



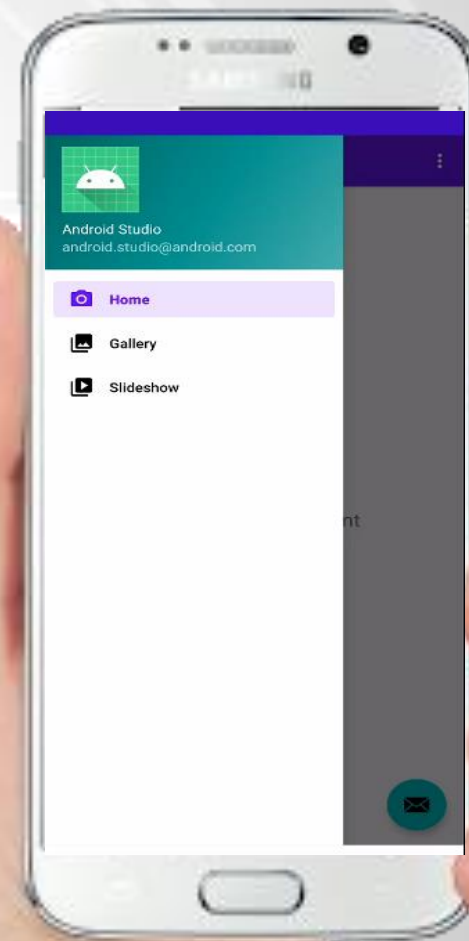
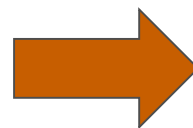
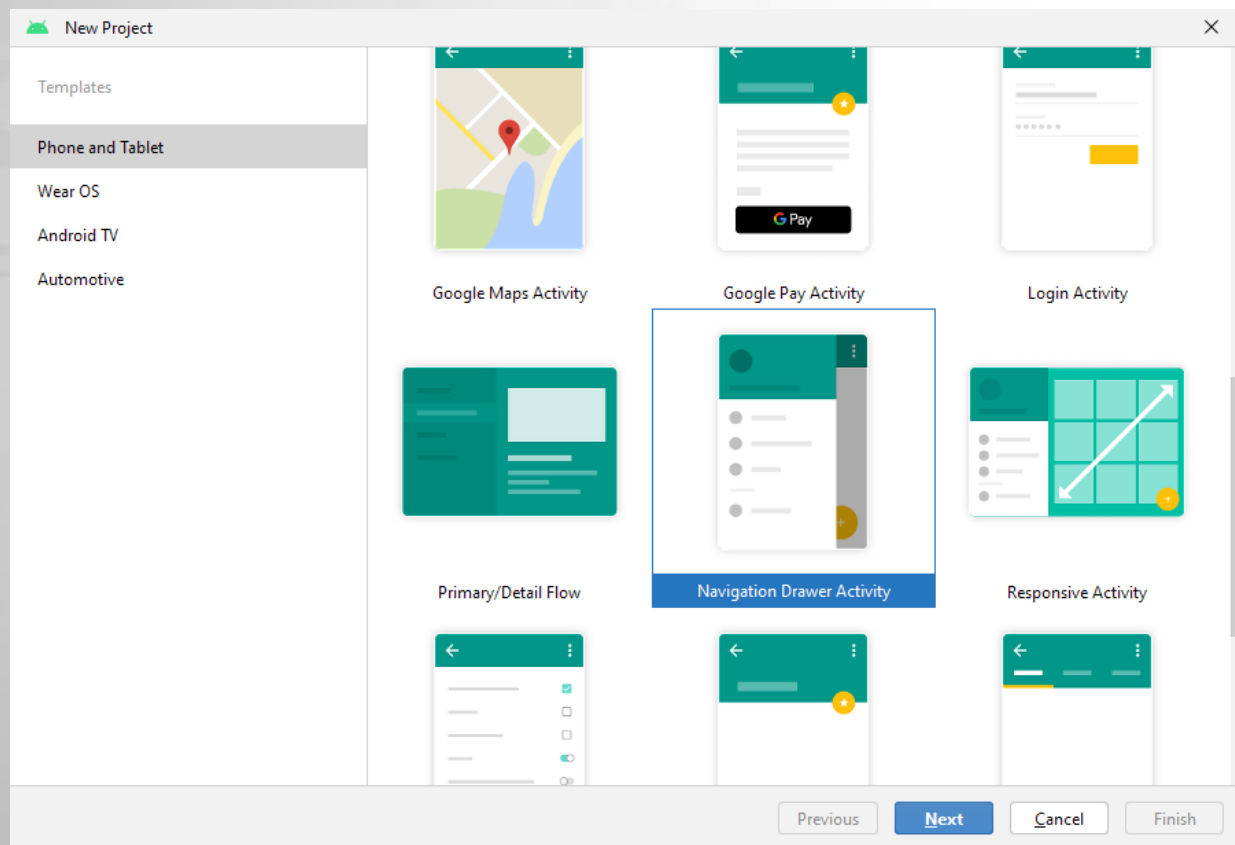
## NavigationDrawer

