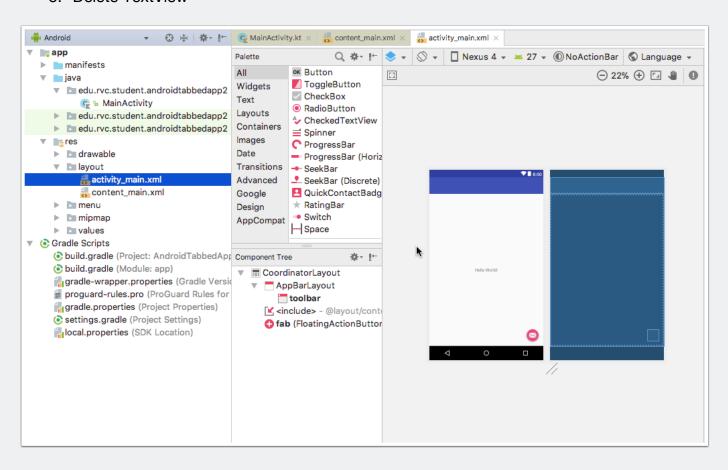
# **Step by Step**



## activity\_main.xml -

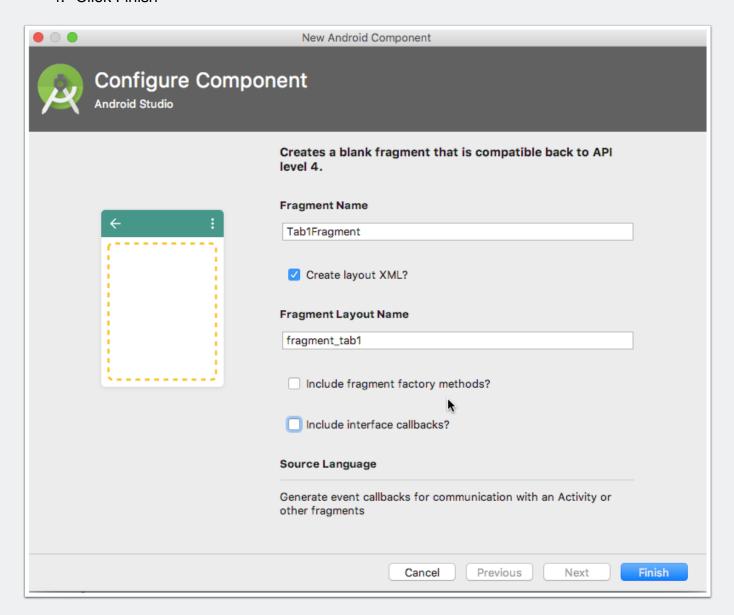
1. Create New Project Named AndroidTabbedApp

- 2. Choose Basic Activity
- 3. Do NOT choose fragment and Finish
- 4. Go to ActivityMain
- 5. Delete TextView



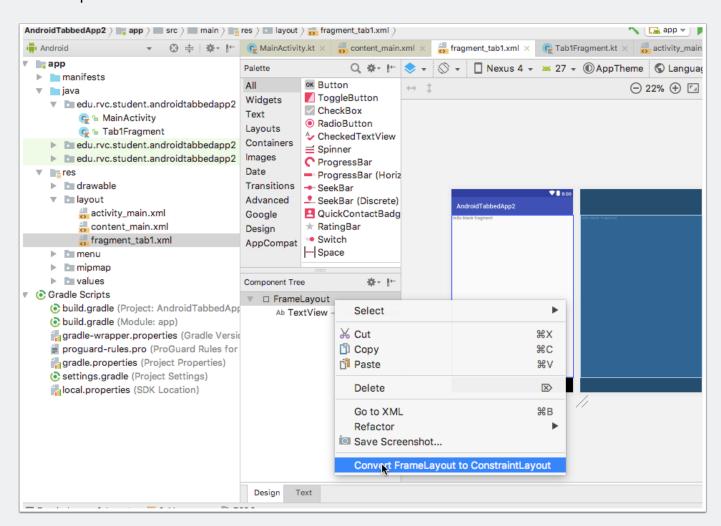
#### **Create First our of Four Fragments**

