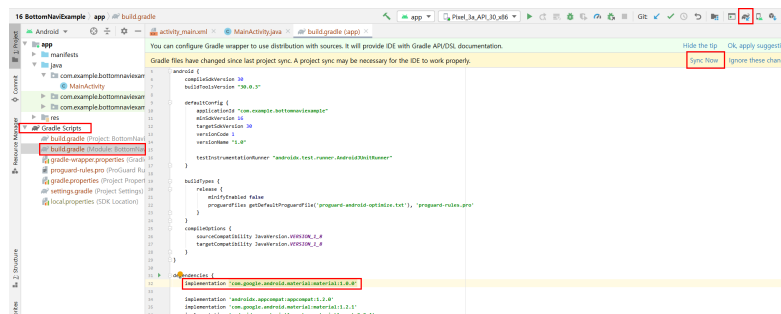


# 16 인스타 하단바 만들기

## 결과

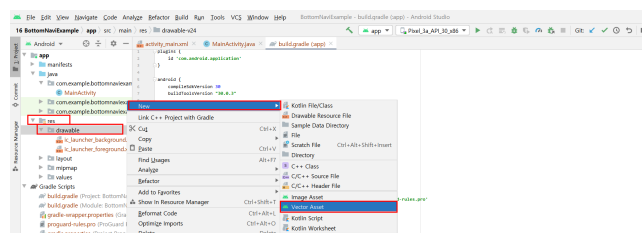


## 1. Gradle Scripts 수정

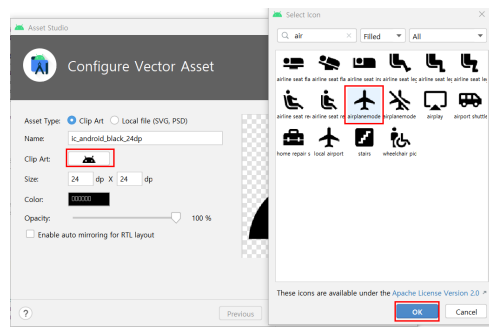


## 2. Vector Asset으로 원하는 Icon 추가

- res - drawable - New - Vector Asset

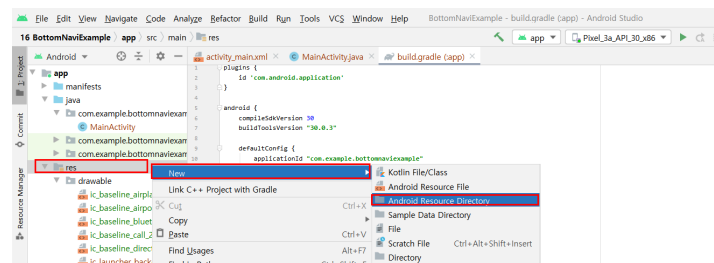


- Clip Art - 원하는 클립아트 선택 - OK

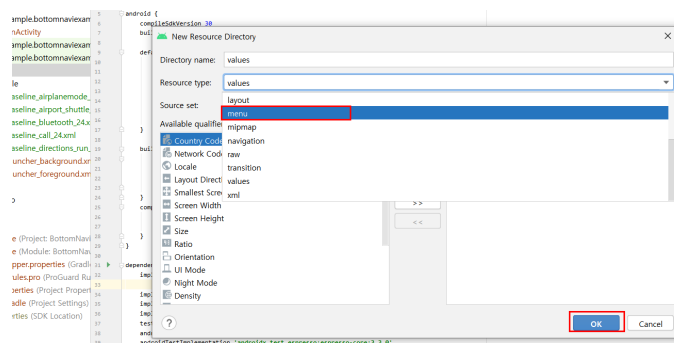


### 3. menu 폴더 생성

- res - Neww - Android Resource Directory

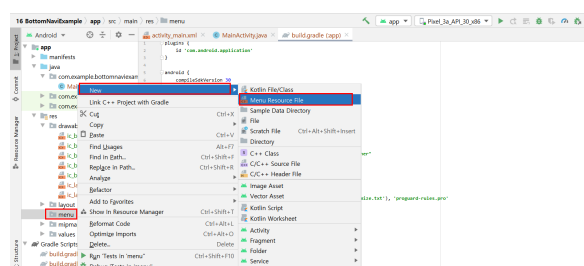


- Resource type: menu 선택 - OK

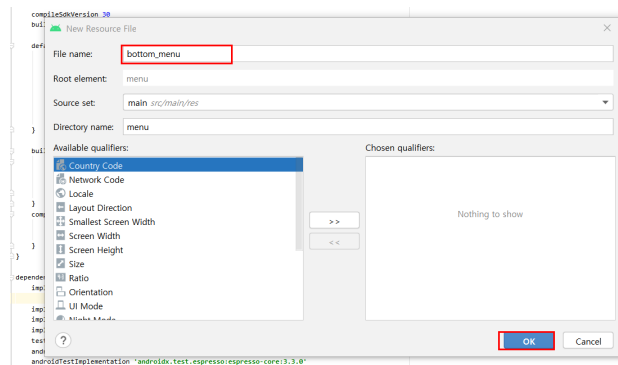


### 4. bottom\_menu.xml 생성

- menu - New - Menu Resource File



- File name : 설정 - OK



- bottom\_menu.xml 코드

```
<?xml version="1.0" encoding="utf-8"?>
<menu xmlns:android="http://schemas.android.com/apk/res/android">
    <item
        android:id="@+id/action_airplane"
        android:enabled="true"
        android:icon="@drawable/ic_baseline_airplanemode_active_24"
        android:title="비행기" />

    <item
        android:id="@+id/action_airport"
        android:enabled="true"
        android:icon="@drawable/ic_baseline_airport_shuttle_24"
        android:title="버스" />

    <item
        android:id="@+id/action_bt"
        android:enabled="true"
        android:icon="@drawable/ic_baseline_bluetooth_24"
        android:title="블루투스" />

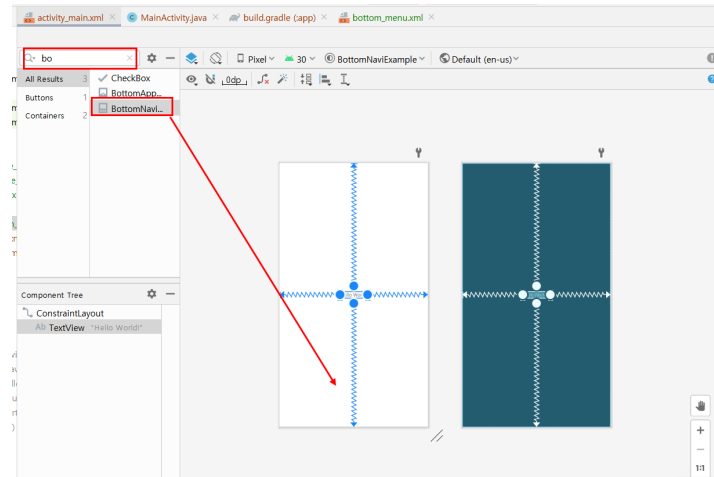
    <item
        android:id="@+id/action_call"
        android:enabled="true"
        android:icon="@drawable/ic_baseline_call_24"
        android:title="전화" />

    <item
