

# Preparation for **AAD Certification**

**Your Name**

Title

Company

## About Me

Your Image

# Your Name

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### Latest Work Experiences:

- Your Role, X Company
- Your Role, X Company

Year - present  
Year - Year

### Education:

- Y University  
*Master of XX*
- X University  
*Bachelor of XX*

Year - Year

Year - Year

# Ground Rules

Observe the following rules to ensure a supportive, inclusive, and engaging classes



Give full attention  
in class



Mute your microphone  
when you're not talking



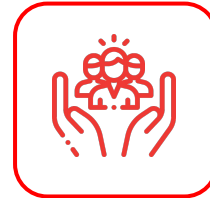
Keep your  
camera on



Turn on the CC Feature  
on Meet



Use raise hand or chat  
to ask questions



Make this room a safe place  
to learn and share

# Associate Android Developer

# What is AAD Certification?

The exam is designed to test the skills of an entry-level Android developer.

Therefore, to take this exam, you should have this level of proficiency, either through education, self-study, your current job, or a job you have had in the past.

This certification aims to **measure** your skills, as **evidence**, use the results to **apply for jobs**, etc.



# Why do you need **AAD Certification**?

The reason you need to take AAD Certification:

- Definitive step to career as Android developer.
- Validation of learned capabilities.
- Tool for learning.
- Test of understanding the creation of Android features.
- Improve bugs problem solving skill.
- Understand the importance of automated testing.

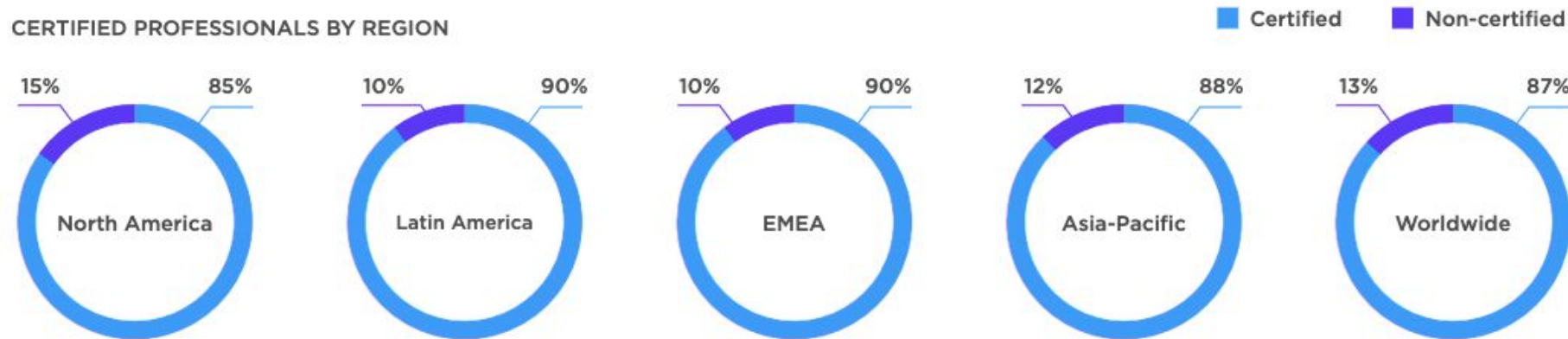


# The benefit of Having a **Global Certification**

- Some of the key benefits of certification include:
  - Validation of knowledge
  - Improved reputation
  - Increased marketability
  - Enhanced credibility
  - Increased earning power
  - Increased confidence
  - Enhanced academic performance
  - Respect from peers
- Certification can improve academic performance.
- Certification provides significant advantages to professionals and job candidates.
- Closing the global skills gap.

