your app and help reduce your APK size
3. View the absolute and relative size of files in the app, such as the DEX and Android resource files.
4. Perform a side-by-side comparison of two APKs
5. **App Quality Insights**:

You can see and act on app crash data **from Firebase Crashlytics directly in Android Studio**. This integration pulls stack trace data and crash statistics from Crashlytics into the App Quality Insights tool window in the Studio IDE, so you don't have to jump back and forth between your browser and the Studio IDE

1. **App Inspection**:

Through App inspection we can inspect the **LocalDb Inspection**(SqLite, Room), **Backgroud Task Inspection**(Worker, Job, Alarm) and **Network Inspection**.

1. What is Diff between LiveData & Flow

**Live data** is part of Android Architecture Components which respect the other application component like activity & fragment and hold the updated/latest data only.

**Flow** : you can use a flow to receive live updates from a database. Flow can handle streams of values, and transform data in complex multi-threaded ways. StateFlow and SharedFlow are Flow APIs that enable flows to optimally emit state updates and emit values to multiple consumers

**(1..5).asFlow()**

**.filter {**

**println("Filter $it")**

**it % 2 == 0**

**}**

**.map {**

**println("Map $it")**

**"string $it"**

**}.collect {**

**println("Collect $it")**

**}**

**OR**

**fun simple(): Flow<Int> = flow {**

**println("Flow started")**

**for (i in 1..3) {**

**delay(100)**

**emit(i)**

**}**

**}**

**simple().collect { value -> println(value) }**

**Note:**

1. **asFlow**: flow the data
2. **filter**: we can filter the coming data
3. **map**: For re-form/ modify the comming data
4. **emit**: push/comit the daat
5. **collect** => collect is basically use for recivve or collect daat from flow
6. Bothe have similer prperty but beliw litlediffrent b/w them
   1. Flow is not lifecycle aware but LiveData is lifecyle aware
   2. Flow has got a bunch of different operators(map, filtter, tranform) which livedata doesn't have
   3. Flow continuously emits results while LiveData will update when all the data is fetched and return all the values at once
7. What is obserbable

Observability refers to the capability of an object to notify others about changes in its data. Like LiveData, Flow

It’s a Reactive programiing concet. Obserser have ability to notifty his object whne it’s data / data set has been chnage. Observer can emit strem of data and his obserbable/consumer can observe /receive the emited data.

1. What is design patter and how many type of design patter
2. Suppose we have login page and how we can handle it through MVVM
3. How you are handing the bug/crash/arn issue in android
4. How you can handle device specifi issue
5. List down the type of jetpack librery
6. What is work manager
7. What is diffrent biteween service and work manager
8. How to render & work UI in flutter with native UI
9. How to call method fron Flutter ⬄ Native
10. What is diff between REST and SOPA

|  |  |
| --- | --- |
| **SOAP API** | **REST API** |
| Relies on SOAP (Simple Object Access Protocol) | Relies on REST (Representational State Transfer) architecture using HTTP. |
| Transports data in standard XML format. | Generally transports data in JSON. It is based on URI. Because REST follows stateless model, REST does not enforces message format as XML or JSON etc. |
| Because it is XML based and relies on SOAP, it works with WSDL | It works with GET, POST, PUT, DELETE |
| Works over HTTP, HTTPS, SMTP, XMPP | Works over HTTP and HTTPS |
| Highly structured/typed | Less structured -> less bulky data |
| Designed with large enterprise applications in mind | Designed with mobile devices in mind |

1. How to make multiple request and wait until data is come from all the requests in retrofit 2.0 – android
   * 1. <https://www.digitalocean.com/community/tutorials/android-rxjava-retrofit>

**@** **Persistent Systems**

1. What is solid Principal and pls deiscribe it’s all terms and use benifits

it is the best practices of software development to deliver good quality of software/app because it’s help us to write clean, extendable, and testable of codebase/software.