- 1. Right Click on Java Folder > New > Fragment > Blank
- 2. Rename to Tab1Fragment
- 3. Uncheck bottom two include checkboxes
- 4. Click Finish



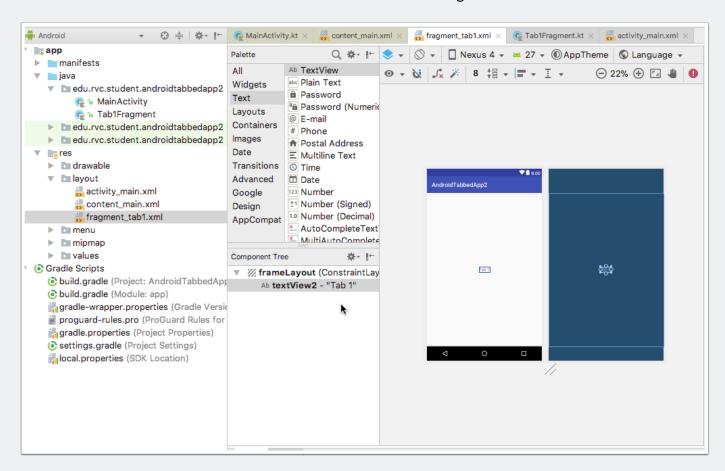
#### **Change Constraint**

 Right-click on FrameLayout and choose Convert FrameLayout to ConstraintLayout menu option



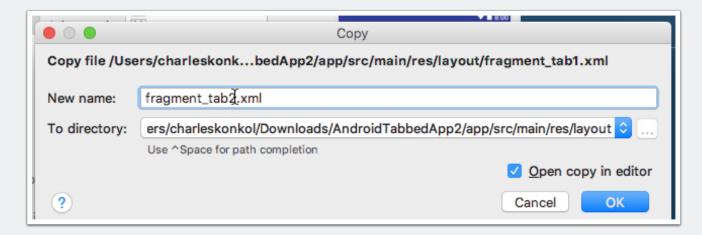
#### fragment\_tab1.xml -

- 1. Delete TextView
- 2. Add New TextView and Name Tab 1 and Center in Page



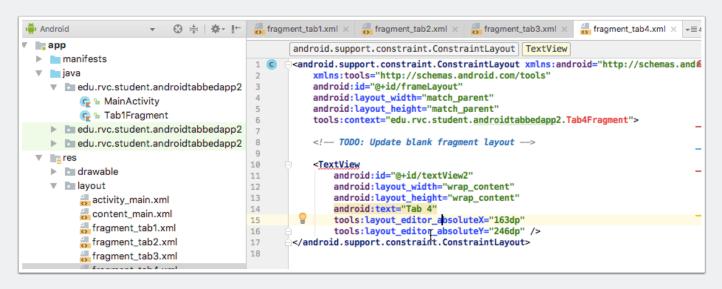
#### **Copy Fragment**

- 1. Right-click on fragment\_tab1.xml & select copy
- 2. Right-click on layout folder and select paste
- 3. Change number in name by adding 1 > select OK



#### fragment\_tab#.xml -

- 1. After file opens change number by adding 1 on Lines 6 &14
- 2. Repeat above steps 1-4 2 more time for fragment\_tab3 & fragment\_tab4
- 3. You should now have, fragment\_tab3.xml, fragment\_tab4.xml



