Lesson - 13

Publish APK on Google Play Store

Useful Resources for the career

- Android Weekly is a free newsletter that helps you to stay cutting-edge with your
 Android Development also job openings around the world.
- The newsletter comes once a week and covers a broad range of topics like tutorials, screencasts, news... just everything that's awesome in the Android Development world!
 - https://androidweekly.net/
- Koltin Weekly is a free newsletter to get your weekly Kotlin Dose
 - http://kotlinweekly.net/

Technologies support career

- Popular Android Design Pattern
 - Model View Presenter (MVP), Model View View Model (MVVP), Model View Intent(MVI)
- Knowledge of
 - Kotlin programming
 - Strong in Android Fundamentals and Components
 - Dagger(Framework to manage dependency)
 - Retrofit2(REST Client network library)
 - RxJava(Reactive Extensions are a set of interfaces and methods)
 - RESTful web services
 - Firebase
 - Android Jetpack (Jetpack is a suite of libraries, tools, and guidance to help developers write high-quality apps easier.)
 - Material Design

Publish .apk

- After you have created, and fully debugged, your application, you might want to deploy it to the Google Store for others to enjoy.
- Before uploading the application in Google Play Store(android market), the basic points to be noted are as follows:
 - Testing the application.
 - Checking the application performance.
 - SDK Compatibility.
 - Remove log data.
- The following sections outline the steps for publishing your applications.

Steps for publishing your app

- Prepare app for release
- Generate signed APK
- Upload to Google Play
- Run alpha and beta tests(optional)
- Publish to the world

Other ways to share your app

Ways to distribute your app to your friends or team or higher authorities

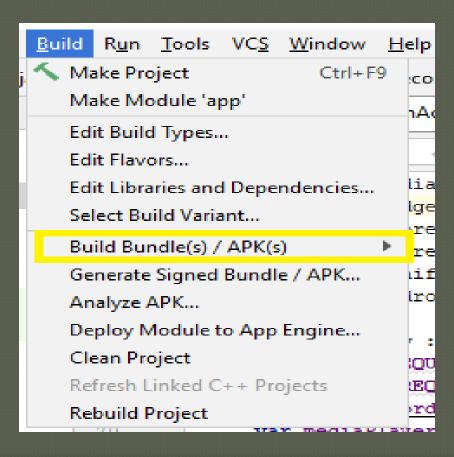
- Zip it up and share, they can extract and import the project
- Share the source code through cloud drive like one drive, google drive etc.,
- Publish to github
- Make an APK

What is an APK?

- Android Application Package file (.apk)
- It's like the executable file
- Each Android application is compiled and packaged in a single file that includes all the app's code, resources, assets, and manifest file
- You need an APK to publish on Google Play

Build APK for Testing Purpose not for Deployment

Step 1 : Click Build → Build Bundles(s)/APK(s) APK, will provide APK to test into various Android Device



Build APK for Testing Purpose not for Deployment

Step 2 : Once the APK is generated you will get this

message.



Step 3: Click on Reveal in Folder to see the APK. Now you copy this file in any android device and test your

application.

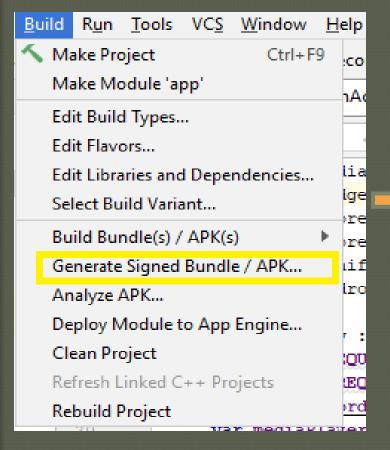


Generating a Signed APK

- To publish your finished application on the Google Play Store, you must generate a signed APK (the Android application package).
- APK is the compiled, executable version of your application.
- Signing it is much like signing your name to a document.
- The signature identifies the app's developer to Google and the users who install your application.