# The benefit of Having a **Global Certification**

CERTIFIED PROFESSIONALS BY REGION



SALARY BY CERTIFICATION CATEGORY

CERTIFICATION CATEGORY	NORTH AMERICA		LATIN AMERICA		EMEA		ASIA-PACIFIC		TOTAL	
	Average	Count	Average	Count	Average	Count	Average	Count	Average	Count
Application development and programming	\$139,231	55	\$21,518	1	\$76,070	75	\$61,948	45	\$91,887	176

Source : Global Knowledge 2020 IT Skills and Salary Report



# Requirements

# What Needs to be Prepared?

1. Language
2. Android Studio
3. Emulator / Android Device
4. Age Requirement
5. ID Verification (KTP/Passport/SIM)
6. Internet
7. Webcam and Microphone
8. Time
9. Pay for the exam.



# Process

# How does the process work?

The Associate Android Developer Certification process works like this:

1. Complete the registration process:
  - a. Read and accept the Terms and Conditions.
  - b. Verify your identity using a government-issued ID such as a driver's license or passport.
  - c. Pay for the exam.
2. Take your exam and submit it for grading.
3. Record your answers for the exit interview.
4. Upon completing the exit interview, your submission will be graded.
5. If your submission meets the criteria for a passing attempt, you will be awarded your Associate Android Developer Certification.

# Exam Project








# Install Plugin to Take Exam

Before working on the Exam Project, you will be asked to install a plugin to take the exam.

You need to know that during the exam, you cannot open other projects. But you can still open your code using other applications such as notepad ++, intellij idea, or via github.com.



## Android Studio

-  Take the certification exam
-  Start a new Android Studio project
-  Open an existing Android Studio project
-  Check out project from Version Control ▾
-  Profile or debug APK
-  Import project (Gradle, Eclipse ADT, etc.)
-  Import an Android code sample

# Important Points & Exam Logistics

## Important points:

- Make sure you are in a place that is undisturbed by others.
- **Do not share** your exam code or talk about exam content with anyone.
- Make sure you have working **internet** for the duration of the exam.

## Exam Logistics:

- You have **8 hours** to submit your exam from the time you opened this project.
- Before you submit your app, make sure it runs. If your app crashes when we try to grade it, **you fail the exam**.
- You will receive notifications in Android Studio when you have **30, 10,** and **5 minutes** remaining.

# Exam Content

Before you take the exam, make sure you can solve the types of coding challenges that the exam contains. To prepare, use the Associate Android Developer study guide.

- App Functionality (Android Core)
- User Interface
- Data Management
- Debugging
- Testing





# Complete a Case Study

Complete the project that has been given. Example task:

- Defining local database table and DAO using Room.
- Creating UI interface of detail/add page using ConstraintLayout.
- Adding data row RecyclerView using Paging.
- Creating a notification using AlarmManager/WorkManager.
- Adding Preference in Settings.
- Writing an UI test.
- Fixing bugs.
- etc.

# Interview

# Exit Interview

Prepare **10-15 minutes** for the interview.

There are usually **5 questions** to be asked (2 minutes per question).

The purpose of this interview is to see how well you **understand** the Exam Project.

Use a **quiet place**, so your voice can be heard clearly when you record it later.



# What is Asked?

What is asked is usually **related** to what you have done, such as:

1. What project have you worked on?
2. Which part is the hardest?
3. What components have been used?
4. How does it work?



# Earn Your Certification

## Receive your certification

- The assessment process takes up to **45 days**.
- Assessment will be done by machine and human.
- After completing the assessment, you will be notified via email.
- Your AAD certificate will be validated via the credential.net page, so you can attach it to your portfolio.
- To see the various alumni who graduated, you can visit the **Google Developers Certification Directory** site.
- Fill in the form in the email so that your personal data appears on the alumni page.





## Associate Android Developer



HELP

MORE ▾

Sign in to access disabled or private options



**Gilang Ramadhan**

[Credentials](#) | [LinkedIn](#) | [Twitter](#)

**Google Developers**

[Issuer's Website](#) | [More Credentials](#)

The Associate Android Developer Certification is a performance-based exam where developers write real apps to show their skills. This certification corresponds to the skills that an entry-level Android developer is expected to have.

