7.Android Emulator (Virtual Device) Setup

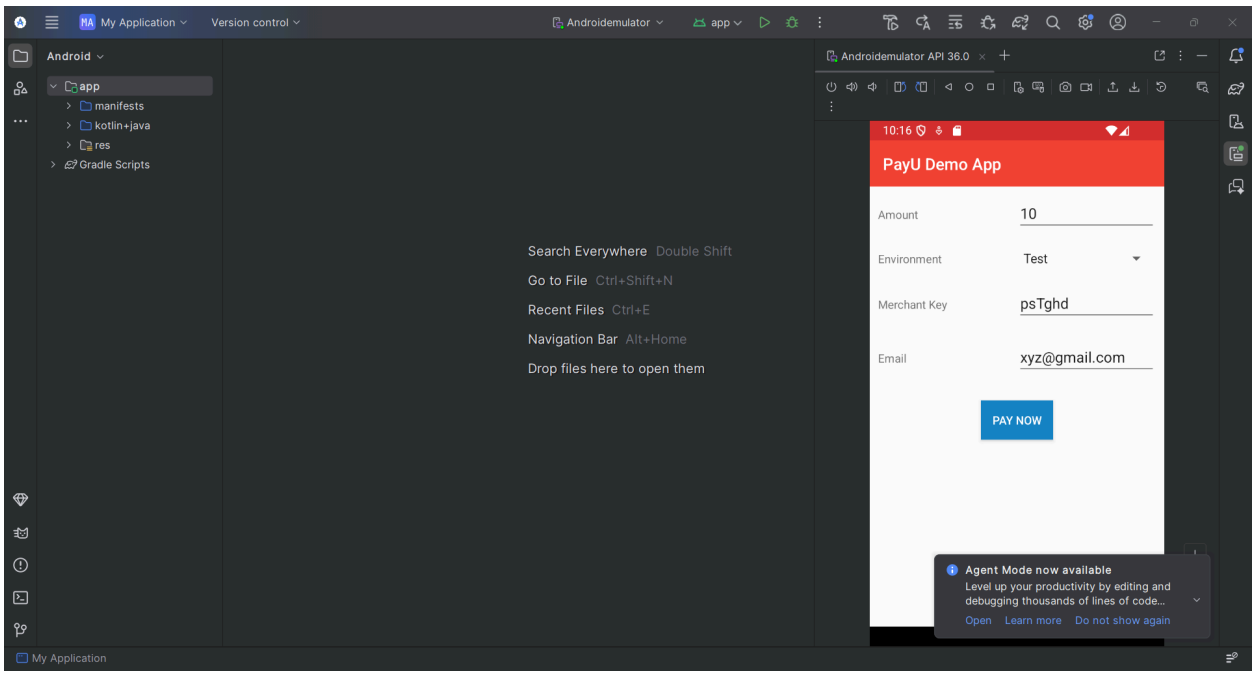
7.1 Creating Virtual Device

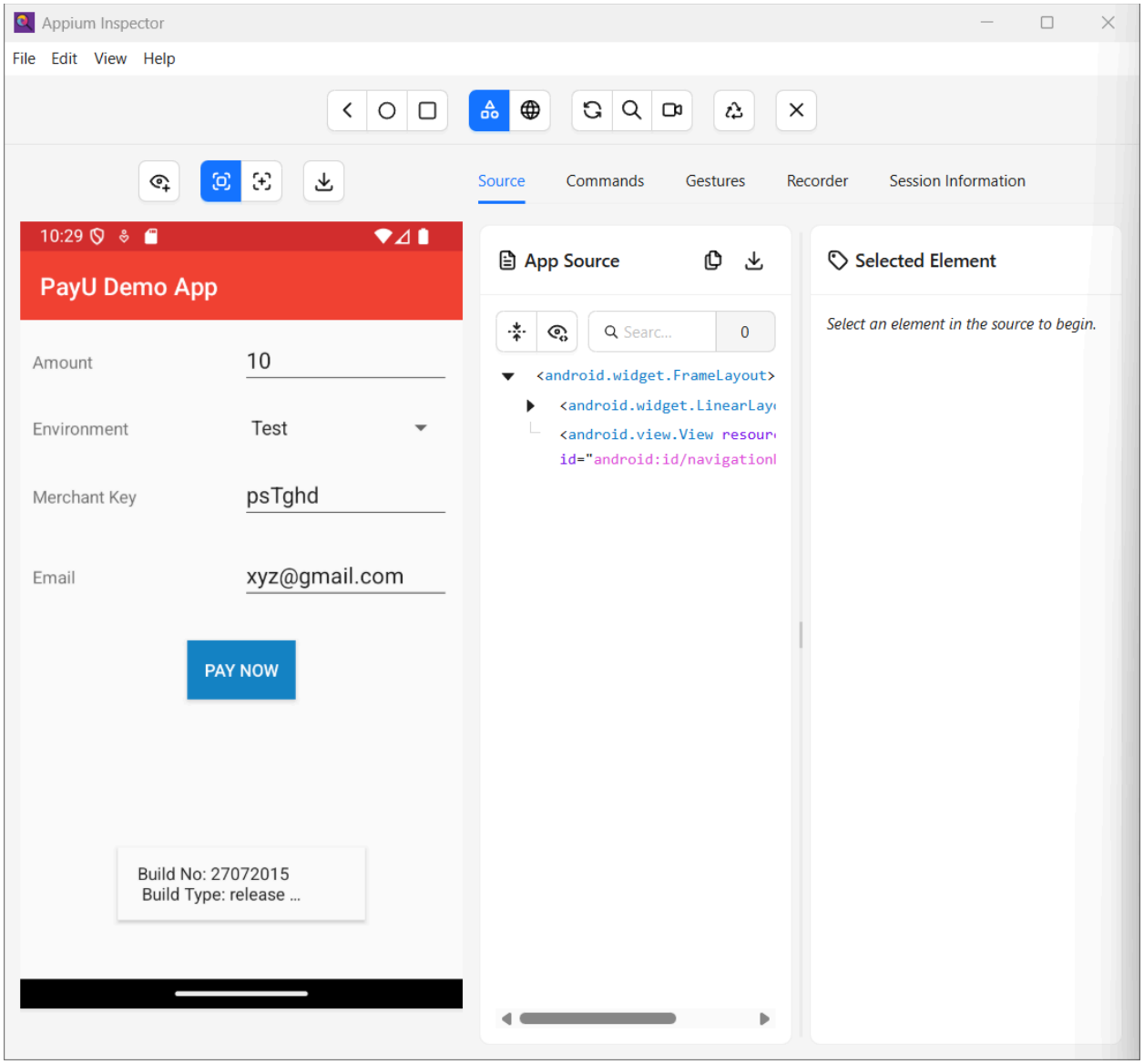
- Opened Android Studio → AVD Manager.
- Created a new Virtual Device with required Android version.

7.2 Verification

- Launched Emulator successfully.
- Verified device connection using:
  adb devices

Purpose: Emulator is used for testing without a physical device.





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8. Real Android Device Configuration

8.1 Device Preparation

- Enabled **Developer Options** on Android device.
- Enabled **USB Debugging**.