Generating a Signed APK steps

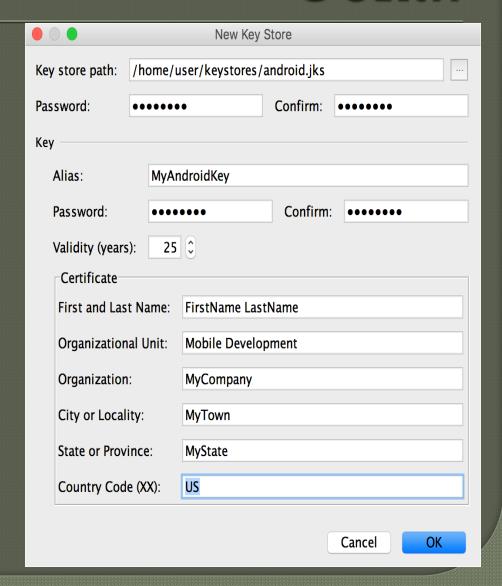
1. Generate a signed APK from your code by selecting Build Generate Signed APK from the Menu bar to bring up the Generate Signed APK window as shown here



• • •		New Key	Store		
Key store path:	/home/user/keystores/android.jks				
Password:	•••••	••	Confirm:	•••••	
Key —					
Alias:	MyA	MyAndroidKey			
Password:	•••	••••	Confirm:	•••••	
Validity (years):		5 0			
Certificate					
First and Last Name:		FirstName LastName			
Organizational Unit:		Mobile Development			
Organization:		MyCompany			
City or Locality:		MyTown			
State or Province:		MyState			
Country Code (XX):		US			
				Cancel OK	

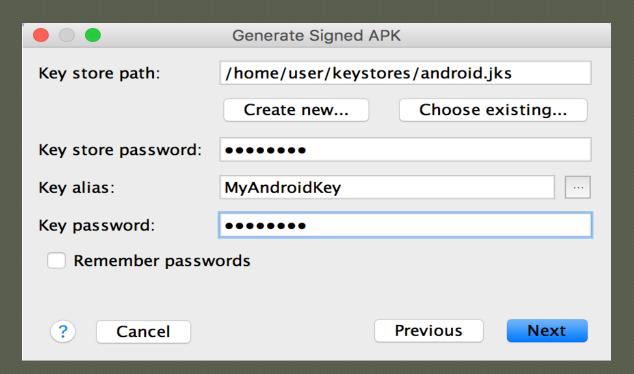
- 2. Assuming you have never published an application from Android Studio, you need to create a new key store. Click the Create New button to display the New Key Store window.
- Signed APK provides two things.
 - a. Signed Key
 - b. APK file.
- The Key is very confidential, it will be useful in future to make any update.
- It should not be shared.
- Signed Key file is stored with the extension .jks(Java Key Store)

- information on this form because it pertains to your entity and application.
 Notice that there are two places for a password. These are the passwords for your key store and your key, respectively. Use the same password in both the places.
- Click OK to return to the Generate Signed APK window.



4. Click Next button

The **Key Alias** is a just a commonplace name that points to a specific certificate. You can create one for each release, or just use the same one for all your apps.



- 5. On the next window, select a destination for the signed APK(s), select the build type, (if applicable) choose the product flavor(s), and click **Finish**.
- 6. You will get, Click on this link to see the signed APK



Link Generating Signed apk https://developer.android.co m/studio/publish/app-signing

Generate Signed APK					
Note: Proguard settings are specified using the Project Structure Dialog					
APK Destination Folder:	udioProjects/DrawerNavigation/app				
Build Type:	release				
Flavors:	free				
	paid				
? Cancel	Previous Finish				

