


LINK 3 continued..

All videos referred here are short videos (5 to 8 min.) related to the specific topics covered in this pdf. Watch the video and study the corresponding text before moving to next video.

Configuration Qualifiers:

https://www.youtube.com/watch?v=UsWk_sJLcf8

To create an alternative layout in Android Studio (using version 3.0 or higher), proceed as follows:

1. Open your default layout and then click **Orientation for Preview**  in the toolbar.
2. In the drop-down list, click to create a suggested variant such as **Create Landscape Variant** or click **Create Other**.

For **Landscape Variant** refer =>

https://www.youtube.com/watch?v=NQJgYD_qUwg

If you selected **Create Other**, the **Select Resource Directory** appears. Here, select a screen qualifier on the left and add it to the list of **Chosen qualifiers**. When you're done adding qualifiers, click **OK**. (See the following sections for information about screen size qualifiers.)

https://www.youtube.com/watch?v=1_AAANiKZas

This creates a duplicate layout file in the appropriate layout directory so you can begin customizing the layout for that screen variat.

Use the smallest width qualifier:

- The "smallest width" screen size qualifier allows you to provide alternative layouts for screens that have a minimum width measured in density-independent pixels(dp or dip).
- By describing the screen size as a measure of density-independent pixels, Android allows you to create layouts that are designed for very specific screen dimensions while avoiding any concerns you might have about different pixel densities.

For example, you can create a layout named `main_activity` that's optimized for handsets and tablets by creating different versions of the file in directories as follows:

```
res/layout/main_activity.xml           # For handsets
(smaller than 600dp available width)
res/layout-sw600dp/main_activity.xml  # For 7"
tablets (600dp wide and bigger)
```

The smallest width qualifier specifies the smallest of the screen's two sides, regardless of the device's current orientation, so it's a simple way to specify the overall screen size available for your layout.

Refer => <https://www.youtube.com/watch?v=3tzEcB-GOKI>

Here's how other smallest width values correspond to typical screen sizes:

- 320dp: a typical phone screen (240x320 ldpi, 320x480 mdpi, 480x800 hdpi, etc).
- 480dp: a large phone screen ~5" (480x800 mdpi).
- 600dp: a 7" tablet (600x1024 mdpi).
- 720dp: a 10" tablet (720x1280 mdpi, 800x1280 mdpi, etc).

Following Figure provides a more detailed view of how different screen dp widths generally correspond to different screen sizes and orientations.

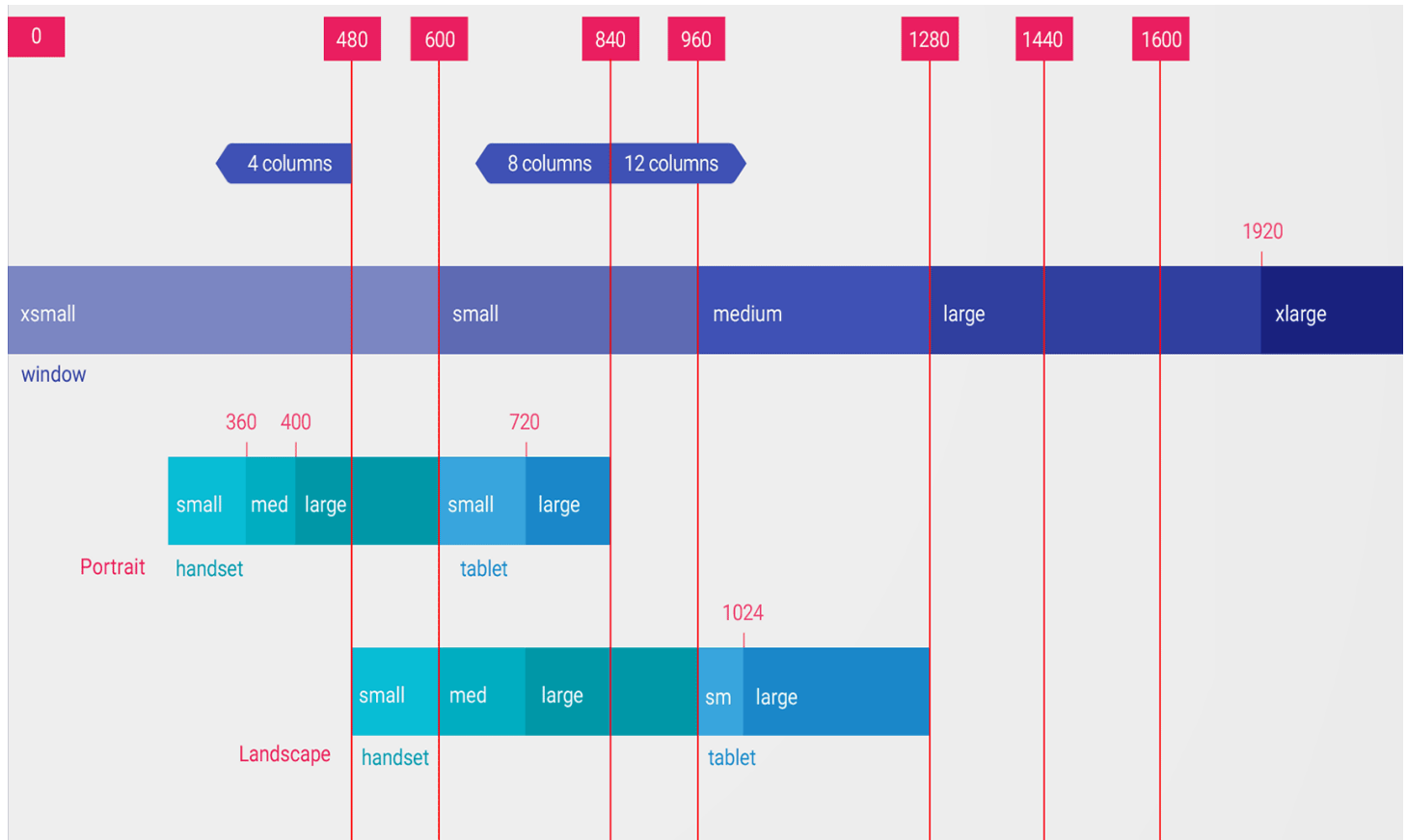


Figure : Recommended width breakpoints to support different screen sizes

- All the figures for the smallest width qualifier are density-independent pixels, because what matters is the amount of screen space available after the system accounts for pixel density (not the raw pixel resolution).

Note: The sizes that you specify using these qualifiers are **not the actual screen sizes**.

As explained in the above video.

- Rather, the sizes are for the width or height in dp units that are **available to your activity's window**.

- The Android system might use some of the screen for system UI (such as the system bar at the bottom of the screen or the status bar at the top), so some of the screen might not be available for your layout.
- Thus, the sizes you declare should be specifically about the sizes needed by your activity—the system accounts for any space used by system UI when declaring how much space it provides for your layout.

Short Revision

<https://www.youtube.com/watch?v=JiTn9wsiGsc>

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