1. **S => SRP = Single Responsibility principa**l : A class should have only one reason to change.
2. **O => OCP = Open-Close Principal:** open for extension but closed for modification
3. **L => LSP = Liskov substitution of principal**: “Derived types must be completely substitutable for their base types”
4. **I => ISP = Interface Segregation Principal:**  the interface segregation principle (ISP) states that no code should be forced to depend on methods it does not use
5. **D => DIP = Dependancy Inversion principal:** High-level modules should not depend on low-level modules. Both should depend on abstractions
6. What Design Pattern and How many type of design pattern and why we are using it.

Design patterns are solutions to general problems that software developers faced during software development. Design patterns are a set of solutions to common software development problems that have been proven to be effective through years of experience.

Three Type of Design Pattern

1. **Creation DP**: Singleton, Dependancy Injection, Fectory, Builder
2. **Structure DP**: Adapter, Fecade, Composite
3. **Bahviour DP**: Observer
4. What is singleton

The Singleton is a creational design pattern that ensures that a class has only one instance and provides a global access point to this instance.

1. What is AndroidViewModel and ViewModel

If you need to use context inside your Viewmodel you should use AndroidViewModel (AVM), because it contains the application context. To retrieve the context call getApplication(), otherwise use the regular ViewModel (VM).

AndroidViewModel and ViewModel is the same, the only difference is that AndroidViewModel contains the application context.

1. List of jetpack librery name

LiveData, ViewModel, DataBinding, ViewBinding, WorkManager, RoomDB, Navigation, Pagination

1. How to find the dublicate element in list using kotlin

val concrete2 = listOf(1, 3, 5, 7, 2, 8, 2, 1);

var uniqList2 = mutableListOf<Int>();

for(elementIndex in 0..concrete.size-1){

if(uniqList2.contains(concrete[elementIndex])){

println("Dublicate element found: ${concrete[elementIndex]}")

}else{

uniqList2.add(concrete[elementIndex])

}

}

**@Loma Technolog**

1. Tell me about your previous project feature and which all library you have used.
2. How you can integrate LIveStrimg
3. What is Push notification and steps we need to flow to implement it
4. What is DI and how we can achive it
5. What is lateinit and what is use
6. What is lazy
7. What is ViewModel class
8. What is MVVM & MVP and which one is best
9. What does means of if some variable declear using ? & !
10. How you can achive Data Binding in UI
11. Have ever write any test cases
12. Have knowledge of CI/CD pipeline or DevOps
13. What is pending intent and stiky intent
14. How to handle the notification
15. How to open Actvity from Notification
16. Is it possible to received notification if app is not open

**TechM**:

1. How to open another app activity
2. How to open and pass the data to another app
3. What all hardware functionality till you use
4. What is customeTab and how handle data
5. How is info.plist file
6. How we can open IOS activity/UIViewController
7. How to set Oriantion in IOS
8. Which state you need to check 1st before uploading/pushing the app

**@KOCH Ind**

1. Tell me about your current project
2. What is MVVM

The key idea behind MVVM is to separate the concerns and responsibilities of each component.

The ViewModel contains the application logic, state management, and data manipulation. The Model handles the data storage and retrieval, as well as any business rules.

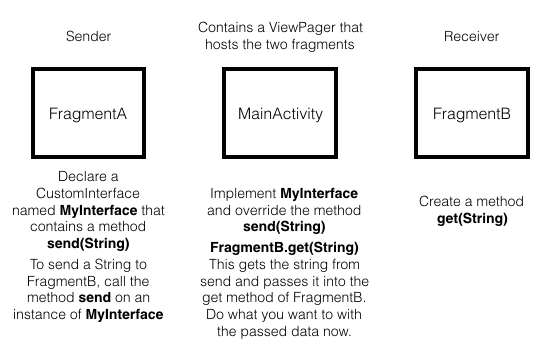
* 1. **Model:** The Model represents the data and business logic of the application. It encapsulates the data structures, database operations, network requests, and any other operations related to manipulating and retrieving data. The Model handles the data storage and retrieval, as well as any business rules.
  2. **View:** The View represents the UI components that are visible to the user. It could be an Activity, Fragment, or any other UI element. The View is kept as lightweight as possible and only handles UI-related tasks, such as rendering the data and capturing user input.
  3. **ViewModel**:

