

## Guide to Graphics & Content for App Deployment



The app developer building your app requires some information and graphical elements to customize your app. Additionally, the app marketplaces (stores) require graphical elements and other content to describe and show elements of your app. To better understand these needs, look at various apps and how they are represented in the [App Store](#) and in [Google Play](#). There are also many blogs and other documents on the web that provide information and guidance for app deployment. Links to a few of these are provided throughout this document. We look forward to deploying your apps with you.

### App Requirements

- Web Domains for App (Dev. & Prod.)
- Folder Location
- App Short name
- App Icons
- Launch/Splash Screen
- No Internet Connection Screen

### Marketplace Requirements

- App Marketplace Names
- Marketplace Icons
- Supported Languages
- Screenshots & Videos
- Feature Graphic
- Promo Graphic & Video
- Description
- Keywords
- Type & Category
- Content Rating
- Contact Details
- Privacy Policy
- Copyright Phrase
- Geographic Distribution
- Store Review Info
- Designed for Families
- Designed for Education
- Consent

Below are the detailed requirements of each element including links for additional guidance.



## App Graphics & Info Guide (These elements go into the app itself.)

- **Web Domains for App** – The set of apps being created will display a web domain and provide rich features available within apps. Provide your development domain to receive the development version of the app. We also need the test/staging and production domains to be used for the app.
- **App Short Names** – The name you want to show under the app’s launch icon. Long names displayed in the marketplaces are explained later in this document. [Article 1](#) [Article 2](#)
  - iOS - About 10-12 character maximum to avoid ellipses (...).
  - Android - About 9 characters, can try name by renaming a folder on an Android device with different names to see how they fit. A name with a space can wrap to a second line.
- **App Icons** – Icons are needed for several purposes including launching the app, for display with notifications, and other locations within both the iOS (Apple) and Android operating systems.
  - iOS - For all images and icons, the PNG format is recommended. You should avoid using interlaced PNGs. The standard bit depth for icons and images is 24 bits—that is, 8 bits each for red, green, and blue—plus an 8-bit alpha channel, for a total of 32 bits. You don’t need to constrain your palette to web-safe colors. The specifications below may differ from official iOS developer documentation. Use the specifications below unless directed otherwise. [Learn More](#)