#### Tab#Fragment.kt -

- 1. Copy/Paste/Rename Tab1Fragment 3 times
- 2. Rename by adding 1 to number in name
- 3. Rename line 18 by adding 1 to number

```
AndroidTabbedApp2 > 📑 app > 🔤 src > 🛅 main > 🛅 java > 🖿 edu > 🛅 rvc > 🛅 student > 🖿 androidtabbedapp2 > 😴 Tab4Fragment.kt >
                                                                                                                  *
Android
                       🔻 😲 🛊 🖟 b2.xml × 👩 fragment_tab3.xml × 👩 fragment_tab4.xml × 🕞 Tab2Fragment.kt × 🕞 Tab3Fragment.kt ×

▼ ■ app

  manifests
                                                 package edu.rvc.student.androidtabbedapp2
  ▼ 📄 java
    edu.rvc.student.androidtabbedapp2
                                                + import ...
          🕝 🖫 MainActivity
          🕝 🖫 Tab1Fragment
                                                  * A simple [Fragment] subclass.
          🕝 🖫 Tab2Fragment
                                                 class Tab4Fragment : Fragment() {
          🕝 🖫 Tab3Fragment
          🕝 🖫 Tab4Fragment
    ▶ edu.rvc.student.androidtabbedapp2 15 of
                                                     override fun onCreateView(inflater: LayoutInflater?, container: ViewGroup?,
    edu.rvc.student.androidtabbedapp2
                                                         savedInstanceState: Bundle?): View? {
// Inflate the layout for this fragment
  ▼ nes
                                                         return inflater!!.inflate(R.layout.fragment_tab4, container, attachToRoot: false)
     ▶ ☐ drawable
     ▼ layout
          activity_main.xml
                                                 }// Required empty public constructor
          acontent_main.xml
          fragment_tab1.xml
           fragment_tab2.xml
          fragment tab3.xml
          fragment_tab4.xml
```

#### **Adding Page Adapter**

- 1. Right-CLick on Java Folder and Create New Kotlin Class
- 2. Name: TabPagerAdapter
- 3. Paste Below Code in Adapter & Save

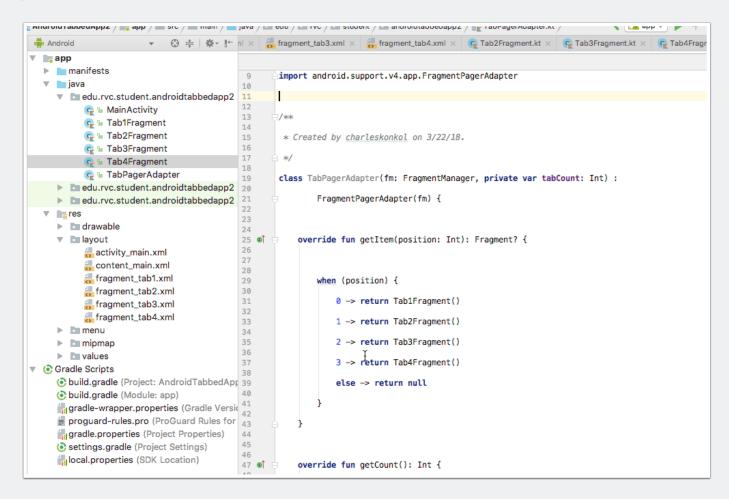
import android.support.v4.app.Fragment

import android.support.v4.app.FragmentManager

import android.support.v4.app.FragmentPagerAdapter

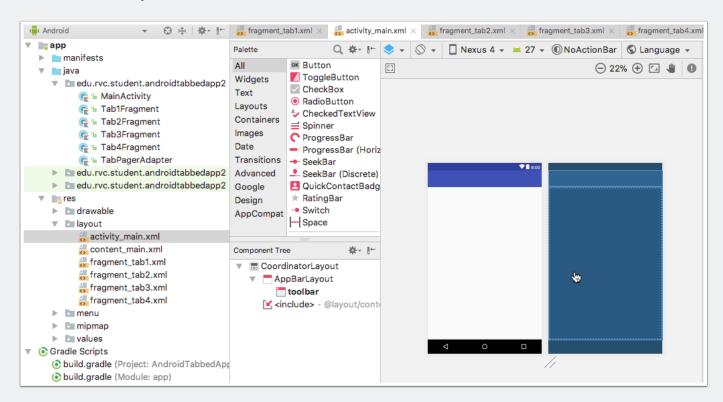
```
/**
* Created by charleskonkol on 3/22/18.
*/
class TabPagerAdapter(fm: FragmentManager, private var tabCount: Int):
    FragmentPagerAdapter(fm) {
 override fun getItem(position: Int): Fragment? {
    when (position) {
      0 -> return Tab1Fragment()
      1 -> return Tab2Fragment()
      2 -> return Tab3Fragment()
      3 -> return Tab4Fragment()
      else -> return null
    }
 }
 override fun getCount(): Int {
    return tabCount
 }
```

