



Mobile Application Development (MCA221IA)

Hand Notes

Unit - I	Topic: Project basics
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List of Questions

1. What tool does Android Studio use to build projects.
2. What is the purpose of the 'Minimum API Level' in project configuration.
3. What are the steps to create a new project in Android Studio.
4. Explain the role of the Package Name in an Android project.
5. Describe the Android Studio main editor window and its key components.
6. Explain the complete process of creating and setting up a basic Android project in Android Studio.

02 Marks Questions:

1. What tool does Android Studio use to build projects?

Answer: Android Studio uses **Gradle** as its build tool to compile, build, and manage dependencies for Android projects.

2. What is the purpose of the 'Minimum API Level' in project configuration?

Answer: It defines the **lowest version of Android** your app can run on, which affects how many devices your app supports.

04 Marks Questions:

3. What are the steps to create a new project in Android Studio?

Answer:

1. Launch Android Studio and click “Start a new Android Studio project.”
2. Choose the project type: **Phone and Tablet** → **Empty Activity**.
3. Configure project details such as:
 - Name
 - Package name
 - Save location
 - Language (Java or Kotlin)
 - Minimum API level
4. Click **Finish** to let Android Studio scaffold the project.

4. Explain the role of the Package Name in an Android project.

Answer:

The **package name** uniquely identifies your app on the Google Play Store and Android devices. It's usually

written in **reverse DNS** format (e.g., com.example.myapp). It also determines the app's namespace and is used internally by Android to differentiate apps.

08 Marks Questions

5. Describe the Android Studio main editor window and its key components.

Answer:

The Android Studio main editor window consists of:

- **Project Panel (Left side):** Shows the tree-like structure of the project files. Files can be opened by double-clicking.
- **Editor Window (Center):** Where the code is written or edited. E.g., MainActivity.java is opened here.
- **Toolbars and Tabs:** Allow access to build, run, debug, and other features.
- **Bottom Panels (e.g., Logcat, Build):** Display logs, error messages, and build results.

These components can be collapsed or expanded depending on user needs, providing a customizable development environment.

10 Marks Questions

6. Explain the complete process of creating and setting up a basic Android project in Android Studio.

Answer:

To create a basic Android project in Android Studio:

1. **Launch Android Studio** and click on “**Start a new Android Studio project.**”
2. **Choose Project Template:**
Select **Phone and Tablet** → **Empty Activity**. This creates a simple screen-based app.
3. **Configure the Project:**
 - **Name:** The name of the app/project folder.
 - **Package Name:** A unique identifier in reverse domain name format (e.g., com.mycompany.app).
 - **Save Location:** The directory on your computer where project files will be stored.
 - **Language:** Choose between **Java** and **Kotlin** (Java is selected in this project).
 - **Minimum API Level:** Sets the minimum Android version that the app supports.
4. **Check device compatibility:**
Use the “**Help me choose**” link to see what percentage of devices the app can support based on the selected API level.
5. **Legacy Support Libraries:**
These allow the app to use newer Android features on older devices.
6. **Click Finish:**
Android Studio will scaffold the project and download necessary files using Gradle. This process may take a few minutes.
7. **Explore the Editor:**
The **Main Editor Window** opens, showing files like MainActivity.java and project folders. Developers can use the **Project Panel** to navigate and open files.

This setup is the foundation for developing, testing, and running Android apps.