Prof. Hércules Santos

2023.1



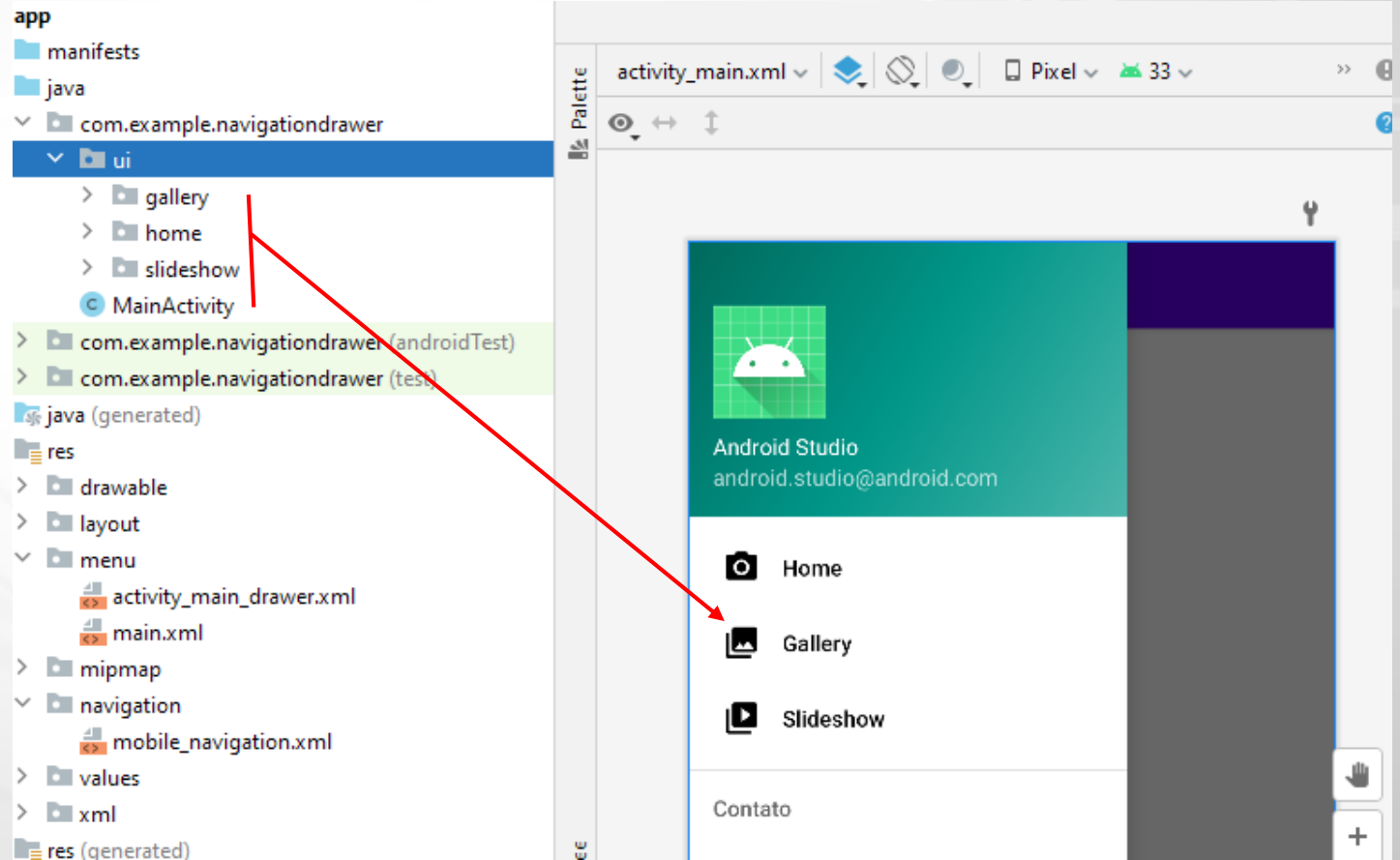
# Criando um Projeto



Ao iniciar um novo projeto, escolha Navigation Drawer Activity



Perceba que, na pasta java, agora temos uma pasta chamada ui que contém os mesmos menus da nossa interface