Signup for Google Play

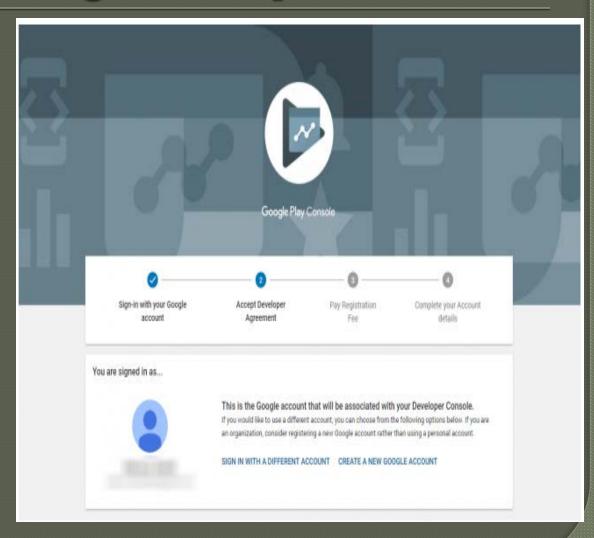
 Now you have a signed APK, you can upload it to the Google Play Store using the developer console at

https://play.google.com/apps/publish/

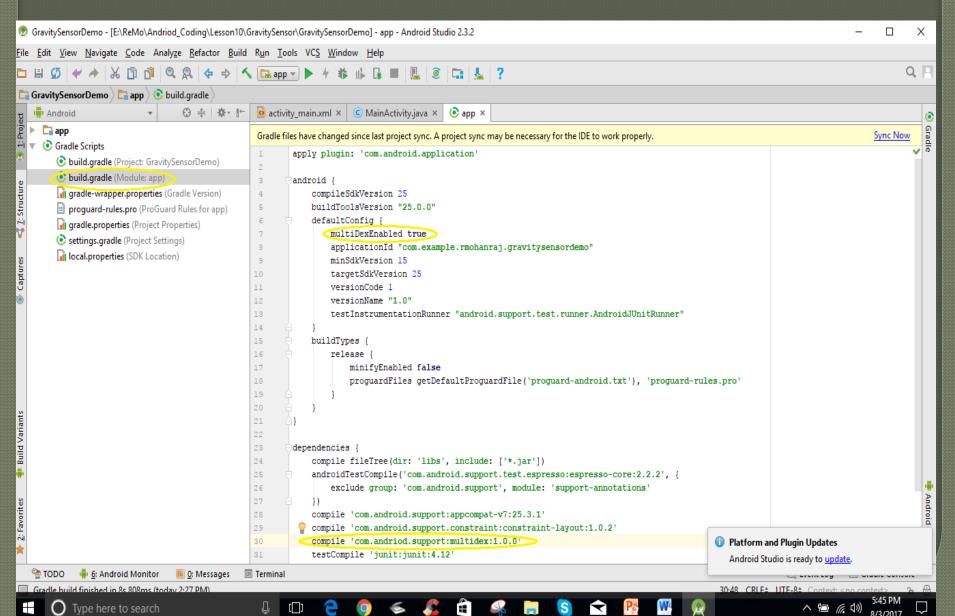
- Once you clicked on the link, need to sign in with your google account.
- You have to create a Play store account and pay some amount(\$25) for this account.
- You will get lifetime membership. You can upload N number of Apps.

Google Play Console

- Pay the \$25 fee
- Complete your account details such as
 - Name
 - Address
 - Website
 - Phone
 - Email

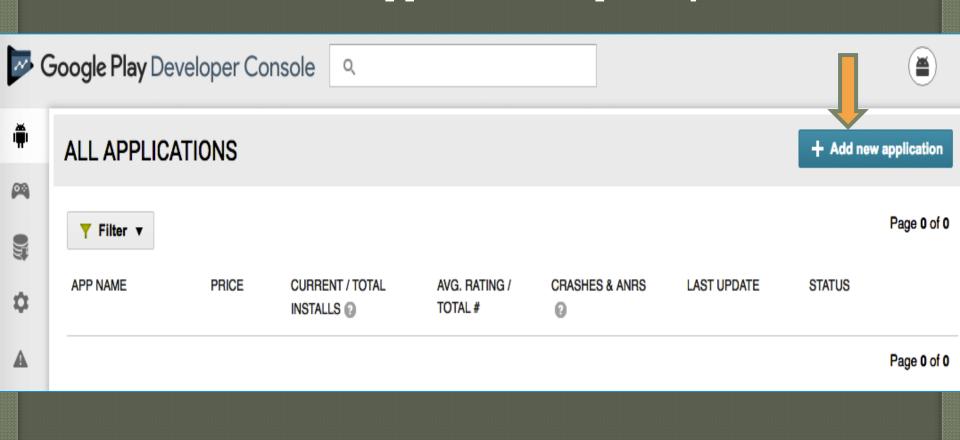


If your application has more than 1000 lines of code add the highlighted part of code in your app before making signed APK.



