Prerequisites Installation:  
  
# 1. Install Python (3.7 or higher)

# Download and install from python.org

# 2. Install Node.js (Required for Appium)

# Download and install from nodejs.org

# 3. Install Java JDK (Required for Android SDK)

# Download and install from oracle.com/java

# 4. Install Android SDK

# Download Android Studio from developer.android.com/studio

this is every Important  
# 5. Set Environment Variables

# Add these to your system's environment variables:

# JAVA\_HOME: path to your Java installation

# ANDROID\_HOME: path to your Android SDK installation

# Add to PATH:

# %ANDROID\_HOME%\platform-tools

# %ANDROID\_HOME%\tools

# %ANDROID\_HOME%\tools\bin

Imports:-

# Install Appium Server

npm install -g appium

# Install Appium Doctor to verify setup

npm install -g appium-doctor

# Install UiAutomator2 Driver

appium driver install uiautomator2

# Verify installation

appium-doctor –android

Install Python Dependencies:-

# Create and activate virtual environment (recommended)

python -m venv venv

.\venv\Scripts\activate # On Windows

source venv/bin/activate # On Unix/Mac

# Install required Python packages

pip install Appium-Python-Client

pip install selenium

Start Appium Server:

*# Start Appium server on port 4723 (default)*

appium --port 4723

1. Additional Setup Requirements:

# Install Android Debug Bridge (ADB)

# This should be included with Android SDK, but verify it's accessible:

adb devices

# Enable Developer Options on Android Device:

# 1. Go to Settings > About Phone

# 2. Tap Build Number 7 times

# 3. Go back to Settings > Developer Options

# 4. Enable USB Debugging

For the error shown in your screenshot (SecurityError):

# Run PowerShell as Administrator and execute:

Set-ExecutionPolicy RemoteSigned

# Then try starting Appium again

appium --port 4723

2.If device not detected:

# Verify ADB connection

adb kill-server

adb start-server

adb devices

1. If app not found:

# Verify app package installation

adb shell pm list packages | grep twitter

adb shell pm list packages | grep reddit

1. Version Compatibility:

* Make sure Appium server version matches client version
* Check Python client compatibility with your Python version

To verify everything is working:

Final check to go :-

# 1. Check Python installation

python --version

# 2. Check Node.js installation

node --version

npm --version

# 3. Check Appium installation

appium --version

# 4. Check ADB

adb --version

# 5. Check Java

java -version