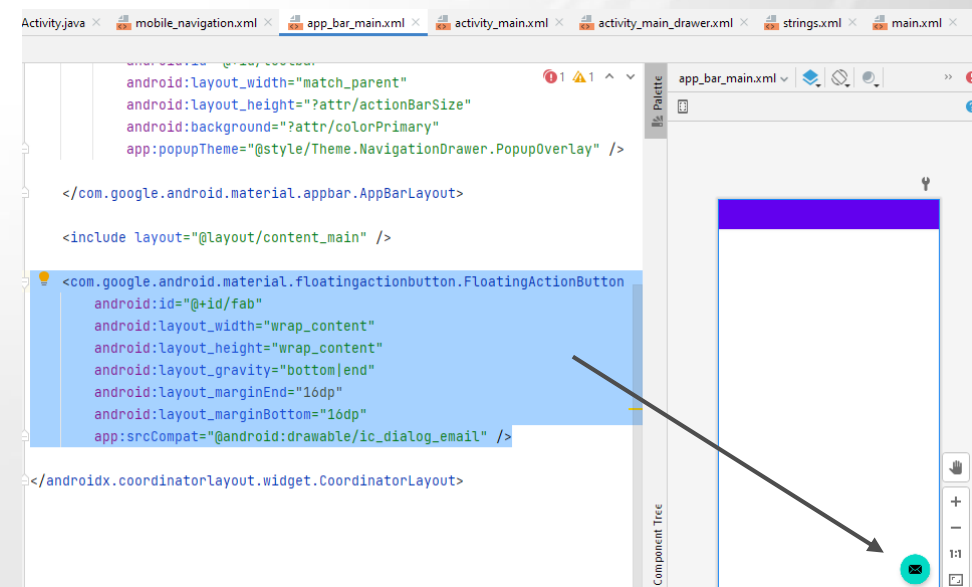
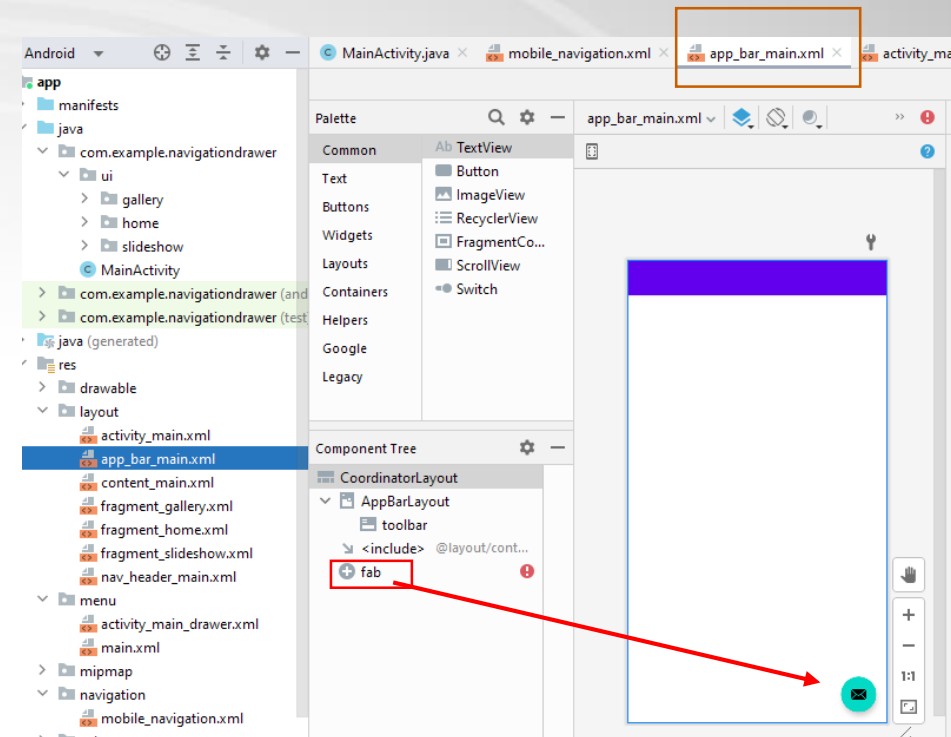
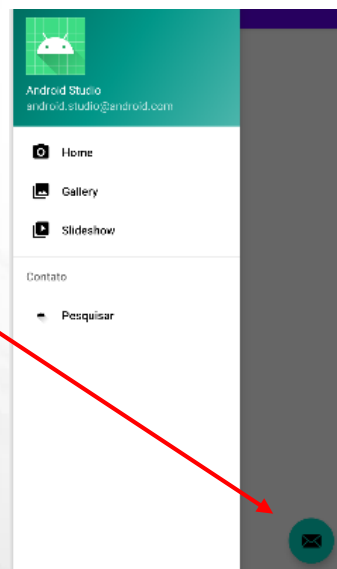