1. How many layer / class is required to to integrate MVVM
2. what is LiveData
   1. Live data or Mutable Live Data is an observable data holder class. We need this class because it makes it easier to handle the data inside ViewModel because it's aware of Android Lifecycles such as app components, activities, fragments, and services. The data will always update and aware of its Lifecycles.
3. Supposes you are getting a data from LiveData and screen is get roted/oriantaion changes and what happed with LiveData
   1. When the (...) fragment is re-created after a screen rotation, it moves from an inactive to an active state. The observer in the fragment is re-connected to the existing ViewModel and receives the current data.
4. **which method will be call at time of ViewMode object is distroying**

[onCleared](https://developer.android.com/reference/androidx/lifecycle/ViewModel#onCleared())(): This method will be called when this ViewModel is no longer used and will be destroyed.

1. **Data is DataBinding**
   1. Data Binding Library is a support library that allows you to bind UI components in your layouts to data sources in your app using a declarative format rather than programmatically.
2. **what is ViewBinding** 
   1. **View Binding** is one of the best features which provides the views to bind with the activity which is ongoing. Replacing the **findViewById()**method, hence reducing the boilerplate code, generated the instances of the views of the current layout.
3. **what is constrant layout**
4. **how to support multiple screen or design the layout to support all screen**
5. **Fragment Lifecycle** 
   1. onAttach(), onCreate(), onCreateView(), onActivityCreated(), onStart(), onResume(), onPouse(), onStop(), onDistroyedView(), onDistroyed(), onDiAttached()
6. **How to pass the data from once frgment to onother fragment**

We can pass the data b/w two fragment using Interface OR LiveData



1. **ViewHolder class in Recycler view**

**ViewHolder** The ViewHolder is a wrapper around a View that contains the layout for an individual item in the list. The Adapter creates ViewHolder objects as needed and also sets the data for those views. The process of associating views to their data is called binding. RecyclerView.ViewHolder: It is mandatory to use with recyclerView and helps us to draw the UI for individual items that we want to draw on the screen.

**onCreateViewHolder():** RecyclerView calls this method whenever it needs to create a new ViewHolder. The method creates and initializes the ViewHolder and its associated View, but does not fill in the view's contents—the ViewHolder has not yet been bound to specific data.

**onBindViewHolder():** RecyclerView calls this method to associate a ViewHolder with data. The method fetches the appropriate data and uses the data to fill in the view holder's layout. For example, if the RecyclerView displays a list of names, the method might find the appropriate name in the list and fill in the view holder's TextView widget.

**getItemCount():** RecyclerView calls this method to get the size of the dataset. For example, in an address book app, this might be the total number of addresses. RecyclerView uses this to determine when there are no more items that can be displayed.

1. **What is Build variants**
2. **what is build product Flover**
3. **How to check memory leakage in Android**
   1. By APK profiling
4. APK profiling
   1. Help us to understand the CPU utilization, Memory Utilization, Battry & Network Utilization
5. Can we extent the String class
   1. We can't extend String class because it's final
6. **What is Abstract class**

Abstract class is a class which declare by using Abstract keyword.. It can abstract(0 t0 100%) and non-abstract methods. Abstract classes cannot be instantiated, but they can be subclassed.

1. **What is Interface class**

|  |  |
| --- | --- |
| **Abstract class** | **Interface** |
| 1) Abstract class can **have abstract and non-abstract** methods. | Interface can have **only abstract** methods. Since Java 8, it can have **default and static methods** also. |
| 2) Abstract class **doesn't support multiple inheritance**. | Interface **supports multiple inheritance**. |
| 3) Abstract class **can have final, non-final, static and non-static variables**. | Interface has **only static and final variables**. |
| 4) Abstract class **can provide the implementation of interface**. | Interface **can't provide the implementation of abstract class**. |
| 5) The **abstract keyword** is used to declare abstract class. | The **interface keyword** is used to declare interface. |
| 6) An **abstract class** can extend another Java class and implement multiple Java interfaces. | An **interface** can extend another Java interface only. |
| 7) An **abstract class** can be extended using keyword "extends". | An **interface** can be implemented using keyword "implements". |
| 8) A Java **abstract class** can have class members like private, protected, etc. | Members of a Java interface are public by default. |
| 9)**Example:** public abstract class Shape{ public abstract void draw(); } | **Example:** public interface Drawable{ void draw(); } |

Simply, abstract class achieves partial abstraction (0 to 100%) whereas interface achieves fully abstraction (100%).