VERIFY

Blockchain ID: 568194

Verified Issuer

### ISSUER'S OTHER CREDENTIALS

[Associate Android Developer](#)

[Mobile Web Specialist](#)

[All Google Developers credentials](#)

# Sample Task



# Sample Case #1 : Complete Database Table

## Starter Code

```
data class Task(  
    val id: Int = 0,  
    val title: String,  
    val dueDateMillis: Long,  
    val isCompleted: Boolean = false  
)
```

## Schema in JSON

```
{  
  "fieldPath": "title",  
  "columnName": "title",  
  "affinity": "TEXT",  
  "notNull": true  
}
```

```
@Entity(tableName = "tasks")  
data class Task(  
    @PrimaryKey(autoGenerate = true)  
    @NonNull  
    @ColumnInfo(name = "id")  
    val id: Int = 0,  
  
    @NonNull  
    @ColumnInfo(name = "title")  
    val title: String,  
  
    @NonNull  
    @ColumnInfo(name = "dueDate")  
    val dueDateMillis: Long,  
  
    @NonNull  
    @ColumnInfo(name = "completed")  
    val isCompleted: Boolean = false  
)
```

## Sample Case #2 : Define DAO

### Starter Code

```
interface TaskDao {  
  
    fun getTasks(query: SupportSQLiteQuery):  
        DataSource.Factory<Int, Task>  
  
    fun getNearestActiveTask(): Task  
  
    fun insertAll(vararg tasks: Task)  
  
    suspend fun deleteTask(task: Task)  
  
}
```

```
@Dao  
interface TaskDao {  
  
    @RawQuery(observedEntities = [Task::class])  
    fun getTasks(query: SupportSQLiteQuery):  
        DataSource.Factory<Int, Task>  
  
    @Query("SELECT * FROM tasks WHERE completed  
= 0 ORDER BY dueDate ASC LIMIT 1")  
    fun getNearestActiveTask(): Task  
  
    @Insert(onConflict =  
OnConflictStrategy.REPLACE)  
    fun insertAll(vararg tasks: Task)  
  
    @Delete  
    suspend fun deleteTask(task: Task)  
  
}
```

## Sample Case #3 : Pre-populate Database

```
fun getInstance(context: Context): TaskDatabase {  
    return INSTANCE ?: synchronized(this) {  
        val instance = Room.databaseBuilder(context.applicationContext,  
TaskDatabase::class.java, "task.db")  
            .addCallback(object : Callback() {  
                override fun onCreate(db: SupportSQLiteDatabase) {  
                    super.onCreate(db)  
                    INSTANCE?.let { database ->  
                        Executors.newSingleThreadScheduledExecutor().execute {  
                            fillWithStartingData(context.applicationContext,  
database.taskDao())  
                        }  
                    }  
                }  
            })  
        .build()  
        INSTANCE = instance  
        instance  
    }  
}
```