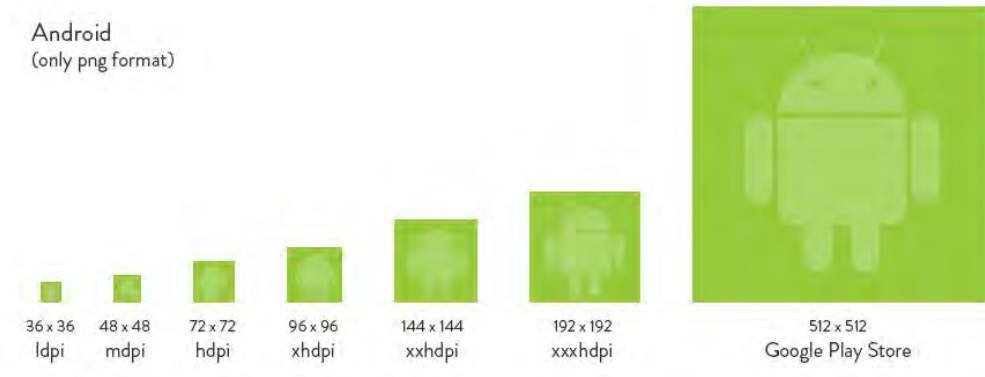


Folder for iOS icons – res\icon\ios

Asset	filename	iOS 8.0+	iOS 7.0+	iOS 6.1+
<b>iPhone 6 Plus</b>	icon-60@3x.png	180 x 180		
<b>iPhone &amp; iPod Touch</b>	icon-60.png / icon.png		60 x 60	57 x 57
<b>iPhone &amp; iPod Touch @2x</b>	icon-60@2x.png / icon@2x.png		120 x 120	114 x 114
<b>iPad</b>	icon-76.png / icon-72.png		76 x 76	72 x 72
<b>iPad @2x</b>	icon-76@2x.png / icon-72@2x.png		152 x 152	144 x 144
<b>Spotlight icon</b>	icon-40.png			40 x 40
<b>Spotlight icon @2x</b>	icon-40@2x.png			80 x 80
<b>iPhone Spotlight &amp; Settings</b>	icon-29.png			29 x 29
<b>iPhone Spotlight &amp; Settings @2x</b>	icon-29@2x.png			58 x 58
<b>iPad Spotlight &amp; Settings</b>	icon-50.png			50 x 50
<b>iPad Spotlight &amp; Settings @2x</b>	icon-50@2x.png			100 x 100
<b>App Store (ios Marketplace)</b>	icon-1024.png			1024 x 1024

[More Details](#)

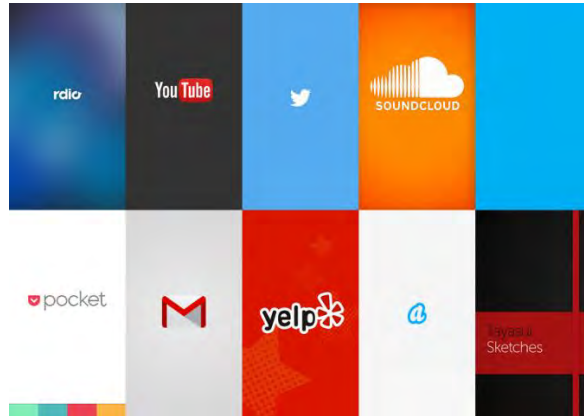
- Android – The table below lists the sizes needed in PNG format. Our tools will generate the other required sizes you may run across in online documentation. The Google Play Store icon is depicted in the graphic below and is not listed in the table, but is mentioned again in the “Marketplace Content Guide” section below. [Learn More](#) [More Details](#) [Cheatsheet](#)



Folder for Android icons – res\icon\android

Specification	Filename	Size	Scale
<b>ldpi</b>	ldpi.png	36 x 36	.75x
<b>mdpi</b>	mdpi.png	48 x 48	1x
<b>hdpi</b>	hdpi.png	72 x 72	1.5x
<b>xhdpi</b>	xhdpi.png	96 x 96	2x
<b>xxhdpi</b>	xxhdpi.png	144 x 144	3x
<b>xxxhdpi</b>	xxxhdpi.png	192 x 192	4x
<b>Google Play Store</b>	GPLAY.png	512 x 512	n/a

- **Launch Images (iOS) and Splash Screens (Android)** display immediately upon launching (opening) the app and disappear when the app has become ready to use. Most of the guidance these days points to this being simple and based on the graphic design of the app. See examples below. The same base image can be used for both iOS and Android; however, they must be formatted differently for both devices with different sizes provided as indicated below.



- iOS [Learn More](#)

Folder for iOS launch screens – res\screen\ios

Filename (all lower case)	Width	Height
ipad-landscape.png	1024	768
ipad-portrait.png	768	1024
ipad-2x-landscape.png	2048	1536
ipad-2x-portrait.png	1536	2048
ipadpro-landscape.png	2732	2048
ipadpro-portrait.png	2048	2732
iphone-portrait.png	320	480
iphone-4-portrait.png	640	960
iphone-5-portrait.png	640	1136
iphone-6-portrait.png	750	1334
iphone-6-landscape.png	1334	750
iphone-6+-portrait.png	1242	2208
iphone-6+-landscape.png	2208	1242

- Android [Learn More](#)

Folder for Android splash screens – res\screen\android

Filename (all lower case)	Width	Height
ldpi-portrait.png	320	426
ldpi-landscape.png	426	320
mdpi-portrait.png	320	470
mdpi-landscape.png	470	320
hdpi-portrait.png	480	640
hdpi-landscape.png	640	480
xhdpi-portrait.png	720	960
xhdpi-landscape.png	960	720

## Marketplace Content Guide (These elements become marketplace (store) content.)

### [App Store Overview by Apple](#)

Visit the App Store and Google Play for examples of content. Additionally, there are many helpful guides to building marketplace/store content online.

