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Why?

- Works on Linux, mac, windows, ios, android, all desktop and all embedded environment
- Low-level access from a high-level common environment
- Porting existing app like game, multimedia, etc to multiple desktop, console, or mobile platforms
- Saves time in development like UI, multi-threading, Graphics, Networks



Prerequisite

- **Qt5 installer** & run to install Qt Creator
- **The Android SDK Tools**
- **Android NDK** - For native code language (c/c++)
- Apache Ant v1.8 or later
- Java SE Development Kit (JDK) v6 or later



Setting up Environment



- Launch Qt Creator
- Create new project and select Android instead of Desktop application
- Set up path for JDK, Android SDK and NDK location, Ant path. Later you can change through tools->options->Android

- Location
- Component Set
- ➔ Kits**
- Summary

Kit Selection

Qt Creator can use the following kits for project **untitled**:

Select all kits

- | | |
|---|-----------|
| <input type="checkbox"/>  Desktop Qt 5.4.1 GCC 64bit | Details ▼ |
| <input checked="" type="checkbox"/>  Android for armeabi-v7a (GCC 4.8, Qt 5.4.1) | Details ▼ |

< Back Next > Cancel

Filter

Android

- Environment
- Text Editor
- FakeVim
- Help
- C++
- Qt Quick
- Build & Run
- Debugger
- Analyzer
- Version Control
- Android**
- BlackBerry
- QNX
- Devices
- Code Pasting

Android Configurations

JDK location:


Android SDK location: 

Android NDK location: 

 [The GDB in the NDK appears to have broken python support.](#)

Found 6 toolchains for this NDK.

Automatically create kits for Android tool chains

 Qt versions for architectures mips, x86 are missing.
To add the Qt versions, select Options > Build & Run > Qt Versions.

Use Gradle instead of Ant

Ant executable:

AVD Manager

System/data partition size:

AVD Name	AVD Target	CPU/ABI	<input type="button" value="Add..."/>
			<input type="button" value="Remove"/>
			<input type="button" value="Start..."/>