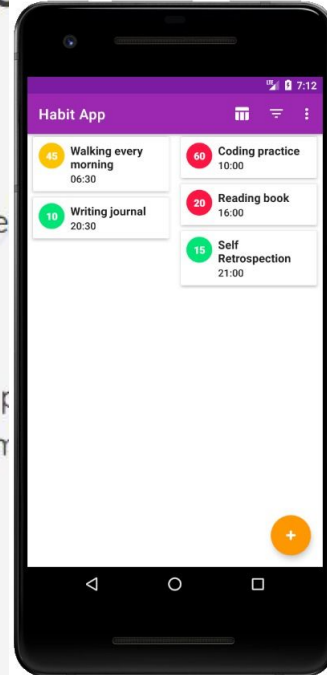
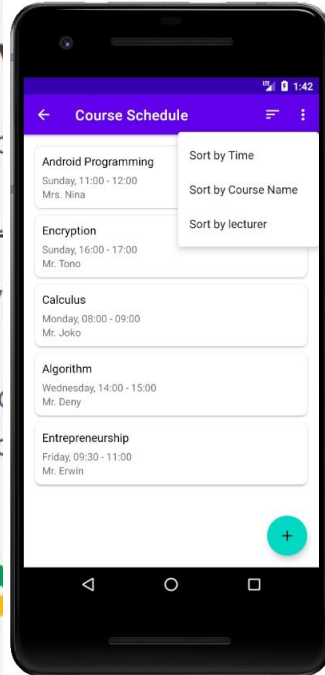
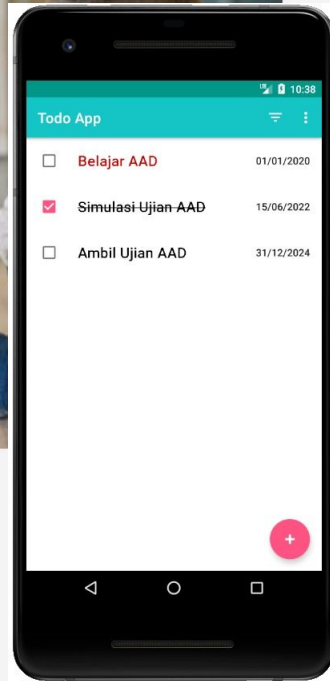
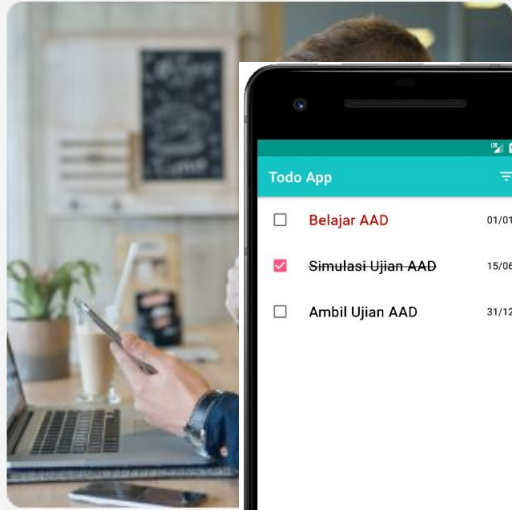
## Sample Case #4 : Paging 2

```
companion object {  
    const val PAGE_SIZE = 30  
    const val PLACEHOLDERS = true  
}  
  
fun getTasks(filter: TasksFilterType): LiveData<PagedList<Task>> {  
    val query = "SELECT * FROM tasks WHERE completed = 1"  
    val tasks = tasksDao.getTasks(query)  
  
    val config= PagedList.Config.Builder()  
        .setEnablePlaceholders(PLACEHOLDERS)  
        .setInitialLoadSizeHint(PAGE_SIZE)  
        .setPageSize(PAGE_SIZE)  
        .build()  
  
    return LivePagedListBuilder(tasks, config).build()  
}
```

## Sample Case #5 : Implement Setting

```
class SettingsFragment : PreferenceFragmentCompat() {  
    override fun onCreatePreferences(savedInstanceState: Bundle?, rootKey: String?) {  
        setPreferencesFromResource(R.xml.root_preferences, rootKey)  
  
        val prefListThemes = findPreference<ListPreference>(getString(R.string.pref_key_dark))  
        prefListThemes?.setOnPreferenceChangeListener { _, newValue ->  
            when (newValue) {  
                getString(R.string.pref_dark_on) -> updateTheme(AppCompatDelegate.MODE_NIGHT_YES)  
                getString(R.string.pref_dark_off) -> updateTheme(AppCompatDelegate.MODE_NIGHT_NO)  
                else -> updateTheme(AppCompatDelegate.MODE_NIGHT_FOLLOW_SYSTEM)  
            }  
        }  
    }  
    private fun updateTheme(mode: Int): Boolean {  
        AppCompatDelegate.setDefaultNightMode(mode)  
        requireActivity().recreate()  
        return true  
    }  
}
```