Note: Any text in light gray is handled by the app developer.

- All textual elements can be contained within one text or word processor file. Notate the platform (iOS or Android) and the description for the text element. Ex. Android Short App Description
- File location for text file: Marketplace\textelements.[appropriate extension]
  
- **App Name/Title** [Article 1](#) [Article 2](#)
  - App Store (Apple)
    - App Name (name in the App Store) – 256 character maximum
  - Google Play Store
    - App Name (name in Google Play Store) – 30 character maximum
  
- **Primary Language** (App Store)
  
- **Bundle ID** (App Store)
  - App ID Description (see above under App Name)
  - App ID Suffix – Explicit App ID (reverse domain name)
  - App Services – Select “Push Notifications”
  
- **Version** (App Store)
  
- **SKU** (App Store)
  
- **Screenshots** – App Screenshots are displayed within app marketplaces to give prospective owners/buyers an idea of how the app looks and functions. Some apps are simple and pure screenshots (no added text or graphics) are all that is needed while with other apps it may be a good idea to enhance screenshots with additional text. The actual screenshot can be reduced in size or eliminated to provide space for text and graphical enhancements.
  - App Store (Apple) - Screenshots must be in the JPG or PNG format, and in the RGB color space. App video previews must be in the M4V, MP4, or MOV format and can't exceed 500 MB. [Learn More](#)
  - Folder structure: Marketplace\ios\screenshot\[screen size]\[position indicator 1-5]
    - 4.7-inch
      - Count 5 at 750 x 1334 resolution
      - May include one App Preview video
    - 5.5-inch
      - Count 5 at 1242 x 2208 resolution

- May include one App Preview video
    - 4-inch
      - Count 5 at 640 x 1136 resolution
      - May include one App Preview video
    - 3.5-inch
      - Count 5 at 640 x 960 resolution
      - No capability for App Preview video
    - iPad
      - Count 5 at 1536 x 2048 resolution
      - May include one App Preview video
  - Google Play Store - JPEG or 24-bit PNG (no alpha). Min length for any side: 320px. Max length for any side: 3840px. At least 2 screenshots are required overall. Max 8 screenshots per type. Drag to reorder or to move between types. [Learn More](#)
  - Folder structure: Marketplace\android\screenshot\[screen size]\[position indicator 1-5]
    - Phone
    - 7-inch Tablet
    - 10-inch Tablet
- **App Icon**
    - App Store (Apple)
      - This icon will be used on the App Store and must be in the JPG or PNG format, with a minimum resolution of at least 72 DPI, and in the RGB color space. It must not contain layers or rounded corners. 1024 x 1024 pixels (don't scale up smaller artwork, because this could appear pixelated and blurry).
      - Folder structure: Marketplace\ios\storeicon.png
    - Google Play Store
      - 512 x 512, 32-bit PNG (with alpha) [Learn More](#)
      - Folder structure: Marketplace\android\storeicon.png
  - **Feature Graphic** (Google Play Store )
    - 1024 w x 500 h, JPG or 24-bit PNG (no alpha)
      - Folder structure: Marketplace\android\featuregraphic.png
  - **Promo Graphic** (Google Play Store )
    - 180 w x 120 h, JPG or 24-bit PNG (no alpha)
      - Folder structure: Marketplace\android\promographic.png

- **Promo Video** (Google Play Store - optional)
  - YouTube Video URL
  
- **Short App Description** (Google Play Store)
  - 80 character maximum
  - All textual elements can be contained within one text or word processor file. Note the platform (iOS or Android) and the description for the text element. Ex. Android Short App Description.
  - File location for text file: Marketplace\textelements.[appropriate extension]
  
- **Long App Description** (App Store and Google Play Store)
  - 4000 characters max
  