OK

Apply

Cancel

Coding using Qt/QtQuick

Source code -

<https://github.com/sinnykumari/Imgs>



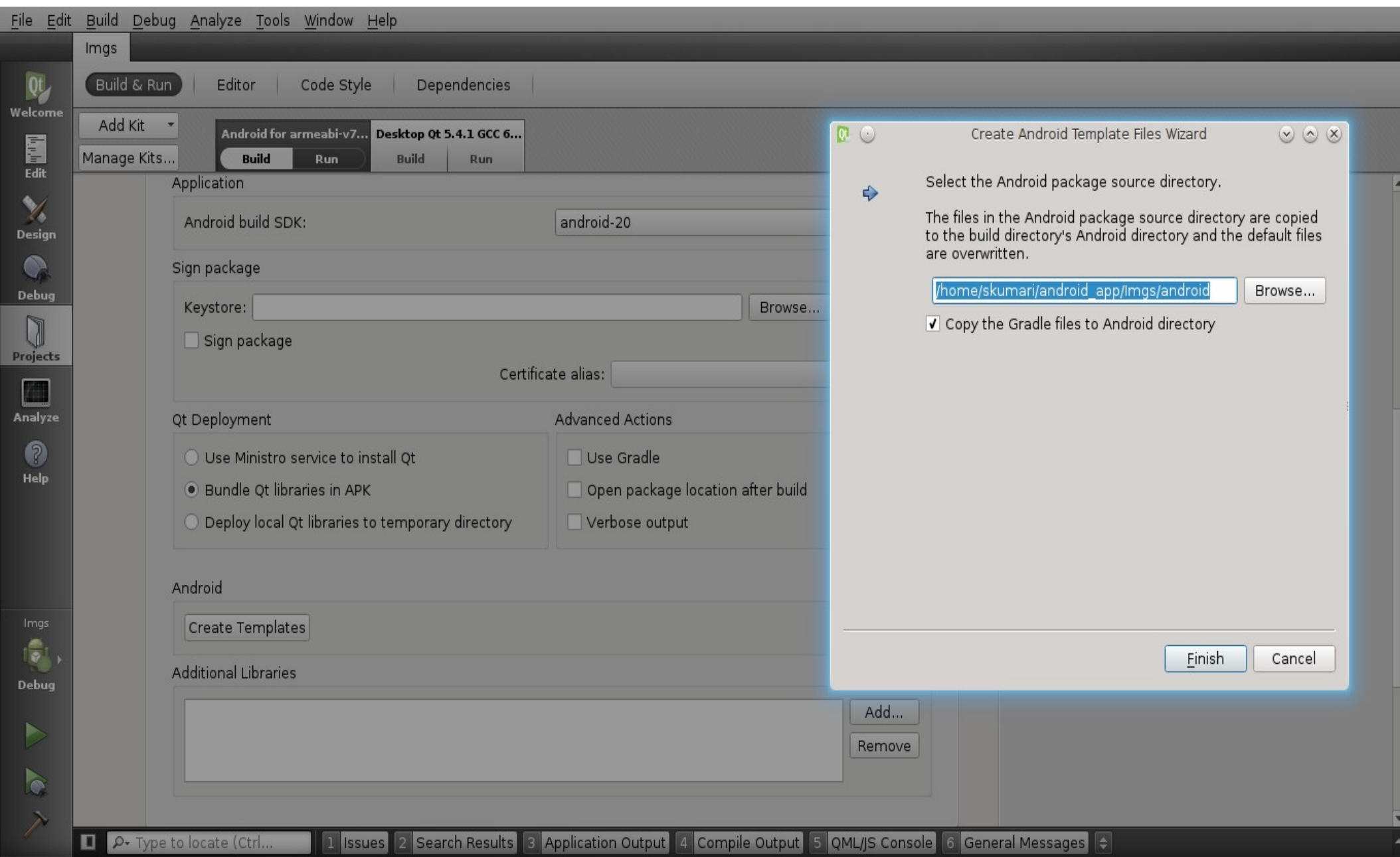


Deploying and Publishing app to Google Play store



- For quick deployment, enable USB debugging mode in mobile and connect your phone with computer using USB and run application in Qt creator
- Create Template
- Open AndroidManifest.xml and add needed information
- Set-up keystore to sign package
- Build your application and foo.apk signed package generated (foo-signed.apk)
- Upload your .apk package and basic information like screenshot, icons
- Login to <https://play.google.com/apps/publish>

Create template



Qt
Welcome
Edit
Design
Debug
Projects
Analyze
Help

Imgs
Debug

Open Documents
AndroidManifest.xml
main.qml

Package

Package name:

Version code:

Version name:

Minimum required SDK:

Target SDK:

Application

Application name:

Run:

Application icon:

Permissions

Include default permissions for Qt modules.

Include default features for Qt modules.