        android:id="@+id/action_run"
        android:enabled="true"
        android:icon="@drawable/ic_baseline_directions_run_24"
        android:title="사람" />

</menu>
```

## 5. activity\_main.xml 코드

- ConstraintLayout 써보기



- 신기하게 저렇게 수정만 좀 하면 된다.



- activity\_main.xml 코드

```
<?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">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Hello World"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <com.google.android.material.bottomnavigation.BottomNavigationView
        android:id="@+id/bottomNavi"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        app:itemIconTint="#000000"
        app:itemTextColor="#000000"
        app:layout_constraintBottom_toBottomOf="parent"
        app:menu="@menu/bottom_menu"
        tools:layout_editor_absoluteX="8dp" />

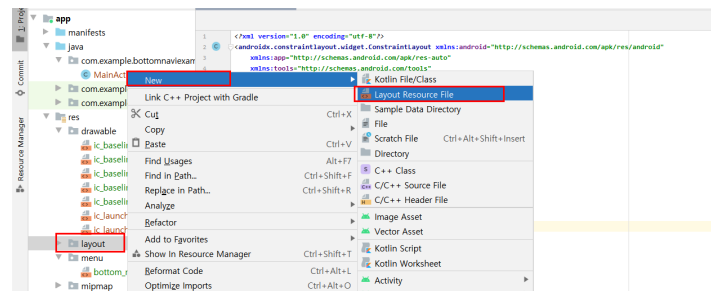
    <FrameLayout
        android:id="@+id/main_frame"
        android:layout_width="match_parent"
        android:layout_height="659dp"
        app:layout_constraintBottom_toTopOf="@+id/bottomNavi"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent">

    </FrameLayout>

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

## 6. frag1.xml, frag2.xml, frag3.xml, frag4.xml, frag5.xml 생성

- layout - New - Layout Resource File



- frag1.xml 코드

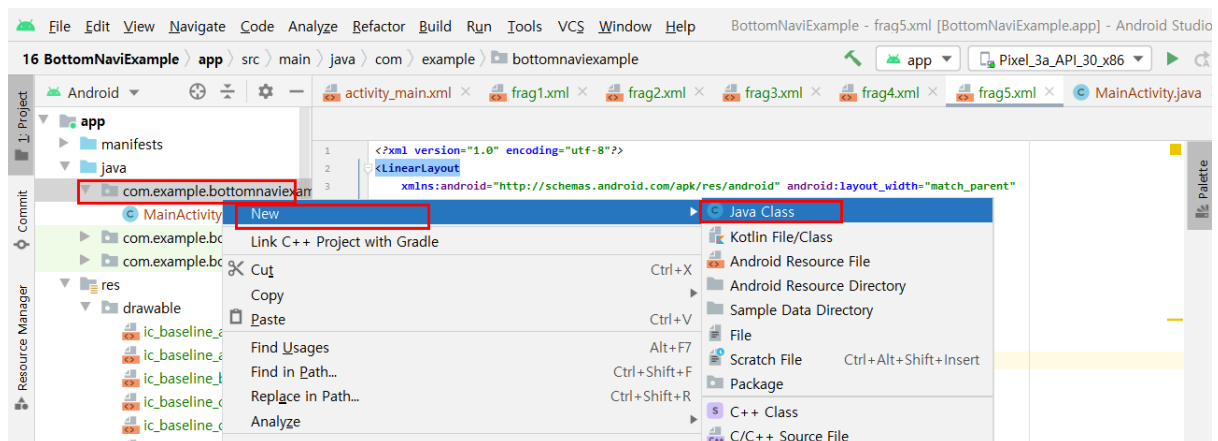
```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="100dp"
        android:layout_gravity="center"
        android:text="1번 화면 입니다."
        android:textSize="40sp" />