# AAD Simulation Course



## Simulasi Ujian Associate Android Developer

Tekno

Latihan

Android

Simulasi

Ujian

Associate

Android Developer

Certification

Project

Simulasi

Ujian

Associate

Android Developer

Certification

Project

Simulation

Project

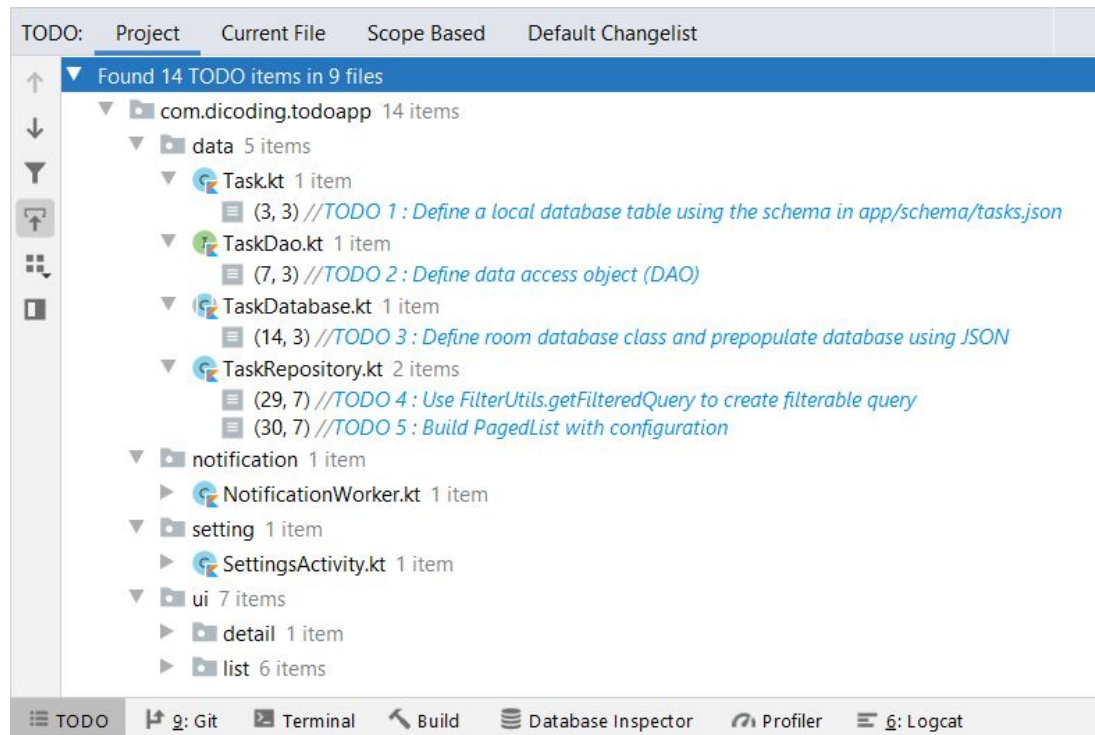
Simulation

Project

ififikasi Associate  
ertification.

<https://www.3SimulationProjectDemies/287>

# TODO Helper





# Tips and Trick

## Tips and Trick

1. Start in the morning, choose a loose day.
2. Choose a different day from the registration day, there could be a problem when registering.
3. Study the given task carefully.
4. Don't panic, look through the code and understand the flow of the application. It could be that there is a task that has been done in another class and you just have to follow it.
5. Start from the easiest.
6. Set the time for rest, meals, pray, etc.
7. Learn the sample codes from Google.

# Technical Issue During Exam

## Exam Problem?

If you have problems during the exam such as:

1. The internet is fast but the upload process is not successful.
2. You can open other applications smoothly, but your Android Studio is not responding.
3. Or other exam system errors.

You can contact support at [developer-certification-support@google.com](mailto:developer-certification-support@google.com).

# Sharing

## Important Link(s)

- **To-Do App (Optional)**
  - [Project Overview](#)
  - [Starter Project](#)
- **Course Scheduler App (Optional)**
  - [Project Overview](#)
  - [Starter Project](#)
- **Habit Tracker App (Recommended)**
  - [Project Overview](#)
  - [Starter Project](#)

# Quiz

# Discussion



**Thank You**