Google Play Store uploading Steps

1. Click Add new Application to upload your APK file.

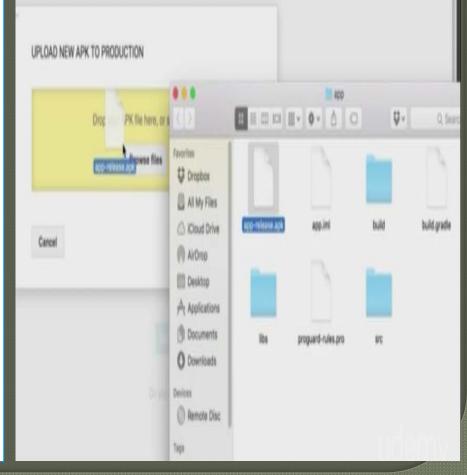


2. Click Upload APK and drag your APK to play store. (Max Size is 100 MB)

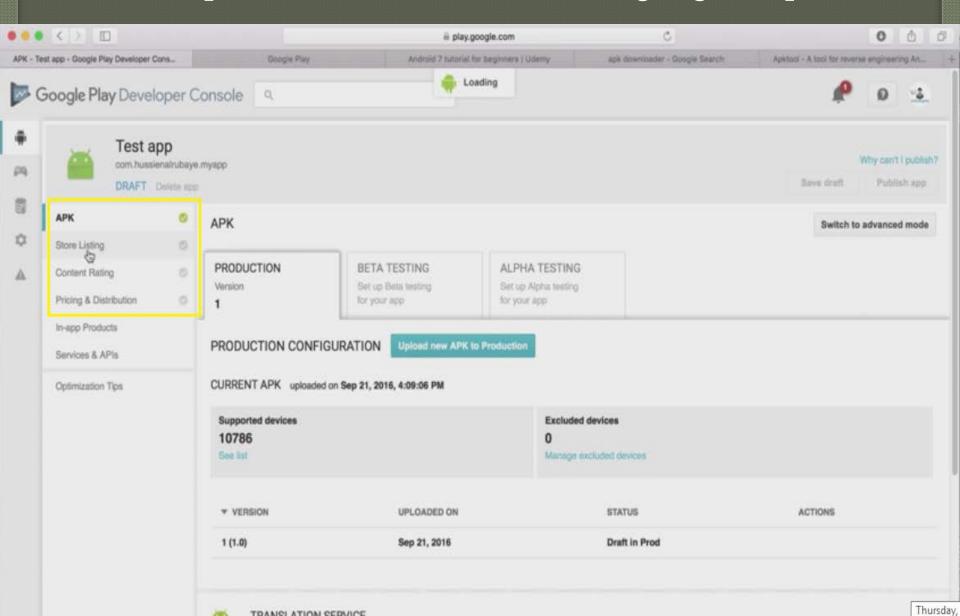
a

b

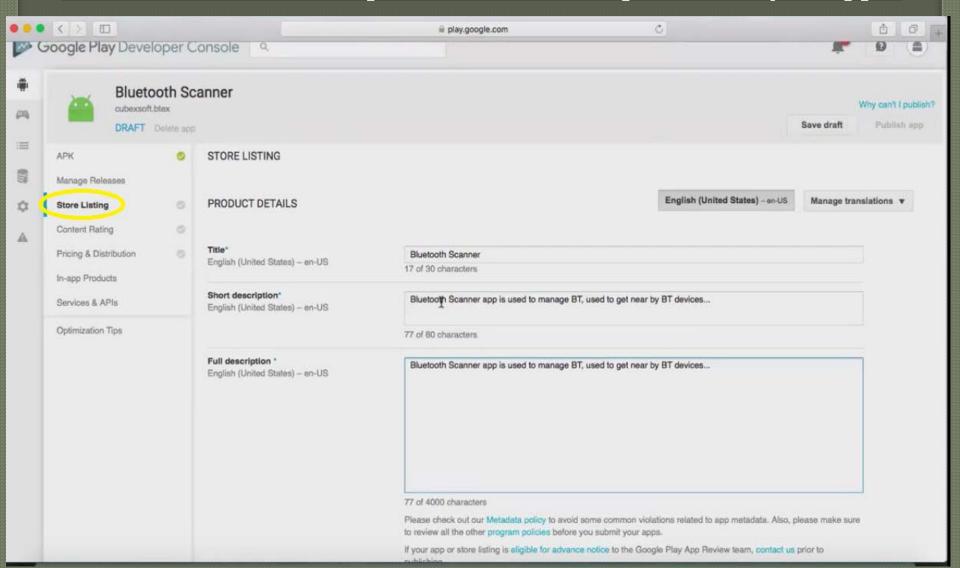
ADD NEW APPLICATION Default language * English (United States) - en-US \$ Title * 0 of 30 characters What would you like to start with? **Upload APK Prepare Store Listing** Cancel



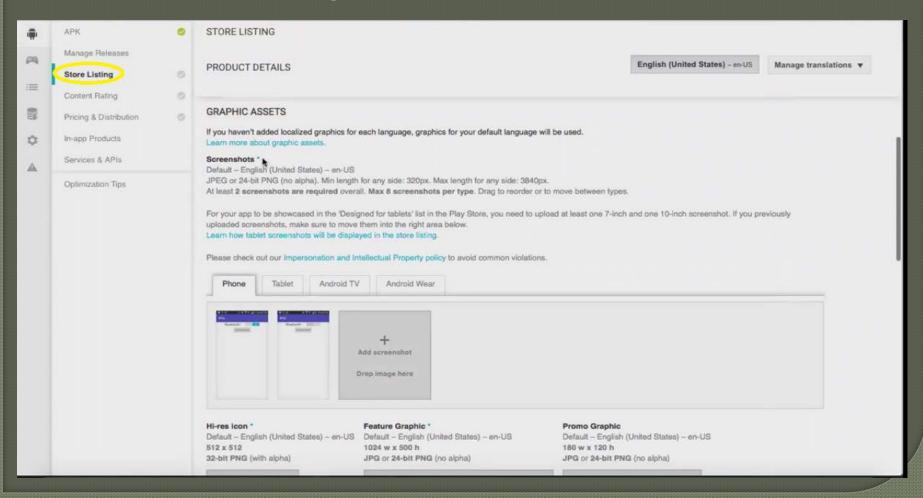
3. Finish the remaining steps in the order how it appeared and fill out the required information from the highlighted part.



Provide Title, Short Description and Full Description about your app.



Provide minimum of two screenshots of your app in the Graphic Assets is mandatory. Under graphic assets, you can add screenshots, images, videos, promotional graphics, and icons that showcase your app's features and functionality.

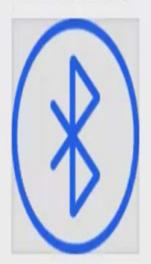


- The next step is to provide Hi-res-icon for your app with specified 512 x512 size. You can create an icon using falticon.com, then upload your icon.
- You should add
 Feature graphic with
 1024 w x 500 h size.
 Other sizes are not allowed.(like Banner)

Hi-res icon *

Default – English (United States) – en-US 512 x 512

32-bit PNG (with alpha)



TV Banner

Default – English (United States) – en-US

1280 w x 720 h

JPG or 24-bit PNG (no alpha)

Feature Graphic *

Default – English (United States) – en-US 1024 w x 500 h JPG or 24-bit PNG (no alpha)

