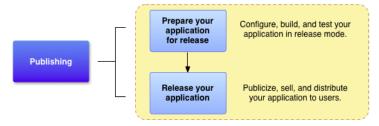
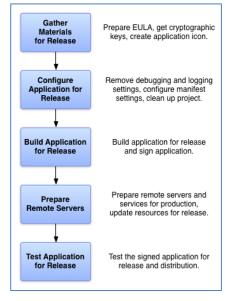
Publish your app on Google Play Store

Before you publish your apps on Google Play and distribute them to users, you need to get the apps ready, test them, and prepare your promotional materials.

This document helps you understand the publishing process and get ready for a successful product launch on Google Play. It summarizes some of the tasks you'll need to complete before publishing your app on Google Play, such as creating a signed, release-ready application package (APK), understanding the requirements of the app, and

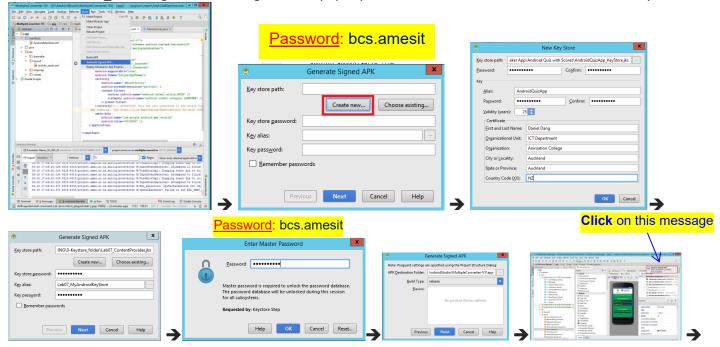
creating the product page and graphic assets for each of your apps.

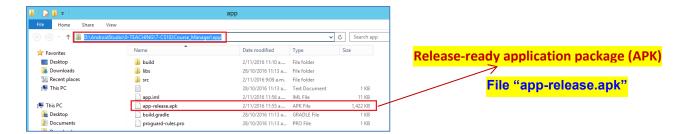




A. Convert your Android project into APK file

- + Open one of your practical lab, example: Lab02_2_AndroidQuizApp_[yourname]
- + Go to "Build" option -> Select "Generate signed APK" -> Generate signed APK:
 - . Choose "Create new ..." -> Enter "New Key Store" window:
 - _Password: bcs.amesit
 - _Certificate file: Complete with your own information
 - Press "OK"
 - Setup Master Password: bcs.amesit
 - _Choose the APK Destination folder
 - _Click "Finish"
 - A message "Generate Signed APK" pops up to show that APK has been created successfully.





<u>Note</u>: Enter all the fields in this screen and press enter. Now your keystore will be created. Please remember all your passwords. Else, this keystore will be useless for you later. For simplicity, keep both the passwords same.

Reference:

- [1]. Reference: http://developer.android.com/tools/publishing/app-signing.html
- [2]. How to create APK file for Android app in "Android Studio":

http://stackoverflow.com/questions/28124071/how-to-create-apk-file-for-android-app-in-android-studio

http://stackoverflow.com/questions/3997748/how-can-i-create-a-keystore

[3]. Sign your Android applications for release:

http://techdroid.kbeanie.com/2010/02/sign-your-android-applications-for.html

B. Publish Your Android App on Google Play Store

Google Play is the premier store for distributing an Android app. After sweating out hours on creating a perfect app, you are now ready to put it out in front of over 1 billion active Android users in more than 190 countries and territories around the world. And, to make the process of publishing your app as smooth as it can be on Google Play Store, here is a quick step by step guide. So, are you ready to publish your android app on Google Play Store?

Step 1: Create a Google account

To publish your app in the Google Play Store, you need to have an account with Google. You might already have a personal email account with them, but it is better to have a separate one to manage your app(s).

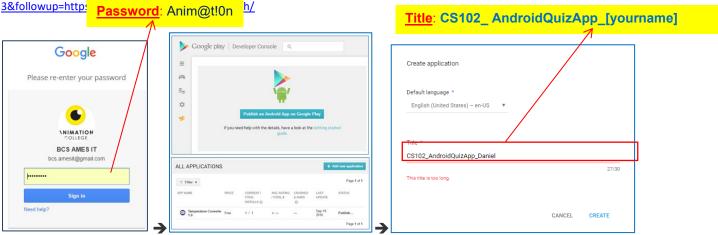
While registering your publisher account, you would have to pay a registration fee of 25 USD, using Google payments. After this, a verification mail would be sent to you; and then, you can sign in to your Developer Console, where all the action would take place.