# floatingActionButton

```

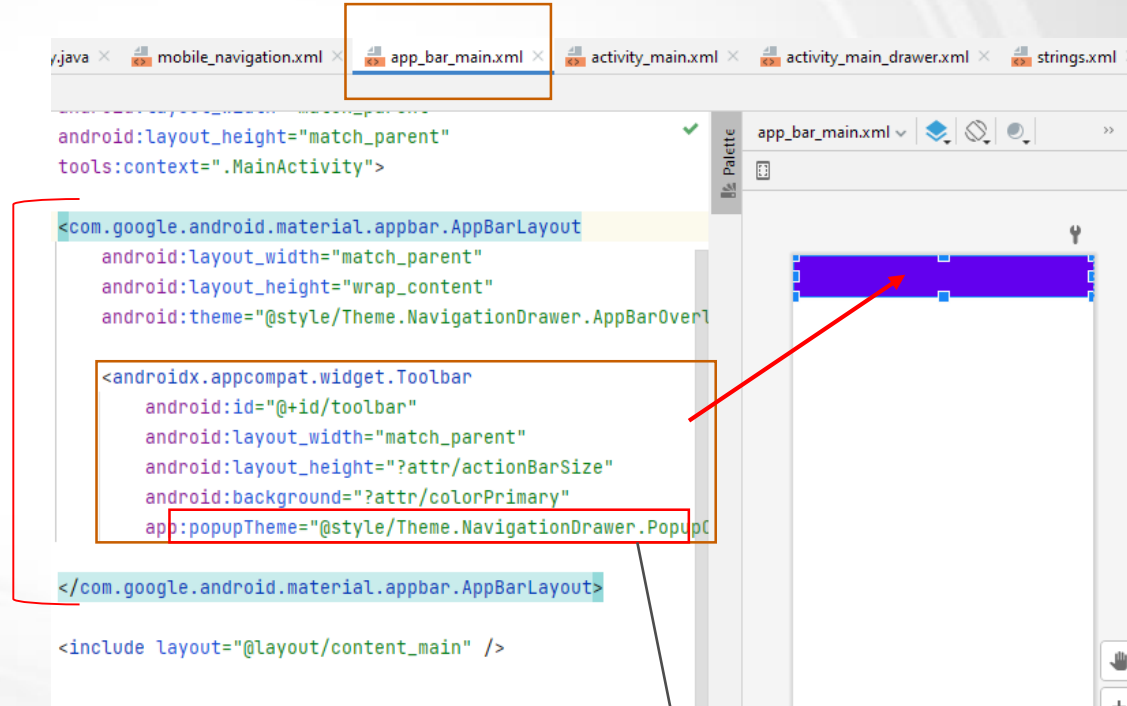
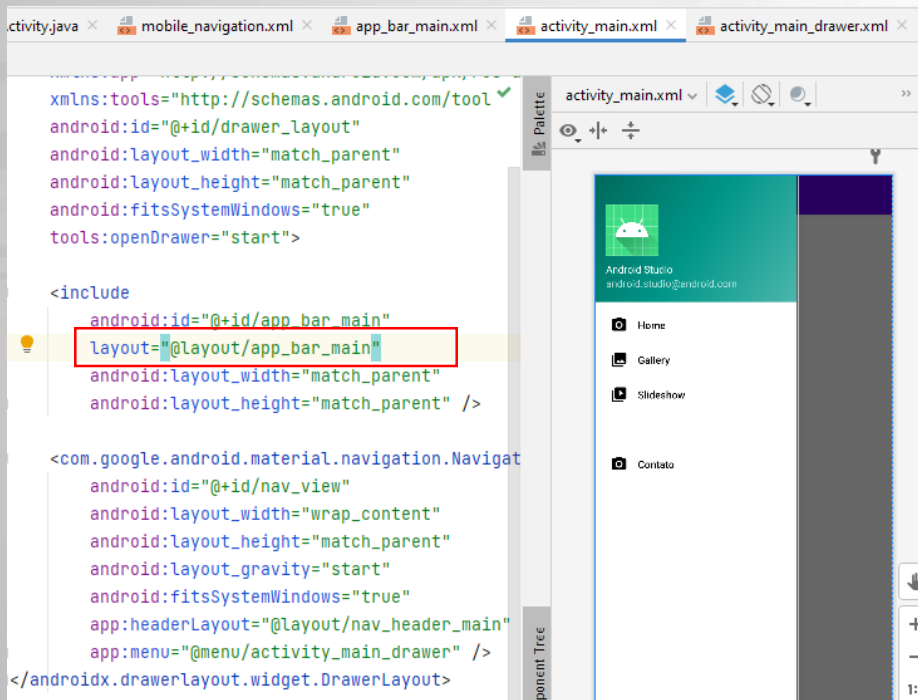
MainActivity.java x mobile_navigation.xml x activity_main.xml x activity_main_drawer.xml
6 usages
22 private ActivityMainBinding binding;
23
24 @Override
25 protected void onCreate(Bundle savedInstanceState) {
26     super.onCreate(savedInstanceState);
27
28     binding = ActivityMainBinding.inflate(getLayoutInflater());
29     setContentView(binding.getRoot());
30
31     setSupportActionBar(binding.appBarMain.toolbar);
32     binding.appBarMain.fab.setOnClickListener(new View.OnClickListener() {
33         @Override
34         public void onClick(View view) {
35             Snackbar.make(view, "Substitua por sua própria ação", Snackbar.LENGTH_LONG)
36                 .setAction("Action", null).show();
37         }
38     });
39
40     DrawerLayout drawer = binding.drawerLayout;
41     NavigationView navigationView = binding.navView;
42     //Passando cada ID de menu como um conjunto de IDs porque
43     // cada menu deve ser considerado como destinos de nível superior
44     mAppBarConfiguration = new AppBarConfiguration.Builder(
45         R.id.nav_home, R.id.nav_gallery, R.id.nav_slideshow)
46         .setOpenableLayout(drawer)
47         .build();
48     NavController navController = Navigation.findNavController(this, R.id.nav_host_fragment_content_main)