Daydream 360 degree stereoscopic image

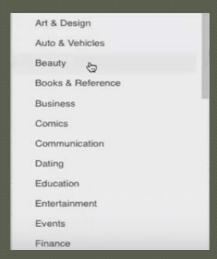
Default – English (United States) – en-US 4096 w x 4096 h

JPG or 24-bit PNG (no alpha)

Choose your application
 type as Applications

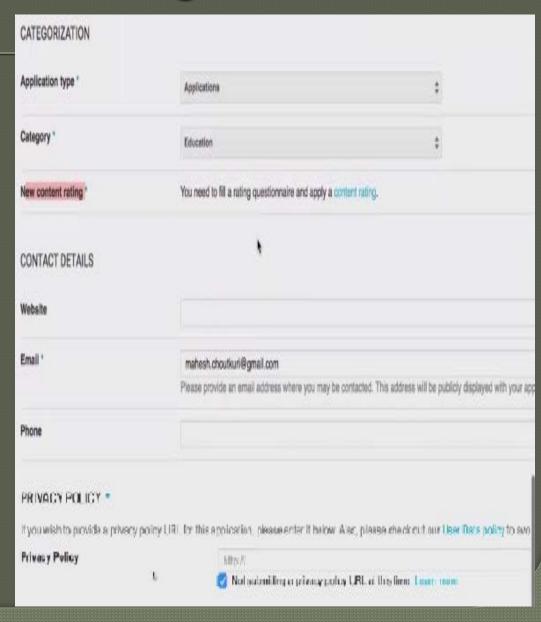
Games

• Choose the specific category from the list.

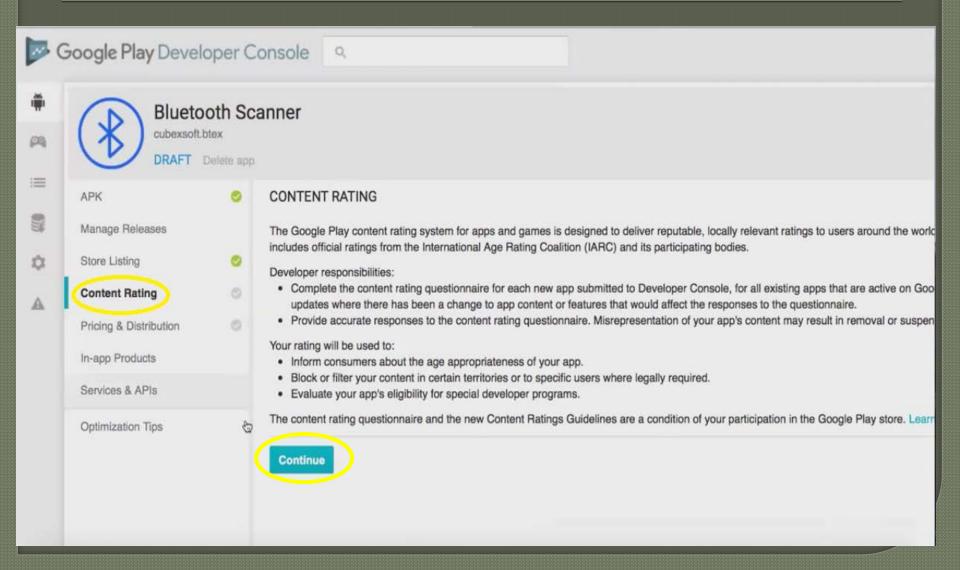


• After finishing all these steps click save draft in the top of the screen.