Step 2: Goole Play Store

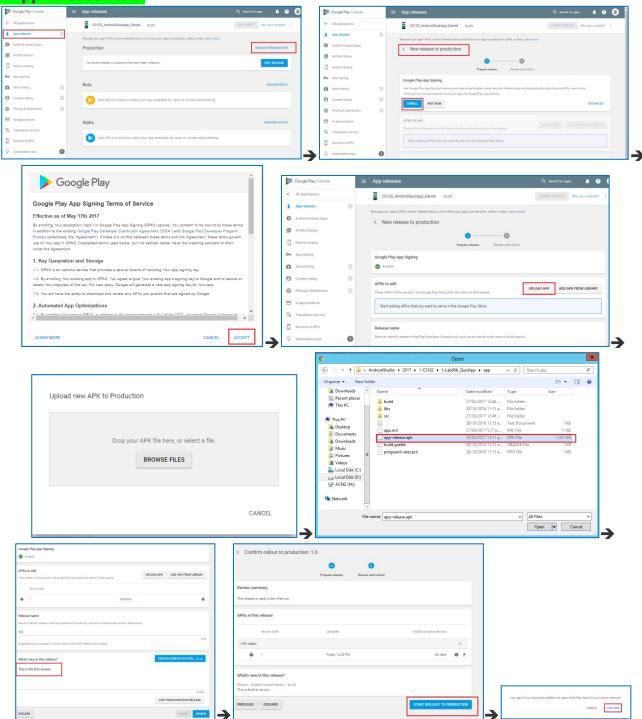
Once you have a developer account, you can go ahead and click "Publish an Android App on Google Play" as in the screenshot below:

Link:

https://accounts.google.com/ServiceLogin?service=androiddeveloper&passive=1209600&continue=https://play.google.com/apps/publish/%2



2a. "App release" tab:



2b. "Store listing" tab Title * English (United States) - en-US <u>Title</u>: CS102_AndroidQuizApp_[yourname] Short description (max 80 characters): This app is a This app is a Multiple-choice Android Quiz Multiple-choice Android Quiz. The app is a simple Quiz App in Android. The app reads questions from an array defined in a string-array stored in res/values/strings.xml file. The questions are asked one by one. — When user clicks to select the correct answer a Tosst Message pops up to inclicate whether the answer is right or wrong. User clicks the "Next question" button to proceed. Full description (max 4000 characters): The app is a simple Quiz App in Android. The app reads questions from an array defined in a string-array stored in res/values/strings.xml file. The questions are asked one by one. When user clicks to select the correct answer, a Toast Message pops up to indicate whether the answer is right or wrong. User clicks the "Next question" button to proceed. Graphic Assets If you haven't added localized graphics for each language, graphics for your default language will be used. Default - English (United State 4096 w x 4096 h JPG or 24-bit PNG (no alpha) Default – English (United Stat 1280 w x 720 h JPG or 24-bit PNG (no alpha) **Application type**: Application Category: Education You need to fill a rating questionnaire and apply a content rating Contact details Website: http://animationcollege.co.nz Email 1 Email: bcs.amesit@gmail.com +642108219683 > **Phone**: +642108219683

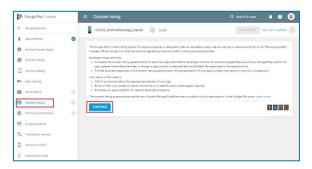
this time

Tick: not submitting a privacy policy URP at

Privacy Policy *

Not submitting a privacy policy URL at this time. Learn r

2c. "Content Rating" tab



- Email address: <u>bcs.amesit@gmail.com</u>;
- Confirm email address: <u>bcs.amesit@gmail.com</u>;
- Select your app category: Reference, news, or educational;



- Violence: can the app contain violent material? No
- Sexuality: Can the app contain sexual material or nudity (except in a natural or scientific setting)? No
- Language: Can the app contain any potentially offensive language? No
- Controlled substance: Can the app contain references to or depictions of illegal drugs? No
- Miscellaneous:
 - Does the app natively allow users to interact or exchange content with other users through voice communication, text, or sharing images or audio? No
 - Does the app share user-provided personal information with third parties? No
 - Does the app share the user's current physical location to other users? No
 - Does the app allow users to purchase digital goods? No
- Save questionnaire;
- Calculate rating:



- Apply rating.
- Skip create "questionnaire"

