**Introduce**

1. I am an android developer having more than 7 years of experience

in enterprise android app development using Java and Kotlin.

2. I am very familiar with application architecture design patterns

like MVP and MVVM with repository pattern

along with Jetpack components

like ViewModel, LiveData, and Data Binding

3. I have good hands-on experience in Dependency Injection

using Dagger 2 and Hilt,

and have pretty much experience in Restful APIs

using Volley, Retrofit, Gson and Moshi,

Also very good experience in Reactive or Asynchronous programming

by RxJava and Coroutine,

and worked a lot using RoomDB and SQLite.

4. I have good understanding of cloud services

and have much experienced in Firebase integration,

like Firebase authentication, Firebase cloud messaging(FCM),

Firebase realtime database, Firebase crashlytics.

5. Unit testing is one of major development part in my past experiences,

so I followed Test Driven Development with Mockito, MockK and JUnit.

Some times I have been involved in UI testing using Espresso.

6. Working for several companies, I have well trained

to follow Agile methodology with JIRA tool

and I am mastered version control tools like Git and Github.

**1Project Chase Mobile – JPMorgan Chase**

It’s a traditional banking app like, managing user accounts,

sending and receiving money with deposit checks,

monitoring credit score, budget and track monthly spending.

Role: For this application, I worked as an Android Developer

------------My responsibility---------------

1. I was responsible for implementing the Trading module.

In this module, I fetch data from the server and display trade information

and used various charts to show various analyses of trades

using different charts like line graph, pie chart, bar chart etc.

I implemented this using the MPChart Library.

2. I also worked on the Credit Journey module

where user can see his or her Credit score,

alerts about credit card spending and offers on credit card usage

in three different tabs.

To show credit score, I created custom view

which is half circle progress bar showing score.

TabView and ViewPager2 was used to show three tabs.

All the data for this module is fetched using Retrofit and Coroutines

and displayed in Tabs.

3. I was responsible for writing Unit test cases for ViewModels

using JUnit and Mockk.

\*\*\*\*\*\*\*Additionally\*\*\*\*\*\*\*\*\*\*\*\*

4. The application was implemented using Kotlin as language

and we followed MVVM as design architecture.

During this project Implementation we have used various frameworks

such like Dagger-Hilts, Retrofit, Coroutines, RoomDB,

and we followed TDD and used JUnit and Mockito  framework

for Local Unit testing and used Espresso Framework

for UI testing of the screens to achieve 80% code coverage.

5. We used GitHub as a project version controller

and followed the Agile methodology with JIRA tool

for project tracking and bug reporting.

---------------Challenge-----------------------

Creating custom view to show credit score was difficult.

Exactly there’s half circle bar like progress bar to show credit score.

I had never worked on custom views before this.

It took lots of learning curve.

**What methodology**

What methodology do you guys follow?

1. We followed Agile methodology.

2. Project was divided into various modules

and each module had different tasks to be completed.

Tasks were converted into story points.

These story points were implemented sprint by sprint;

And our typical sprint duration was 2 weeks.

3. We had daily standup meetings

where we discussed our project progress, issues(roadBlocks)

and dependencies

and used this information to plan our day accordingly.

4. We also had sprint review meetings towards the end of the sprint

to showcase and demonstrate work progress

to managers, stakeholders, product owners etc.

5. At the end of each sprint, we conducted retrospective meetings

to analyze what went wrong and what went well in the previous sprint.

Our retrospective meetings helped us to figure out

how to overcome the things that didn’t go so well in the previous sprint.

**Motive**

1. I’ve been honing my android development skills for a few years

now and, first and foremost, I’m looking for a position

where I can continue to exercise those skills.

2. Another thing that’s important to me is that the position allows me to

not only write the code, but also present my findings and suggestions

directly to the team members.

That would be really refreshing!

I’m always very motivated by being able to see the impact of my work

on other people.

3. And, I’m definitely looking for a position where I can grow.

Professional development is something that’s really important to me

since I hope to take on managerial responsibilities in the future.

4. To sum it up, I’d love a position where I can use my skills

to make an impact that I can see with my own eyes.

Being at a company

where I can grow and work toward something I care about

matters, too.

**When you find it difficult to work with someone, how did you handle the situation?**

I had to try to find a way to communicate

which is less time consuming.

Before communication with someone,

I spent some time thoroughly reading and understanding the work details

and write down what I think the problem is.

And then I spent some time looking at the code

and thinking up a proper solution.

And I wrote down in a new paragraph

what I believe the ideal solution would be.

And then I communicated on both paragraphs

of me outlining the problem and the solution.

And then I asked if he agrees with my solution, and took his feedback if any

and modified my solution if need be.

And then implemented the solution and only after all of that, submitted my work done.

So:

1. Thoroughly read and understand the work details (on my own)

2. Write down the problem in my own words

3. Spend time reading the code and thinking of a solution

4. Write down the solution

5. Communicate with someone on my understanding of the problem / solution

6. Incorporate any feedback and implement the solution

7. Finally submit my work

**Troubleshooting crash**

If an Android application is crashing frequently,

1. Compatibility Check:

It is not possible to test an application for all kinds of devices

and operating systems.

There might be a possibility that an application

is not compatible with your OS.

2. Memory Management:

2-1. Some apps run perfectly on one mobile device

but might crash on other devices.

This is where processing power, memory management,

and CPU speed are considered.