- **Keywords** – 100 characters (App Store) [Learn More](#)
  
- **Application Type** – Application or Game (Google Play Store ) [Learn More](#)
  
- **Application Category** – Fixed list, subsets of Application Type (Google Play Store )
  
- **Content Rating**
  - App Store (Apple) - Important: Apple rejects apps that include material that Apple finds obscene, pornographic, offensive, or defamatory.
    - 4+ Apps in this category contain no objectionable material.
    - 9+ Apps in this category may contain instances of the following content that may not be suitable for children under the age of 9:
      - Infrequent or mild occurrences of realistic violence
      - Infrequent or mild profanity
      - Infrequent or mild mature, suggestive, or horror-themed content
      - Frequent or intense cartoon or fantasy violence
    - 9+ Apps in this category may contain instances of the following content that may not be suitable for children under the age of 9:
      - Infrequent or mild occurrences of realistic violence
      - Infrequent or mild profanity
      - Infrequent or mild mature, suggestive, or horror-themed content
      - Frequent or intense cartoon or fantasy violence
    - 17+ Apps in this category may contain instances of the following content that may not be suitable for children under the age of 17:
      - Unrestricted web access, such as with an embedded browser
      - Gambling or contests

- Frequent or intense mature or suggestive content
    - Frequent or intense medical or treatment-focused content
    - Frequent or intense references to alcohol, tobacco, or drug use
    - Frequent or intense sexual content or nudity
  - Google Play Store
    - Questionnaire determines ratings for multiple countries. This questionnaire is too lengthy to publish here. We will plan a time to walk through the questionnaire together over the phone or in person.
- **Contact Details**
  - Website URL - optional (Google Play Store)
  - Email address - public (Google Play Store)
  - Phone - optional (Google Play Store)
  - Support URL - public (App Store)
  - Marketing URL - public (App Store)
- **Privacy Policy URL**
  - App Store (Apple) - A URL that links to your organization's privacy policy. Privacy policies are required for apps that are Made for Kids or offer auto-renewable In-App Purchases or free subscriptions. They are also required for apps with account registration, apps that access a user's existing account, or as otherwise required by law. Privacy policies are recommended for apps that collect user- or device-related data.
  - Google Play Store - [Learn More](#)
- **Copyright phrase (App Store (Apple) )**
  - Example: Copyright 2010-2015 CompanyName, Inc., All Rights Reserved
- **Geographic Distribution** – In which countries will the app be available – consider language translation and other cultural aspects.
  - App Store (Apple) - Routing App Coverage File -optional
    - Specify the geographic regions supported by your app. The file must be in the .geojson format and can only contain one multipolygon elements.
  - Google Play Store – Check box list of countries. Some countries have additional options.
- **App Review Info** – This provides information for Apple's reviewer staff to review/test the app. A demo login account is required if the app requires login to access all content and/or functionality. You should pre-establish a demo user for them to use. (App Store)



- Demo Account (for apps with user accounts)
  - Username(s)
  - Password(s)
- Notes (4,000 character max) – Provide any instruction or other information Apple’s review staff may need to have to better understand and use the app (website navigation and functionality).
  
- **Opt-in to Designed for Families** (Google Play Store) [Learn More](#)
  
- **Distribute your app through Google Play for Education** [Learn more](#)
  
- **Consent** (Google Play Store)
  - Marketing Opt-out (optional) - Do not promote my application except in Google Play and in any Google-owned online or mobile properties. I understand that any changes to this preference may take sixty days to take effect.
  - Content Guidelines - This application meets [Google Play Store Content Guidelines](#). Please check out these [tips on how to create policy compliant app descriptions](#) to avoid some common reasons for app suspension.
  - US Export Laws - I acknowledge that my software application may be subject to United States export laws, regardless of my location or nationality. I agree that I have complied with all such laws, including any requirements for software with encryption functions. I hereby certify that my application is authorized for export from the United States under these laws. [Learn More](#)