**Apps build for Android manual**

Based on: <https://github.com/EchterAlsFake/PySide6-to-Android>

1. **System configuration**
   1. **Install Ubuntu 24.04**
   2. **Update Ubuntu**
      1. sudo apt-get update
      2. sudo apt-get upgrade
   3. **Install Python3.11**
      1. sudo add-apt-repository ppa:deadsnakes/ppa
      2. sudo apt-get install python3.11
      3. sudo apt-get install python3.11-venv
   4. **Install tools**
      1. sudo apt-get install build-essential
      2. sudo apt-get install cmake
      3. sudo apt install openjdk-17-jdk
      4. update-alternatives --config java
      5. export JAVA\_HOME=/usr/lib/jvm/java-17-openjdk-amd64
      6. sudo apt-get install git
      7. sudo apt-get install zlib1g-dev
      8. sudo apt-get install autoconf
      9. sudo apt-get install libtool
2. **Install NDK and SDK**
   1. cd ~/
   2. git clone <https://code.qt.io/pyside/pyside-setup>
   3. cd pyside-setup
   4. git checkout 6.8.1
   5. python3.11 -m venv venv
   6. source venv/bin/activate
   7. pip install –upgrade pip
   8. pip install -r requirements.txt
   9. pip install -r tools/cross\_compile\_android/requirements.txt
   10. python tools/cross\_compile\_android/main.py --download-only --auto-accept-license
   11. NDK ad SDK will be downloaded to /home/user/.pyside-adnroid-deploy/
3. **Download wheels**
   1. cd ~
   2. mkdir whl
   3. Download wheels to whl folder from <https://github.com/EchterAlsFake/PySide6-to-Android/releases/tag/6.8.1_3.11>
4. **Configure project**
   1. git clone <https://github.com/hutouski-aliaksei/DoseCalculatorAndroid.git>
   2. cd ~
   3. mkdir ve
   4. cd ve
   5. python3.11 -m venv venv
   6. source venv/bin/activate
   7. Go into the virtual environment to the PySide6 folder (e.g.: venv/lib/python3.11/site-packages/PySide6/scripts/)
   8. Edit the android\_deploy.py file
   9. Search for the line: logging.info("[DEPLOY] Running buildozer deployment")
   10. Above this line write this: input("Modify your buildozer.spec now")
   11. pip install –upgrade pip
   12. cd ~/DoseCalculatorAndroid
   13. pip install -r requirements.txt
   14. In pysidedeploy.spec specify program name, NDK, SKD and wheels paths
5. **Run build**
   1. cd ~/ve
   2. source venv/bin/activate
   3. cd ~/DoseCalculatorAndroid
   4. pyside6-android-deploy --config-file pysidedeploy.spec
   5. Add db to source.include\_exts in buildozer.spec. Specify other parameters here (orientation, name, version, icon and presplash.background)