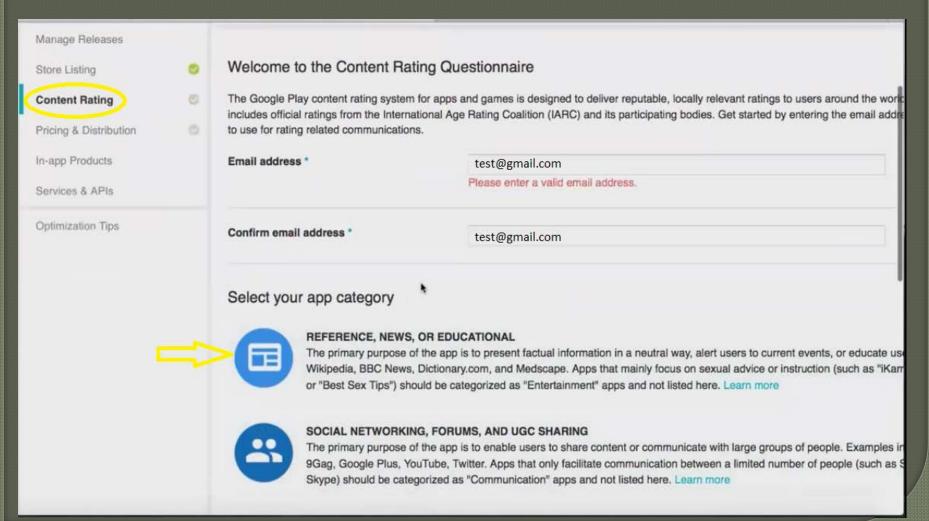
Sava draft



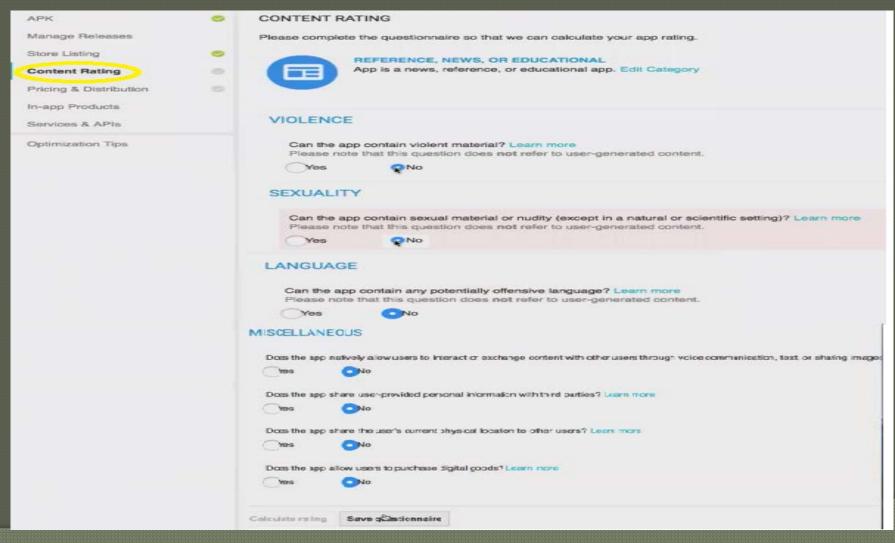
Your app's content rating level inform users of it's maturity level. Click on the Continue button.



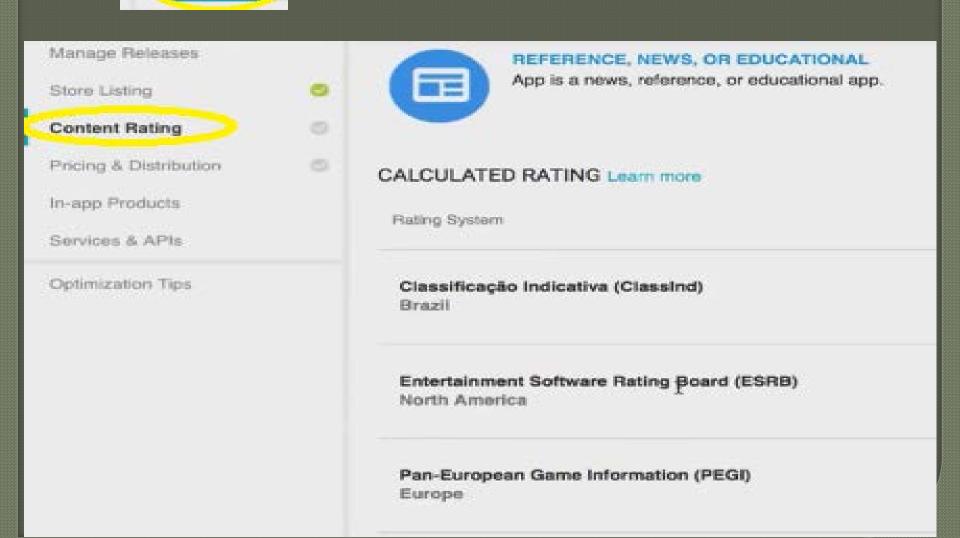
Fill out the Email address and Confirmation email address, then choose the category of your app. Once you choose the category you will get another screen.