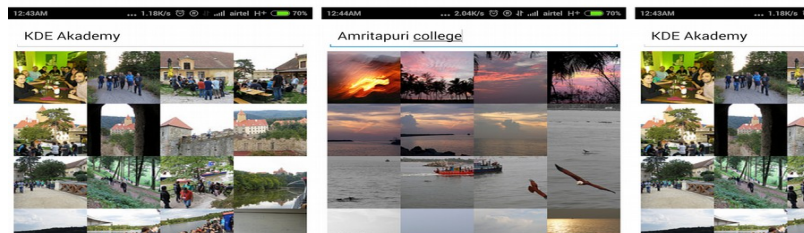
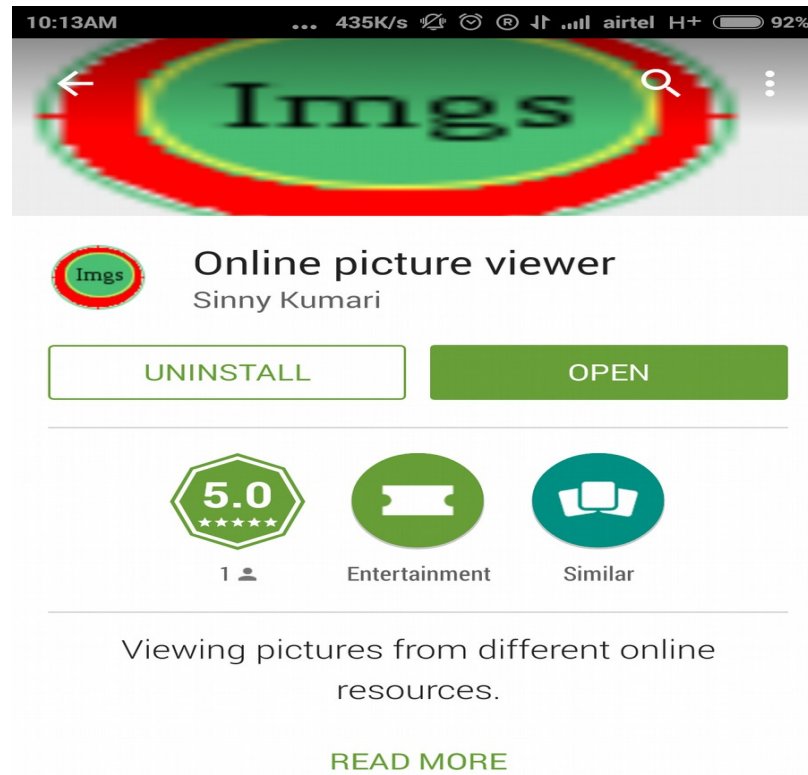
Keystore Creation

Keystore	Certificate
<p>Password: <input type="password" value="●●●●"/></p> <p>Retype password: <input type="password" value="●●●●"/></p> <p><input type="checkbox"/> Show password</p>	<p>Alias name: <input type="text" value="QtApp"/></p> <p>Keysize: <input type="text" value="2048"/></p> <p>Validity (days): <input type="text" value="10000"/></p> <p>Password: <input type="password"/></p> <p>Retype password: <input type="password"/></p> <p><input checked="" type="checkbox"/> Use Keystore password <input type="checkbox"/> Show password</p>
<p>Certificate Distinguished Names</p>	
<p>First and last name: <input type="text" value="Foo bar"/></p> <p>Organizational unit (e.g. Necessitas): <input type="text" value="Tools"/></p> <p>Organization (e.g. KDE): <input type="text" value="foo"/></p> <p>City or locality: <input type="text" value="Amritapuri"/></p> <p>State or province: <input type="text" value="Kerala"/></p> <p>Two-letter country code for this unit (e.g. RO): <input type="text" value="IN"/></p>	
<p><input type="button" value="Save"/> <input type="button" value="Close"/></p>	



Demo

Imgs App



Qt 5 Everywhere App

The image shows a screenshot of the Qt 5 Everywhere app interface and its Google Play Store listing. The app interface at the top features a 3D-style menu with categories: FEEDS, CANVAS, GAMES, APPLICATIONS, MULTIMEDIA, and PARTICLES & SHADERS. The Google Play Store listing below shows the app is being downloaded, with a progress bar. It includes statistics: 10 THOUSAND Downloads, a 4.2 star rating from 333 users, and options for Libraries & Demo and Similar apps. A green banner at the bottom of the listing reads "WHAT'S NEW Support for Lollipop added" with a "READ MORE" link.

12:48AM ... 273K/s 273K/s airtel H+ 46%

Qt 5 Everywhere
Digia

Downloading...

10 THOUSAND Downloads

4.2 333

Libraries & Demo

Similar

Qt5 Everywhere

WHAT'S NEW
Support for Lollipop added

READ MORE

References

- <http://www.qt.io/>
- <http://doc.qt.io/qtcreator/creator-deploying-an-droid.html>
- <http://doc.qt.io/qt-5/androidgs.html>
- Slide -
<https://github.com/sinnykumari/slides/tree/master/conf.kde.in.2015>



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Thank You
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