1. **What is default method and when/which varsion it’s introduce**

**Default methods**(Introdiced in Java-8) enable you to add new functionality to existing interfaces and ensure binary compatibility with code written for older versions of those interfaces. In particular, default methods enableyou to add methods that accept lambda expressions as parameters to existing interfaces. If you add/create new default method in your exiting Interface class which you have already implemented with multiple class, then you no need/not mandatory/option only to implement newaly added method.

1. **What is sirialization and Parceable class and which one is the best for Android**

Parcelable is an Android-specific interface that enables an object to be passed as a parameter from one activity to another. This is a more efficient method compared to serialization, as it doesn’t require the object to be converted into a byte stream. When an object is passed using parcelable, it is passed directly from one activity to another. Parcelable also has the advantage of being able to pass a large amount of data in a single call, making it more efficient than serializatio

1. **What is singleton class and write the logic**

Singleton pattern restricts the instantiation of a class and ensures that only one instance of the class exists in the Java Virtual Machine. The singleton class must provide a global access point to get the instance of the class. Singleton Pattern says that just"define a class that has only one instance and provides a global point of access to it".

In other words, a class must ensure that only single instance should be created and single object can be used by all other classes.

class A{

private static A obj;

private A(){}

public static A getA(){

if (obj == null){

synchronized(Singleton.class){

if (obj == null){

obj = new Singleton();//instance will be created at request time

}

}

}

return obj;

}

public void doSomething(){

//write your code

}

}

1. **How many way you can storethe data in Android**
   1. SharePrefrance, RoomDb, SqLite, File Manager
2. **Steps for Notification Integration**
3. **Lunch Mode**
   1. standard, singleTop, singleTask, singleInstance
4. **what is SingleTask and singleInstance**
   1. Single task will store single instance in activity stack and clear all activty instance from top of that. Like we have activity ABCD and we declear C as single Task. Right now we are on activity D and we are again calling Activty C from activty D and D instance we be distroyed and activity instance in stack will be ABC.
   2. Single Instance will be create saprate task . like we have an activity ABC and we decleared C as single Instance and we are lunching C from B. then C instance will be in separet Task Stack
   3. Task Stack -1 : AB
   4. Task Stack -2 : C
5. .