}



#### activity\_main.xml -

- 1. Go to activity\_main.xml and remove the floatingactionbutton
- 2. Go to MainActivity and remove code for fab.setOnClickListener {}
- 3. Delete import xxx.R.id.fab line



### activity\_main.xml - Add ViewPager and TabLayout

- 1. Place code right above the
- </android.support.design.widget.CoordinatorLayout>
- 1. Copy/Paste Below Code for tabs placed on bottom

<!-- add ViewPager -->

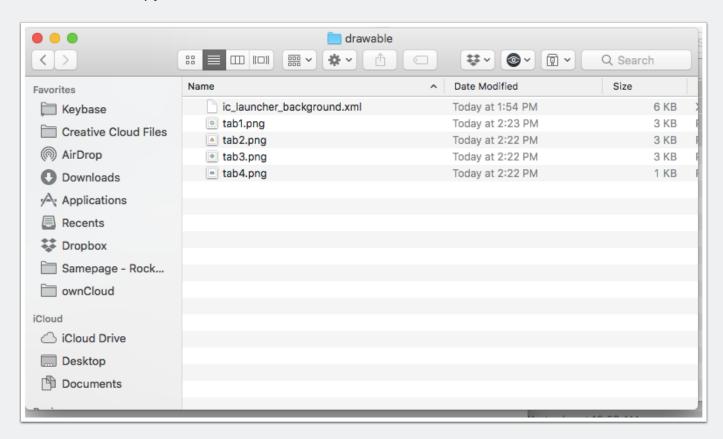
```
<android.support.v4.view.ViewPager
 android:id="@+id/pager"
 android:layout_width="match_parent"
 android:layout_height="match_parent"
 app:layout_behavior="@string/appbar_scrolling_view_behavior"
 />
<!-- add TabLayout at Botton -->
<android.support.design.widget.TabLayout
 android:id="@+id/tab layout"
 android:layout_width="match_parent"
 android:layout_gravity="end|bottom"
 android:layout_height="wrap_content"
 app:tabGravity="fill"
 app:tabMode="fixed" />
   1. If you wanted tabs to be at top of pages place TabLayout code right above
      </android.support.design.widget.AppBarLayout>
   2. Copy/Paste below<!-- add TabLayout at Top>
<!-- add TabLayout at Top > -->
```

```
<android.support.design.widget.TabLayout
android:id="@+id/tab_layout"
android:layout_width="match_parent"
android:layout_height="wrap_content"
app:tabGravity="fill"
app:tabMode="fixed" />
```

```
fragment_tab1.xml ×
Android
                                                                                                            fragment_tab3.xml
                             ⊕ 💠 | ‡ - 1 🗠
                                                                  activity_main.xml ×
                                                                                     fragment_tab2.xml
                                                                                                                                 -≡ε
 📑 app
                                                 << android.support.design.widget.AppBarLayout</pre>
  manifests
                                                     <include tayout="@tayout/content_main" />
                                            39
                                            40
                                                     <!-- add ViewPager --->
     edu.rvc.student.androidtabbedapp2
                                            41
           🕝 🖫 MainActivity
                                                         <android.support.v4.view.ViewPager</pre>
                                            42
           🕝 🖫 Tab1Fragment
                                            43
                                            44
                                                             android:id="@+id/pager"
           🕝 🖫 Tab2Fragment
           🕝 🖫 Tab3Fragment
                                            46
                                                             android:layout_width="match_parent"
           🕝 🖥 Tab4Fragment
                                            47
           🕞 🖫 TabPagerAdapter
                                                             android:layout_height="match_parent"
                                            48
     edu.rvc.student.androidtabbedapp2
                                                             app:layout_behavior="@string/appbar_scrolling_view_behavior"
     edu.rvc.student.androidtabbedapp2
     res
                                            52
     drawable
                                            53
     layout
                                             55
           activity_main.xml
                                                         <!-- add TabLayout at Botton -->
           content_main.xml
                                            58
                                                         <android.support.design.widget.TabLayout</pre>
           fragment_tab1.xml
                                            59
           fragment_tab2.xml
                                                             android:id="@+id/tab_layout"
                                            60
            fragment_tab3.xml
                                            61
           fragment_tab4.xml
                                            62
                                                             android:layout_width="match_parent"
                                            63
                                            64
                                                             android:layout_gravity="end|bottom"
       mipmap mipmap
                                            65
     values
                                            66
                                                             android:layout_height="wrap_content"
Gradle Scripts
                                            67
                                                             app:tabGravity="fill"
     build.gradle (Project: AndroidTabbedApp 68
     build.gradle (Module: app)
                                                             app:tabMode="fixed" />
     gradle-wrapper.properties (Gradle Versic 71
                                                     </android.support.design.widget.CoordinatorLayout>
     proguard-rules.pro (ProGuard Rules for 72
     gradle.properties (Project Properties)
     settings.gradle (Project Settings)
```

