

## Software Dependency and Requirements Document for Android Studio Application

### System Requirements

- **Operating System:** Windows 8/10/11 (32- or 64-bit), macOS (10.13.6 or later), Linux (GNOME or KDE desktop)
- **RAM:** 8 GB RAM minimum, 16 GB RAM recommended
- **Disk Space:** At least 4 GB for Android Studio itself, plus an additional 2 GB for Android SDK, emulator system images, and caches. Please note, more disk space will be needed for your project files.

### Software Requirements

- **JDK (Java Development Kit):** OpenJDK version 11 is recommended. This is bundled with Android Studio.
- **Android Studio:** Version 4.0 or above is recommended.
- **Gradle:** The project uses Gradle 8.0.

### Android SDK Dependencies

- **SDK Platforms:** Android 13.0 (Tiramisu) SDK Platform or later should be installed using the SDK Manager in Android Studio.
- **SDK Tools:** Android SDK Build-Tools 30.0.2 or above, Android Emulator (latest), and Android SDK Platform-Tools (latest) should be installed.

### Emulator Requirements

The emulator should be configured with the following specifications:

- **Device:** Pixel 3 or any similar device supporting Android 13.0 and above.
- **System Image:** The latest system image of Android 13.0 (Tiramisu) or later.
- **RAM for Emulator:** At least 1 GB, recommended 2 GB.

### Compatible Android Devices for Emulator

As of the Android Studio version and Android SDK specified above, the Android Virtual Device Manager supports emulating the following device types:

- Pixel 3
- Pixel 3 XL
- Pixel 2
- Pixel 2 XL
- Pixel
- Pixel XL
- Nexus 5X

- Nexus 6P

Please note, other generic phone and tablet configurations can be created in the AVD Manager to emulate devices with different screen sizes, resolutions, and hardware capabilities.

### **Requirements for Running APK on Android Phone**

- The phone must be running Android 13.0 (Tiramisu) or later.
- The phone should have enough free storage space to install the APK file (consider the APK size and additional data that the app may download after installation).
- USB Debugging must be enabled on the phone to install the APK file from Android Studio. Alternatively, if you're transferring the APK file to the phone manually, you'll need to enable installation from unknown sources in the phone's settings.