**@Adani**

1. Create App with TableView & bind data from local JSON

2. Can we override static method

3. We have Abstract class with 3 Abstract method and i want to implement only 1 method in child class

4. Parent P = new Child C();, Child C = new Child C(); , Parent P = new Parent P()

5. Activity life cycle

6. Life cycle state of=> ActivityA To ActivityB

7. Back Life cycle state of=> ActivityB To ActivityA

8. How to count number of Int in String

9. How to remove duplicate value from List

10. What singleton

11. what is MVVM

12. How to check, given number is odd or even

13. How to check given number is prime or not

14. what is coroutine

**@R Bharat on 17/09/21 at 12.00 PM**

1. What is PWA(Progressive Web App)

**@ArteriaTech on 20/09/21 at 6PM**

1. Tell Me About your self

2. Latest Architecture pattern

3. Latest architecture components

4. What is diff b/w MVVM & MVP

5. What is firebase

6. which ALC method will call on clicking on device Home Button

7. which ALC method will call on change of device orientation

8. what is Abstract & Interface

9. what is polymorphism

10. What is function overloading

11. what is final & static

12. what is build-Type, build-Flavour, build-Variant

**@PetroIT on 01/10/21 at 1PM**

1. Activity lice cycle

2. How you can save the data when app get terminated by system

3. CI/CD or CICD (continuous delivery or continuous deployment)

4. How you are sharing the testing build to tester

5. How you are performing Unit Testing

6. How push notification work

7. How may type of push notification

8. What is releam DB

9. How to check & status of notification is deliver or not

10. How to save Dynamic form data based on category

**@Aventior for IOS on 01/10/21 at 12PM**

1. IOS App is working on Single or Multi thread

2. Which catch policy have Session URL

3. What is the basic step for IOS Core Data

4. How to run code on background thread

5. How to update UI after run all n(5)

**@MyLoanCare for Android on at 1PM**

1. What is activity life cycle

2. what life cycle method will call on press on Home Button

3. what life cycle method will call on back press

4. what life cycle method will call on open app from bak stack

5. Fragment life cycle

6. what life cycle method will call when we add B fragment on top of A fragment

7. How we can handle camera/take picture and handle in Android 11

8. What is the broadcast receiver

9. What is changes in Android 8 in the broadcast receiver

10. what is WorkManager and how we can achieve it

11 what is the JobScheduler and how we can achieve it

12. which service is best for background job

13. what is corountine

14. what is difference b/w lifecycleScope & viewModelScope

15. What is MVVM and how we can achieve it

14 What is MVC & how we c an acheive it

14. what is difference b/w MVVM & MVC

15. what is RxJava

15. what is difference Rxjava and corountine

16. what is abstract class

17. what is open method

18.

**@Condeco Software for Android11PM on 13 Sept 22**

1. **What is scope function and how may type?**

**Scope:** scope functions are used to execute a block of code within the scope of an object. Generally, you can use scope functions to wrap a variable or a set of logic and return an object literal as your result.

**Type:** let, apply, with, run, also

1. **What is diffrence between use of let & when**
2. **What is scope function and what is diffrance between let, apply, also, when**
3. **what is diffrance between varlable?.let & varible.let**
4. **What dirrance between lateinit & lazy**

**lateinit can only be used with a var property whereas lazy will always be used with val property**. A lateinit property can be reinitialised again and again as per the use whereas the lazy property can only be initialised once

1. **whay use by lazy keyword with lazy**

lazy() is **a function that takes a lambda and returns an instance of lazy which can serve as a delegate of lazy properties upon which it has been applied**. It has been designed to prevent unnecessary initialization of objects. Lazy can be used only with non-NULLable variables. Variable can only be val.

1. **what is RxJava and how many type of Obserbable**

**RxJava** =>RxJava is a Java base implementation of ReactiveX. The ReactiveX (or Reactive Extensions) project aims to provide a reactive programming concept. It's a combination of the Observer pattern, the Iterator pattern, and functional programming.RxJava is **a reactive programming library** for composing asynchronous and event-based programs by using observable sequences

**Type of Observable : Observable** , **Flowable, Single, Maybe, Completable**

**RxAndroid :** RxAndroid is **an extension of RxJava with few added classes related to Android**. To be specific there are schedulers introduced in RxAndroid which plays a major role in supporting multi-thread operations in android. Schedulers decide if the block of code should run on a worker thread or the main thread

1. **How to handle onTextChnage Listerser & call the API on every text changes**

**Ans:** There is 3 metho for listen the text change listner in edittext/serach text box

**.1 BeforeTextChnaged(), OnTextChnaged(), AfterTextChnage()**

**Cancel The Retofir APi Call:**

**val retrfitCall = Retrofi.getInstance.getSearchData(search\_texy)**

**retrfitCall.enque()…………{**

**………**

**……….  
 }**

**if(!retrfitCall.isCanceled){**

**isCanceled. cancel()**

**}**

1. **What is services & background services**

**Ans:** Background or worker thread can be created within the app to run long running tasks in background without blocking the UI thread.