#### Add icons & code to On\_Create

- 1. download 4 mobile png icons from <a href="https://www.iconfinder.com/">https://www.iconfinder.com/</a> search/?q=menu&price=free(Links to an external site.)Links to an external site.
- 2. rename icons to tab1.png, tab2.png, tab3,png, tab4.png
- 3. move icons to drawable folder
  - 1. Right-Click on drawable folder and open in folder
  - 2. Copy/Paste icons into drawable folder



### MainActivity.kt - Code for icons.

Add to newline below

classMainActivity : AppCompatActivity() {

// icons for tabs

**private val homeicons**=*intArrayOf*(R.drawable.*tab1*, R.drawable.*tab2*, R.drawable.*tab3*, R.drawable.*tab4*)

```
package edu.rvc.student.androidtabbedapp2

import ...

class MainActivity : AppCompatActivity() {

// icons for tabs
private val homeicons = intArrayOf(R.drawable.tab1, R.drawable.tab2, R.drawable.tab3, R.drawable.tab4)

T
```

#### MainActivity.kt - configureTabLayout()

- 1. Add configureTabLayout() function
- 2. Add call to configureTabLayout() right before end of override fun OnCreaete () .
- 3. Should look like below.

```
override fun onCreate(savedInstanceState: Bundle?) {
   super.onCreate(savedInstanceState)
   setContentView(R.layout.activity_main)
   setSupportActionBar(toolbar)
   configureTabLayout()
private fun configureTabLayout() {
   //see https://developer.android.com/reference/android/R.drawable.html
   tab_layout.addTab(tab_layout.newTab().setIcon(homeicons[0]))
   tab_layout.addTab(tab_layout.newTab().setIcon(homeicons[1]))
   tab_layout.addTab(tab_layout.newTab().setIcon(homeicons[2]))
   tab_layout.addTab(tab_layout.newTab().setIcon(homeicons[3]))
   val adapter = TabPagerAdapter(supportFragmentManager, I
            tab_layout.tabCount)
   pager.<u>adapter</u> = adapter
   pager.addOnPageChangeListener(
           TabLayout.TabLayoutOnPageChangeListener(tab_layout))
    tab_layout.addOnTabSelectedListener(object :
            TabLayout.OnTabSelectedListener {
       override fun onTabSelected(tab: TabLayout.Tab) {
            pager.currentItem = tab.position
       override fun onTabUnselected(tab: TabLayout.Tab) {
       override fun onTabReselected(tab: TabLayout.Tab) {
       }
   })
```