Source code address

material-components-android/docs/components/BottomNavigation.md at master · material-components/material-components-android · GitHub

Steps

1. no extra dependencies needed (in my case).
2. add a navigation bar container in activity_main.xml.

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <com.google.android.material.bottomnavigation.BottomNavigationView
        android:id="@+id/bottom_navigation"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="1.0"
        app:menu="@menu/navigation_menu"
        tools:layout_editor_absoluteX="0dp" />


</androidx.constraintlayout.widget.ConstraintLayout>
```

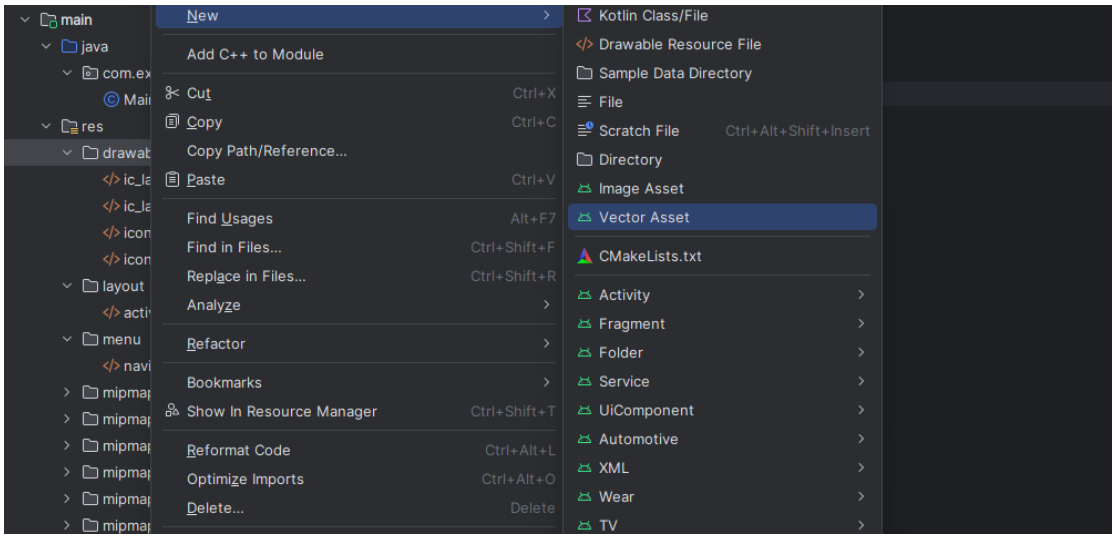
3. Create a menu folder, generate a new menu file named “navigation_menu” (be the same name as declared in the navigation bar), add menu items.

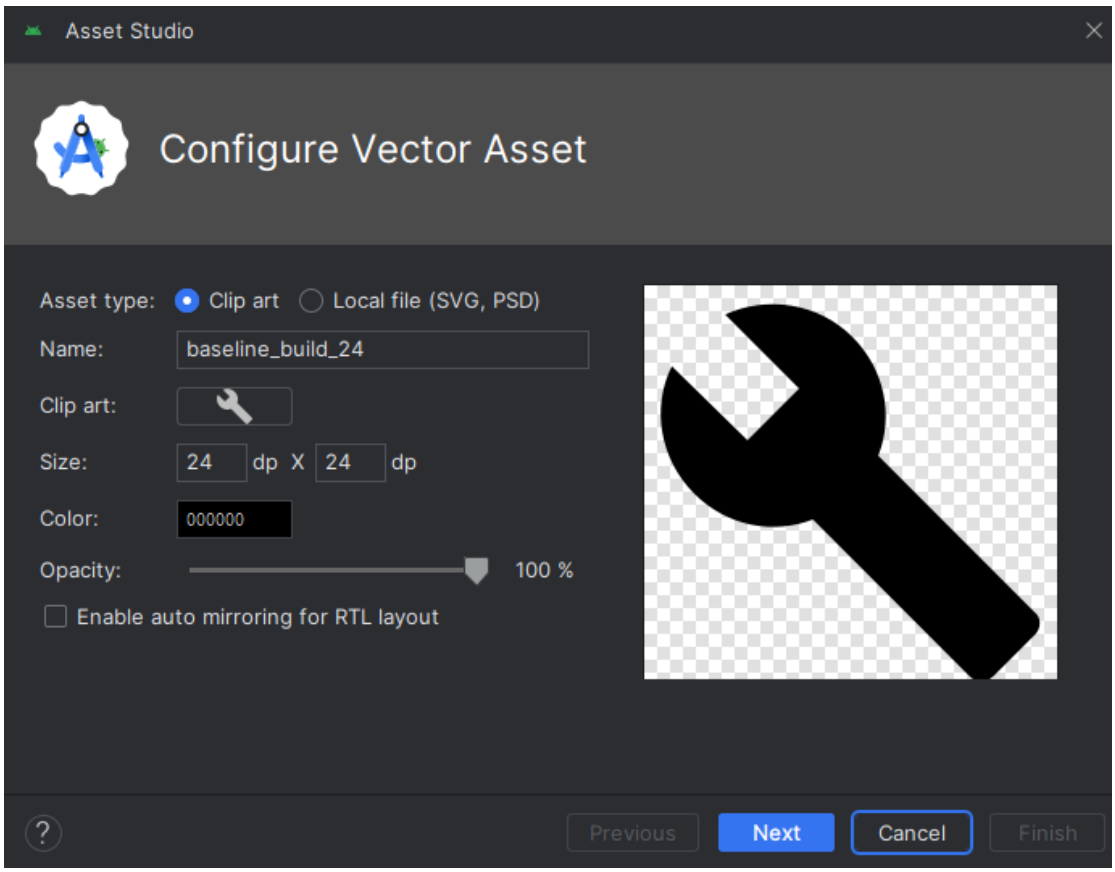
```
<?xml version="1.0" encoding="utf-8"?>
<menu xmlns:android="http://schemas.android.com/apk/res/android">

    <item
        android:id="@+id/item_1"
        android:enabled="true"
        android:icon="@drawable/icon_1"
        android:title="label1"/>
    <item
        android:id="@+id/item_2"
        android:enabled="true"
        android:icon="@drawable/icon_2"
        android:title="label_2"/>

</menu>
```

4. Create vector assets in drawable folder as the icon of each menu item.





5. In Java code, instantiate and add action listener to the navigation bar. Avoid using a switch statement as it may reported error; instead, use if-else.

```java
    NavigationBarView nav = findViewById(R.id.bottom_navigation);

    NavigationBarView.OnItemSelectedListener listener = new NavigationBarView.OnItemSelectedListener() {
        1 usage
        @Override
        public boolean onNavigationItemSelected(@NonNull MenuItem item) {
            if(item.getItemId() == R.id.item_1){

                // type code here!
                Toast.makeText( context: MainActivity.this,  text: "Item 1 Clicked", Toast.LENGTH_SHORT).show();
                return true;
            }

            else if (item.getItemId() == R.id.item_2){

                //type code here!
                Toast.makeText( context: MainActivity.this,  text: "Item 2 Clicked", Toast.LENGTH_SHORT).show();
                return true;
            }

            else return false;
        }
    };

    nav.setOnItemSelectedListener(listener);

}
```