2-2. As there is a limited amount of memory space on mobile devices,

we can free up memory space for the application to function properly.

2-3. If an application is frequently crashing,

we can delete the application’s data, which will clear its cache memory

and allow some free space on the device

and it might boost the app’s performance.

**prevent memory**

how to prevent memory leaks?

1. Use Application Context rather than Activity Context

because Activities are more likely to be leaked.

2. Avoid long-lived references to Activities i.e.AsyncTask.

3. Avoid non-static inner classes in Activities.

Use static inner classes with weak references

so they can't be Garbge Collected when they are not used.

4. Use LeakCanary - A memory leak detection library for Android.

**deal app crashes**

How do you deal with real time app crashes?

1. We integrated Firebase crashlytics in our app.

Whenever an app crashes we get the crash log and related stack traces

on the Firebase console.

2. By observing the crash report and stack traces,

I found the root cause of the bug and fixed it.

3. After fixing bugs, we plan to release an updated version of the app.

Sometimes for a few bugs we updated the app immediately

and sometimes our lead decided to publish bug fixes

along with the next upcoming sprint release.

**one thing that really proud of**

Tell me one thing that you are really proud of?

I am very good at tracking bugs in asynchronous programming.

I have my own skill to track bugs which produced in asynchronous flow.

For example, During Chase bank app, there was one ticket

“after logout still previous user session affects some screens”.

The ticket had been taken by several developers and done by their own way.

But the problem had not been solved essentially.

Finally I could complete that ticket and my solution

had been accepted as the right way and the best.

This was because of my good tracking bugs

in asynchronous combinations of modules.

------------Howto track bugs in async--------------

Of course there are lots things introduced to track bugs.

And most of developers are rely on Logcat.

First of all, I plant my own timer to spy when and what happened.

And I plant very minium spy code to track bug.

Once I fix the bug, I clean my spy code with only one search.

It looks like very simple and easy

but in fact, deciding what code and where to put is not that easy.

**like more about Android**

What do you like more about Android?

1. Honestly said, Android development is not convenient rather than iOS.

But it has one thing that I like more than iOS.

That is the apk file can be delivered easily for any device

so that we can test the app during development along with many devices

without any effort. Just sending apk file to the device owners. That’s it.

But for iOS, it not that easy

like we need to upload the build file to Appstore, and invite the test users,

like that there are so many extra steps to test on many devices.

2. Android provides lots of open source library supports.

3. Jetpack components like ViewModel, RoomDB, WorkManager,

Pagination Libraries, DataBinding, ViewBinding, NavigationGraphs etc.

are really useful

4. Google itself provides various services

such as Google Maps, Firebase, Google Vision Library etc.,

which helps us to implement complex tasks easily.

5. Android OS architecture is itself designed in a very good manner.

So implementing an application with various capabilities

such as a Multilingual app, an app with different themes,

security concerns, data sharing capabilities,

ability of applications to use some tasks in background

can be done in an effective and easy way.

**dislike more about Android**

What do you dislike more about Android?

1. Google introduces some libraries in a current version

and very quickly may be in the next update,

they will deprecate some of the functions and libraries

which leads to learning new alternatives

for that deprecated functions is quite painful.

2. There are frequent changes in Google’s privacy and policy.

Each time when a new privacy policy is introduced,

we have to check if our app is adhering to Google’s privacy and policies.

If not, then we have to make changes to comply with new privacy policies.

**keep updated latest technology**

How do you keep updated on the latest technology?

I mainly rely on Google Android documentation.

I also follow some articles over medium.

Also keep an eye of new features introduced by Google and JetBrains.

I also prefer to read articles related to new technologies introduced.

**couldn’t complete story points**

What do you do when you or your team member couldn’t complete some story points?

If some story point couldn’t be completed within the sprint time,

I first analyze the reasons for not being able to complete it.

I would discuss with the team lead and project manager

about the reasons for not being able to complete story points.

After communicating with project leads, I would still put extra effort

into completing story points if they are a higher priority

than my other work.

But at the end if I couldn’t complete,

then I would request the project manager to add it

to the backlog for the next sprint.

communicate discussion backend developers

How do you communicate with backend developers? or What type of discussions do you have with the back end developers? (slack)

At the beginning of the project,

we discussed API requirements with the backend team.

We created an API document where we mentioned

all the required APIs, their inputs and outputs.

Sometimes it also required that we need some extra data

in either API input/output, we discussed these things

either in daily stand up meetings or over communication channels

we used to communicate in our organization.

Sometimes we also discussed optimization of some APIs

with respect to application flow and API calls involved at different stages.

Sometimes we also discuss optimization of API

with respect to format of input and output of some complicated APIs.

**communicate discussion QA team**

How do you communicate with the QA team? Or what type of discussions do you have with the QA team?

Whenever I work with new QA team members,

I try to understand their way of testing applications

and based on that I code accordingly.

Sometimes, QA assigns bugs to me, but I couldn’t reproduce the bug.

In that case, I used to discuss with QA to understand

how to reproduce the same bug so that I can fix it.

Sometimes if a bug is assigned to me by QA

but the backend developer is responsible(API handling), I report this to QA.

**communicate discussion Design Team**

How do you communicate with the Design Team? Or what type of discussions do you have with the Design team.

Our design team uses Zeplin/Figma to share app designs and resources

such as icons, fonts and colors.

Sometimes I suggest application flow for better user experience.