2d. "Pricing & Distribution" tab

Move to the next tab, which is "Pricing & Distribution" and select whether it is a "Free" or a "Paid" app:

• For our app, we select "Free";

Select the distribution countries and check the boxes stating that your app complies with the content guidelines.:

• Countries: Australia, Canada, New Zealand, UK, USA, Vietnam;

_Primarily Child-Directed:

• Select: No;

_Contains ads: No, it has no ads;

_Device categories: N/A,

_User programs:

• Check "Google Play for Education"; → In-app purchases: No;

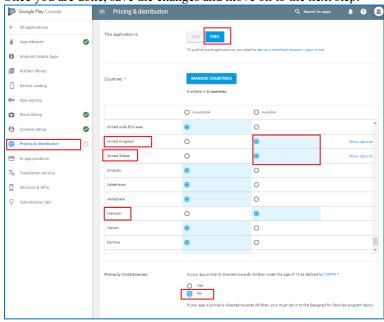
_Consent:

Marketing opt-out: CHECK;

• Content guidelines: CHECK;

• US export law: CHECK;

Once you are done, save the changes and move on to the next step.

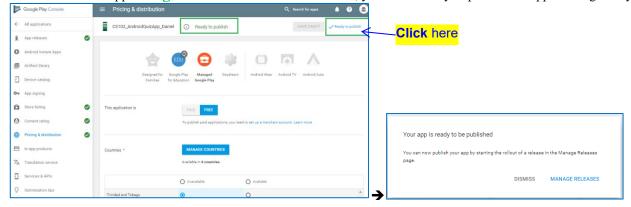


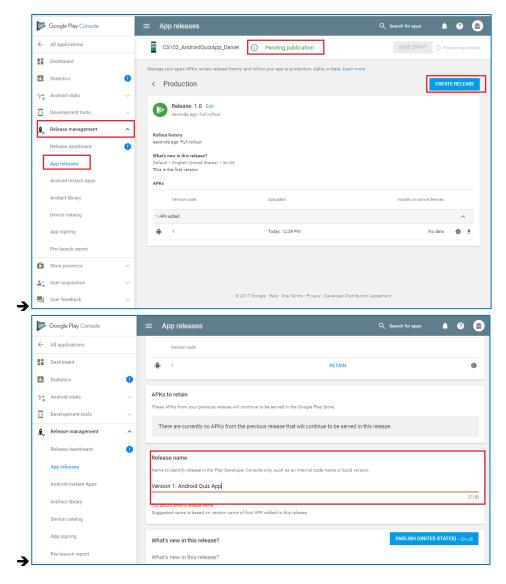
+ Publishing the app:

When all 4 tabs:

- "App Releases",
- "Store Listing"
- "Content Rating"
- "Pricing & Distribution"

have been filled and there appears a green check mark next to them, you are all ready to publish the app in Google Play.





All you need to do is, click the "Publish app" button under the "Ready to Publish" drop-down menu at the top right corner of the Developer Console. After you have hit the button, a confirmation bar would show up stating that your app would appear shortly in the Google Play Store.

It takes about 15 minutes for app uploading.



Once your app is published, you can update it as often as you want. You can even make changes with the pricing, configuration and distribution options at any time.

Reference:

- [1]. Publishing your app: https://ionicframework.com/docs/guide/publishing.html
- [2]. 10 Steps To Publish Your First Android App On Google Play Store: https://www.linkedin.com/pulse/10-steps-publish-your-first-android-app-google-play-store-karan
- [3]. Upload an App: https://support.google.com/googleplay/android-developer/answer/113469?hl=en

C. Update app with Google Play and force download

+ Update an existing apk on Google Play Store:

- 1. Go to your Google Play Developer Console
- 2. Select All applications in that select "Your Application"
- 3. Select "Upload APK".
- 4. Choose from the *Production -> Beta, or Alpha channels* → select "Upload your APK".

It takes few hours to publish update.

+ Force users to update:

There are three things:

- 1. It is not possible in Google Play Store, unless user have set automatic update on.
- 2. You can use external library like <u>UpdateChecker</u>, <u>AppUpdater</u>, etc.
- 3. You can change your application structure in that way that whenever user starts you application internal contents get update.

What is KeyStore?

- It is used to build singed apk.
- Keep your keystore in a secure location. If you lose your keystore, you'll need to publish the app with a new package name and a new key. If you need to do this, you should also unpublish the original app and update its description

How to unpublish an app after publishing it?

Select app go to Store presence then select pricing and distribution you will find option to publish and unpublish the application