1. **what is diffrance between UI & Main Thered**

And: The UI thread, that is responsible for handling the UI events like Draw, Listen and receive the UI events.UI-Thread in Android is **a Thread element responsible for updating the layout elements of the application implicitly or explicitly**. This means, to update an element or change its attributes in the application layout ie the front-end of the application, one can make use of the UI-Thread

**Main thread** is what which start the process/app. In Android UI thread is main thread.

1. **Activity life cycle**

**Ans=>** oncreate, onstrat, onresume, onpouse, onstop, onrestart, ondestroyed

1. **when OnRestart Method will Call**

**Ans=>**When user back from actvity, Switching back from others app, relaes device back luck button, reopen the app from backstack

(onrestart, start, resume)

1. **is Alert dialog is part/subclass of activity**

**Ans=>** NO, AlertDialog is a subclass of Dialog

There is no any activity life cycle method will call when you open AlertDialog on Actvity or fragmneet

**@GlobalLogic @12.30PM on 13 Spet**

1. **Activity LC**
   1. oncreate(), onStart(), onResume(), onPouses(), onStop(), onRestart(), onDestroyed()
2. **Android Configuraction Chage method**
3. **What is configuration**
4. **Which method will call after orination change** 
   1. onPouse(), onStop(), onSaveInstanceState(), onDistroyed(), onCreate(), onStart(), onRestoreInstanceState(), onResume()
5. **What is services, Give me a real example**
   1. Service is android application component which run in background to for indefinite period of time
6. **What is Abstraction, Give me real example**
   1. Abstraction is process of hiding hiding their implimantion and internal logic and show only essential feature to user.
   2. *Hiding internal details and showing functionality* is known as abstraction. For example phone call, we don't know the internal processing.
7. **what class & Object, Gice me real example**
   1. **OOPs=>Object-Oriented Programming(system)** is a methodology or paradigm to design a program using classes and objects.
   2. class is a blueprint for object. It is template or blueprint or prototype where every object can be created. It is logical Entity. A class is a group of objects which have common properties. It is a template or blueprint from which objects are created. It is a logical entity. It can't be physical.
   3. Object is an instance of class and every object having some identity & behaviour. Every entity is an object . Any entity that has state and behavior is known as an object. For example, a chair, pen, table, keyboard, bike, etc. It can be physical or logical.
8. **What is polymorphisum** 
   1. Polymorphism is way to perform a single task in different way.
9. **What is Inheritance**
   1. Inheritance is a mechanism by which once class(child) accrue the property & behaviour of others class(Parent)
   2. *When one object acquires all the properties and behaviors of a parent object*, it is known as inheritance. It provides code reusability. It is used to achieve runtime polymorphism.
10. **Reverse The String & remove all value from that string**

String str = “Abhishek”

char arr[] = new char[str.lenght]

for(int i= arr.length-1; i>=0; i—){

arr[arr.length - i - 1] = str.charAt(i)

}

String rev = String.valueOf(arr)

**@PWC @03.00PM on 14 Spet**

1. **What is singleton & Why we r using it**

Singleton is a design pattern that ensures that a class can only have one object. To create a singleton class. Using with like: Retrofitt, DB Class, Network call

**Java:** create constructor as private and Write a static method that has the return type object of this singleton class.

Class Singleton {

//private static instance variables

Privatestatic Singleton singleInstance = null;

//Private constructor

privateSingleton(){

}

//Static method to create instance of Singleton class

Public static Singleton Singleton(){

//To ensure only one instance is created

if(singleInstance == null){

singleInstance = new Singleton();

}

return singleInstance

}

}

**Kotlin:** In kotlin we can create singleton class by using Object keyword. The object class can have functions, properties, and the init method. The constructor method is not allowed in an object so we can use the init method if some initialization is required and the object can be defined inside a class. when we declare the class by using object keyword then kotlin compiler create private constructor & static reference for that class.

object  NewsService{

     val newsInstance:NewsInterface

     init {

         newsInstance=NewsService();

     }

}

1. **What is DI & why we r using it**
2. **What is Dragger**
3. **List Android Archetecture component**
4. **What is live Data**
5. **What is MVVM**
6. **What is Diff b/w MVC & MVVM**
7. **What is retrofit & why we are using it**

Retrofit is a networking librery which used for get/post the between client & server.

