

Code Review 4 – Code Review for Lab05 (ScoreKeeper)

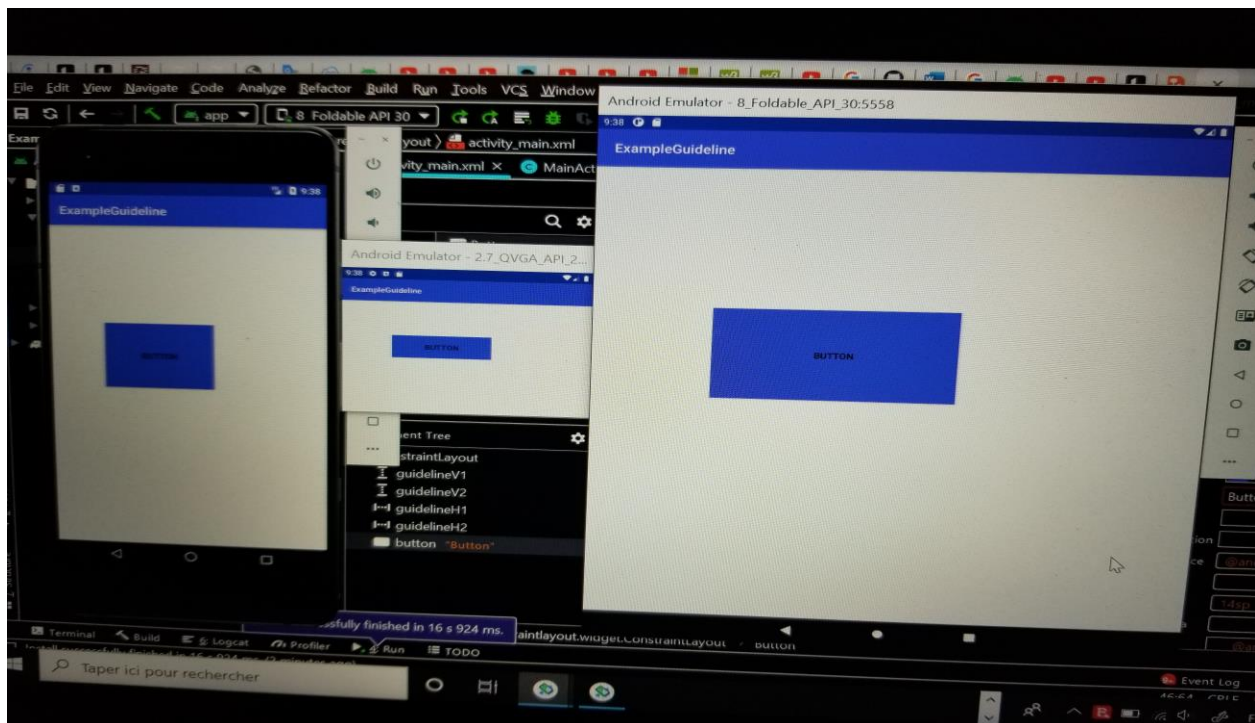
In this Lab it is all about positioning elements and it is very challenging in Android Development.

After doing this Lab I noticed that the challenge in doing apps in Android is more to position elements and having the almost same look in all devices, than to code.

The ideal way and after reading many articles and seeing many YouTube videos on that subject is to create each specific dimension xml file for each device size, then when launching the app, the elements will fit corresponding to the correct xml file will be applied for this specific device size, but even doing that the other challenge will be how to apply different text sizes depending on which size the app is launched on, I found an interesting parameter “autoSizeTextType” I set this parameter to “uniform” to textSize it will change the size of texts depending on which device size, but it is only working on API26 and above, under API26 it will apply the text sizes by default, I also applied textMinSize and textMaxSize to specific values if we want to not go beyond a certain value especially on max values.

When trying different layouts(LinearLayout, RelativeLayout, ConstraintLayout...) I can say that every layout has its advantages and disadvantages, always the question of finding the perfect positioning for all size devices is a challenge, but I found an interesting layout called Guideline (Horizontal and Vertical), and its property layout_constraintGuide_percent.

An element can be positioned between four guidelines two horizontal and two vertical whose percentage is applied to layout_constraintGuide_percent provided that layout_width and layout_height be at 0, in this case in each size the element will take its shape proportionately to the position of the guidelines (See the example below).



The button size will take its shape depending on the size of the device.

I can say that ConstraintLayout is very powerful, I tried to use it without guideLines but I feel that I am not good at it yet, but to use it we must master it, it is my challenge for the project.