</LinearLayout>
```

## 7. Frag1.java, Frag2.java, Frag3.java, Frag4.java, Frag5.java 생성

- New - Java Class



- Frag1.java 코드

```
package com.example.bottomnaviexample;

import android.os.Bundle;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;

import androidx.annotation.Nullable;
```

```
import androidx.fragment.app.Fragment;

public class Frag1 extends Fragment {

    private View view;

    @Nullable
    @Override
    public View onCreateView(LayoutInflater inflater, @Nullable ViewGroup container, Bundle savedInstanceState) {
        view = inflater.inflate(R.layout.frag1, container, false);

        return view;
    }
}
```

## 8. MainActivity. java 코드

```
package com.example.bottomnaviexample;

import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;
import androidx.fragment.app.Fragment;
import androidx.fragment.app.FragmentManager;
import androidx.fragment.app.FragmentTransaction;

import android.os.Bundle;
import android.view.MenuItem;

import com.google.android.material.bottomnavigation.BottomNavigationView;

public class MainActivity extends AppCompatActivity {

    private BottomNavigationView bottomNavigationView; // 하단바 뷰
    private FragmentManager fm;
    private FragmentTransaction ft;
    private Frag1 frag1;
    private Frag2 frag2;
    private Frag3 frag3;
    private Frag4 frag4;
    private Frag5 frag5;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        bottomNavigationView = findViewById(R.id.bottomNavi);
        bottomNavigationView.setOnNavigationItemSelectedListener(new BottomNavigationView.OnNavigationItemSelectedListener() {
            @Override
            public boolean onNavigationItemSelected(@NonNull MenuItem item) {
                switch (item.getItemId()) {
                    case R.id.action_airplane:
                        setFrag(0);
                        break;
                    case R.id.action_airport:
                        setFrag(1);
                        break;
                    case R.id.action_bt:
                        setFrag(2);
                        break;
                    case R.id.action_call:
                        setFrag(3);
                        break;
                    case R.id.action_run:
                        setFrag(4);
                        break;
                }
                return true;
            }
        });
        frag1 = new Frag1();
        frag2 = new Frag2();
        frag3 = new Frag3();
        frag4 = new Frag4();
        frag5 = new Frag5();

        setFrag(0); // 첫 fragment 화면을 무엇으로 지정해줄 것인가
    }
}
```

```

    }

    // fragment 교체가 일어나는 메소드
    private void setFrag(int n) {
        fm = getSupportFragmentManager();
        ft = fm.beginTransaction();

        switch (n) {
            case 0:
                ft.replace(R.id.main_frame, frag1);
                ft.commit();
                break;
            case 1:
                ft.replace(R.id.main_frame, frag2);
                ft.commit();
                break;
            case 2:
                ft.replace(R.id.main_frame, frag3);
                ft.commit();
                break;
            case 3:
                ft.replace(R.id.main_frame, frag4);
                ft.commit();
                break;
            case 4:
                ft.replace(R.id.main_frame, frag5);
                ft.commit();
                break;
        }
    }
}
}

```