Answer the questions appeared on the screen and click Save questionnaire button. Then click Calculate rating button, you will get next screen.



This screen give the information about different country rating. Finally click Apply rating button in the bottom of the screen.

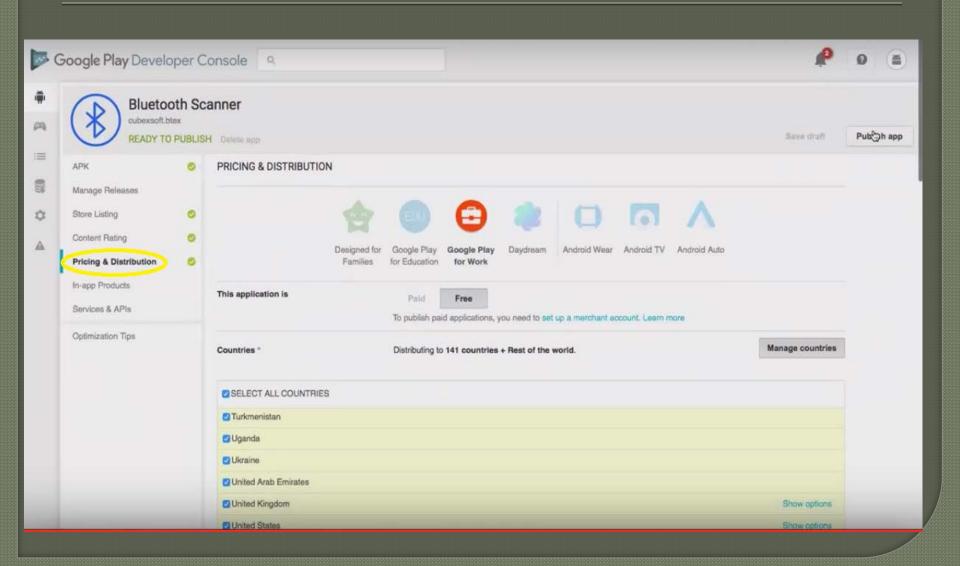


3.c. Pricing & Distribution

- You can publish your app as free to download or priced.
- Free apps can be downloaded by any Android user in Google Play.
- Priced apps can be downloaded only by users who are in a country that supports paid downloads and have registered a form of payment in Google Play, such as a credit card or Direct Carrier Billing.
- Priced apps can be changed to free at any time.
- If you do decide on a priced app or are selling in-app products, you'll need to setup a Google payments merchant account before you can publish.

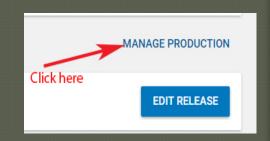
3.c. Pricing & Distribution

Answer the Mandatory option and click Save draft button on the top.

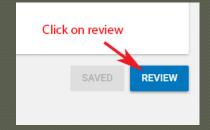


Manage Release

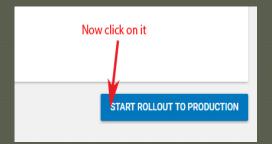
Click Manage Production. Click Edit
 Release to perform modification



Click review



 After review click on Start Rollout to production. Now you need to confirm.
 After confirm you will need to wait for one or six hour for approval.



Publish and update App useful resources

- Publishing guidelines link
 - https://support.google.com/googleplay/androi d-developer/#topic=3450769
 - https://developer.android.com/distribute/bestpractices/launch
- To update the apps on the Play Store read this resource.
 - https://support.google.com/googleplay/answer /113412?hl=en