1. **Type of mysql joining**

retrieving data from two or more than two tables based on a common field. In other words, JOINs combine data from multiple tables in a result table based on a related column between those tables.

1. **What is Diff b/w inner & outer join**
2. **What is Primary key**

A primary key generally focuses on the uniqueness of the table. It assures the value in the specific column is unique

1. **what is foren key**

A FOREIGN KEY is a field (or collection of fields) in one table, that refers to the PRIMARY KEY in another table.

1. **what is relation b/w primary & foren key**

A primary key generally focuses on the uniqueness of the table. It assures the value in the specific column is unique. A foreign key is generally used to build a relationship between the two tables. The table allows only one primary key.

**@Incido @02.30PM on 15 Spet**

1. **How to get highest / top second (2nd highest) salery by qal command**

fun getSecondHighestNo(){

val arrr :MutableList<Int> = mutableListOf(3,76,8,5,7,9,2)

val sizex = arrr.size -1

for (i in 0..sizex){

var lowstIndex = i;

for (j in i..sizex){

if(arrr[j] < arrr[lowstIndex]){

lowstIndex = j

}

}

val temp = arrr[i];

arrr[i] = arrr[lowstIndex]

arrr[lowstIndex] = temp

}

println("sortest list ${arrr}")

println("second highest ${arrr[1]}")

}

1. **How to get multple user by his id/name**

SELECT \* FROM audit\_log\_webservice\_16\_09\_22 WHERE id IN (1, 2, 4)

1. **What is ROOM DB**

Room is a persistent library that is part of the Android jetpack. It is built on top of SQLite. The room persistent library has many advantages over raw SQLite

1. **Main class in ROOM DB**

**@Entity:** A Room entity includes fields for each column in the corresponding table in the database, including one or more columns that comprise the primary key

**@DAO:** The DAO is an interface that defines all the database operations which we want to do/performce on our entity/table to get/put the data. For this we declare methods without a method body and annotate them with @Insert, @Update, @Delete or the generic @Query, where we can pass an SQLite query.

**@DataBase:** Room Database class as Abstract to enable your class become flexible and skip implementing unnecessary methods of the RoomDatabase Base Class.

1. **Which are abstract / Interface class in ROOM DB**

@DataBase class is abstract class, @DAO is interface class

1. **what is transient**

**transient** : It will ignore this field while saving into database, BUT it will also ignore this field while parsing data which comes from server. transient is a Java construct, indicating that this field should not be serialized in standard Java serialization.By default, all of object's variables get converted into a persistent state. In some cases, you may want to avoid persisting some variables because you don't have the need to persist those variables. So you can declare those variables as transient. If the variable is declared as transient, then it will not be persisted.

**private transient String fullName;**

1. **what is the use of @Ignore**

**@Ignore** is a Room-specific annotation, saying that Room should ignore that field or method. It will only ignore this field while inserting data into database, but this field will participate into json parsing. **android.arch.persistence.room.Ignore.Ignores** the marked element from Room's processing logic. This annotation can be used in multiple places where Room processor runs. For instance, you can add it to a field of an Entity and Room will not persist that field.

**@Ignore val picture: Bitmap?**

1. **what is the diff b/w int, Int, Integer**

int: Java based Primitive Data Type

**Int:** Int is primitive data type and Int is a Kotlin Class derived from Number

**Integer:** Integer is wapper class. The Integer class wraps a value of the primitive type int in an object. An object of type Integer contains a single field whose type is int

1. **what is Int and IntArray**

An array of ints. When targeting the JVM, instances of this class are represented as int[]. Constructor: Creates a new array of the specified size, with all elements initialized to zero.