8.2 Connection

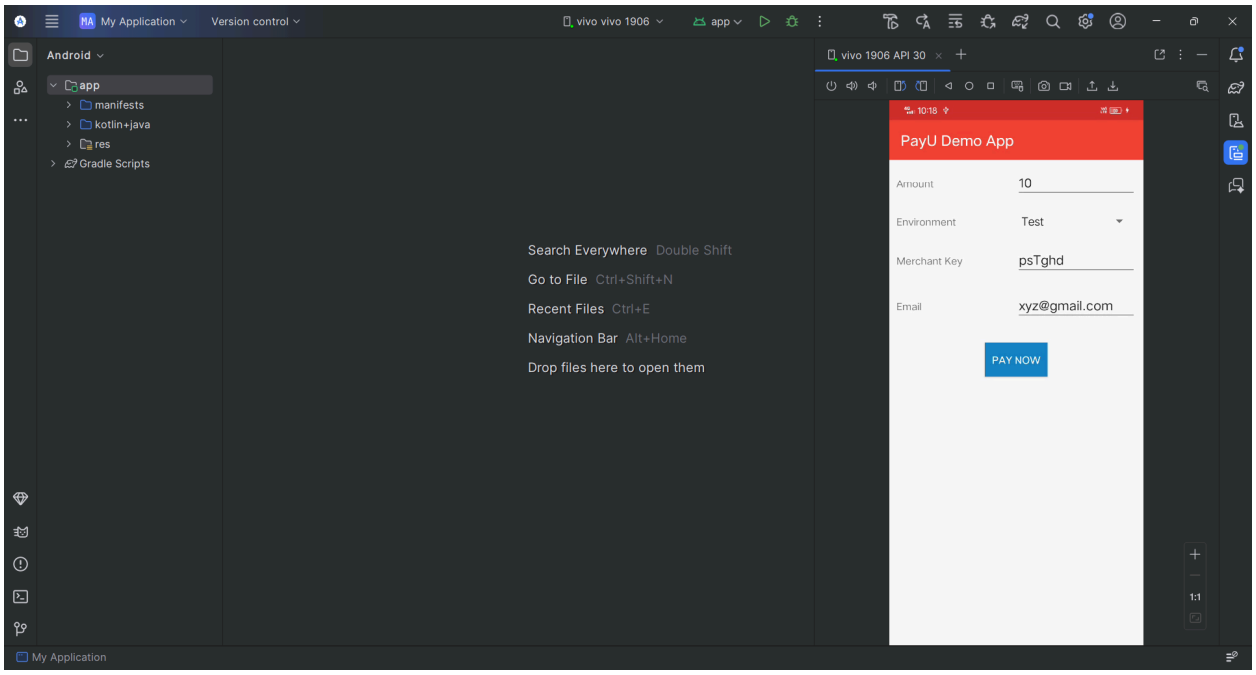
- Connected device to system via USB cable.

- Verified connection using:
  adb devices

8.3 Authorization

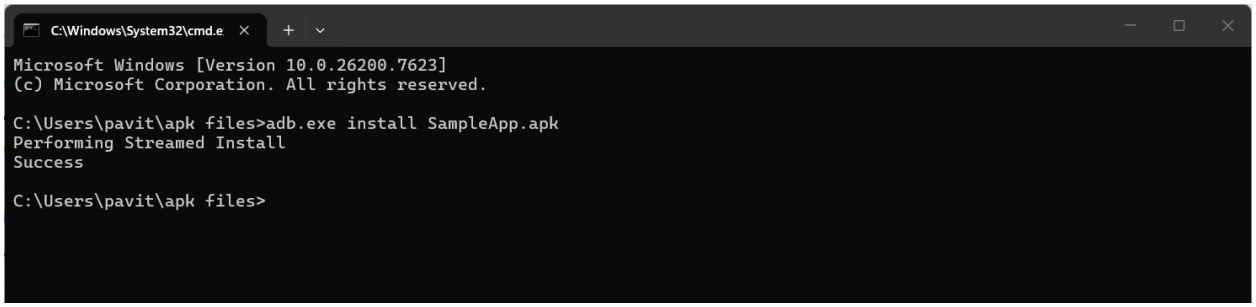
- Allowed USB debugging permission on device.

Purpose: Real device testing ensures real-world behavior validation.



9.Installing APK on Real Device

- The same APK file was installed on the real Android device.
- Installation was done using:
  - ADB commands, or
  - Automation code written inside the Maven project
- The application was successfully installed and launched on the real device.



10. Maven Project Creation

10.1 Creating the Maven Project

- A new Maven project was created using the standard Maven archetype.
- Maven automatically generated the project structure with folders such as:
  - `src/main/java`
  - `src/test/java`
  - `pom.xml`

10.2 pom.xml Configuration

- Required dependencies (such as Appium Java Client, Selenium, and TestNG) were added to the `pom.xml` file.
- Maven was used to download and manage all dependencies automatically.