1. **What is Default ArrayList &LinkedList Size: 10**
2. **what is MVVM**

**Model: Model**

**View:**

**ViewModel:**

1. **How Model view internally work (instance are maange) (create & distored)**
2. **what is diff b/w ViewModel & AndroidView Model**
3. **what is mutableData & how it’s working**
4. **is mutableData is class or abstract class or interface?**
5. **How you can call multiple API and bind there data as per her response(bind order by responce not oredr by calling)**
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8. **FCM feature**
9. **FFM notifiction class name & his manadatory method**
10. **whta is Application class**
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20. **what is DI**
21. **what is Dragger & Hilt**
22. **can we layout on onstart() or onResume()**
23. **what services**
24. **Type of services**
25. **what is work manager**
26. **How to chedule task in work manager**
27. **can we schedule the task with alarm maneger**
28. **can work manager task resume/calss after reboot the device**
29. **can alarm manager work resume after reboot the device**
30. **what is init command**
31. **what is base and …**
32. **how to get update from other branch**
33. **What is JVM, JRE, JDK**

**@Adani**

* + - 1. Create App with TableView & bind data from local JSON
      2. Can we override static method
      3. We have Abstract class with 3 Abstract method and i want to implement only 1 method in child class
      4. Parent P = new Child C();, Child C = new Child C(); , Parent P = new Parent P()
      5. Activity life cycle
      6. Life cycle state of=> ActivityA To ActivityB
      7. Back Life cycle state of=> ActivityB To ActivityA
      8. How to count number of Int in String
      9. How to remove duplicate value from List
      10. What singleton
      11. what is MVVM
      12. How to check, given number is odd or even
      13. How to check given number is prime or not
      14. what is coroutine

**@R Bharat on 17/09/21 at 12.00 PM**

* + - 1. What is PWA(Progressive Web App)

**@ArteriaTech on 20/09/21 at 6PM**

* + - 1. Tell Me About your self
      2. Latest Architecture pattern
      3. Latest architecture components
      4. What is diff b/w MVVM & MVP
      5. What is firebase
      6. which ALC method will call on clicking on device Home Button
      7. which ALC method will call on change of device orientation
      8. what is Abstract & Interface
      9. what is polymorphism
      10. What is function overloading
      11. what is final & static
      12. what is build-Type, build-Flavour, build-Variant

**@PetroIT on 01/10/21 at 1PM**

1. Activity lice cycle
2. How you can save the data when app get terminated by system
3. CI/CD or CICD (continuous delivery or continuous deployment)
4. How you are sharing the testing build to tester
5. How you are performing Unit Testing
6. How push notification work
7. How may type of push notification
8. What is releam DB
9. How to check & status of notification is deliver or not
10. How to save Dynamic form data based on category

**@Aventior for IOS on 01/10/21 at 12PM**

1. IOS App is working on Single or Multi thread
2. Which catch policy have Session URL
3. What is the basic step for IOS Core Data
4. How to run code on background thread
5. How to update UI after run all n(5)

**@MyLoanCare for Android on at 1PM**

1. What is activity life cycle
2. what life cycle method will call on press on Home Button
3. what life cycle method will call on back press
4. what life cycle method will call on open app from bak stack
5. Fragment life cycle
6. what life cycle method will call when we add B fragment on top of A fragment
7. How we can handle camera/take picture and handle in Android 11
8. What is the broadcast receiver
9. What is changes in Android 8 in the broadcast receiver
10. what is WorkManager and how we can achieve it
11. what is the JobScheduler and how we can achieve it
12. which service is best for background job
13. what is corountine
14. what is difference b/w lifecycleScope & viewModelScope
15. What is MVVM and how we can achieve it
16. What is MVC & how we c an acheive it
17. what is difference b/w MVVM & MVC
18. what is RxJava
19. what is difference Rxjava and corountine
20. what is abstract class
21. what is open method

**@CondecoSoftware for Android11PM on 13 Sept 22**

* + - 1. What is scope function and how may type?
      2. What is diffrence between use of let & when
      3. What is scope function and what is diffrance between let, apply, also, when
      4. what is diffrance between varlable?.let & varible.let
      5. What dirrance between lateinit & lazy
      6. whay use by lazy keyword with lazy
      7. what is RxJava and how many type of Obserbable
      8. How to handle onTextChnage Listerser & call the API on every text changes
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**@Global Logic @12.30 PM on 13 Spet**

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