```

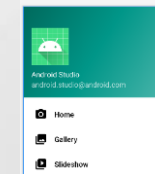




# layout/app\_bar\_main



O tema NavigationDraew está dentro de toobar







```
android:layout_height="match_parent"
tools:context=".MainActivity">

<com.google.android.material.appbar.AppBarLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:theme="@style/Theme.NavigationDrawer.AppBarOverl

    <androidx.appcompat.widget.Toolbar
        android:id="@+id/toolbar"
        android:layout_width="match_parent"
        android:layout_height="?attr/actionBarSize"
        android:background="?attr/colorPrimary"
        app:popupTheme="@style/Theme.NavigationDrawer.PopupC

    </com.google.android.material.appbar.AppBarLayout>

    <include layout="@layout/content_main" />
```

O content\_main é toda a parte branca do seu App, ele é chamado dentro de app\_bar\_main



```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res-auto"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    app:layout_behavior="com.google.android.material.appbar.AppBarLayout"
    tools:showIn="@layout/app_bar_main">

    <fragment
        android:id="@+id/nav_host_fragment_content_main"
        android:name="androidx.navigation.fragment.NavHostFragment"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        app:defaultNavHost="true"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:navGraph="@navigation/mobile_navigation" />

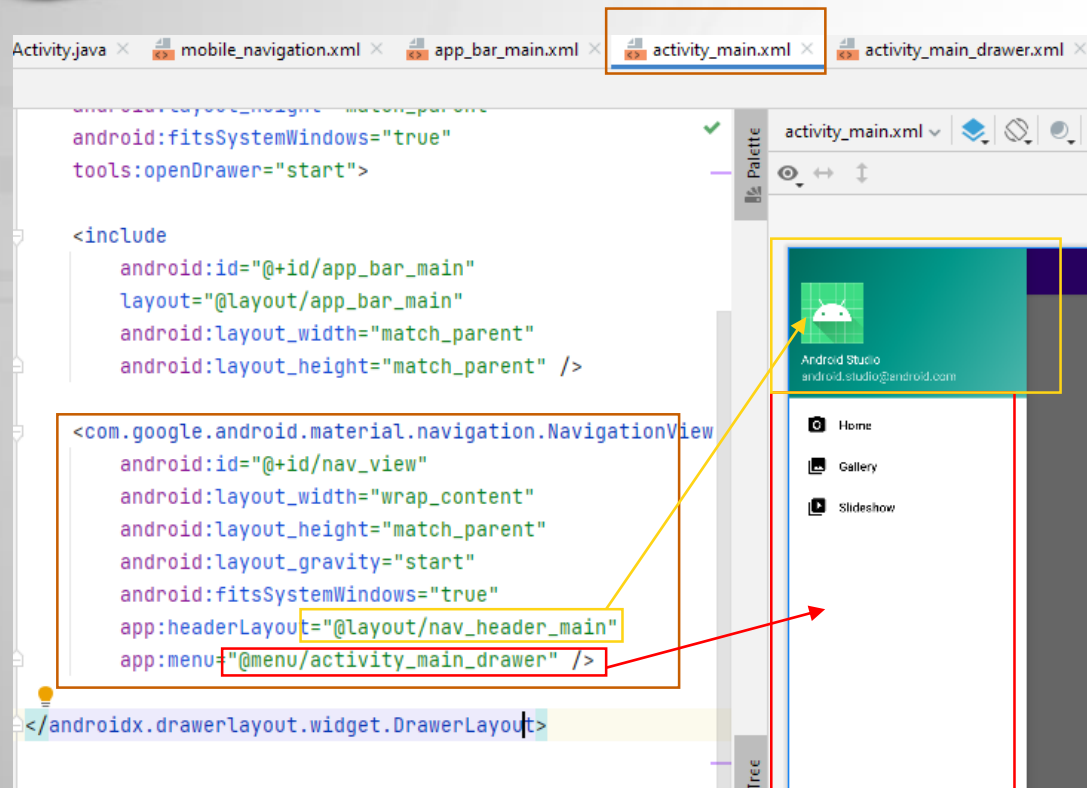
    </androidx.constraintlayout.widget.ConstraintLayout>
```

Perceba que na construção do content\_main, temos o fragmente, esse **fragment** será carregado no content\_main

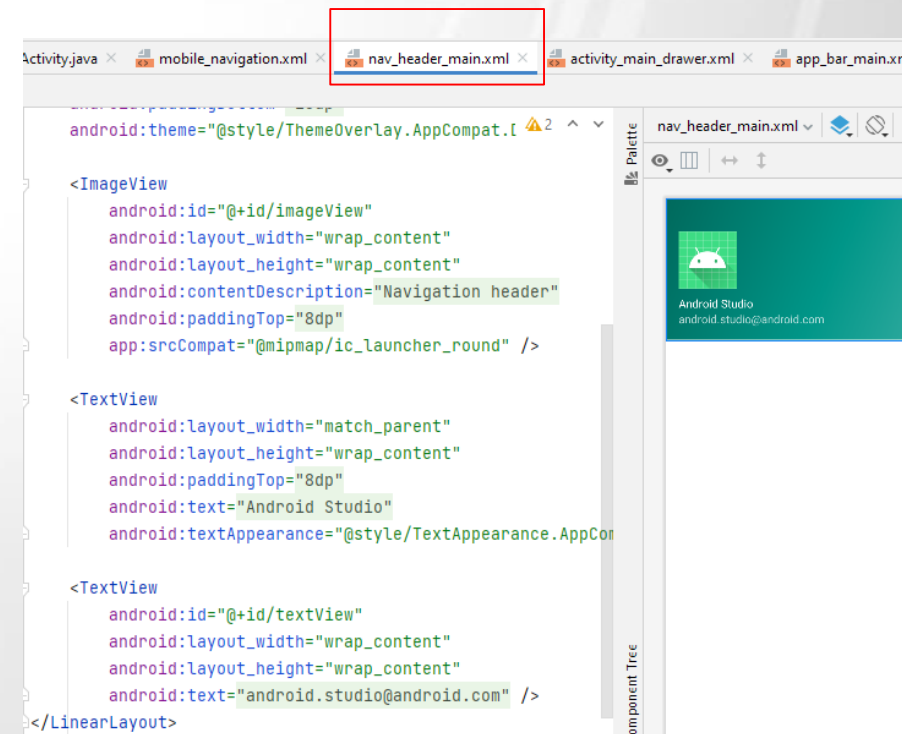
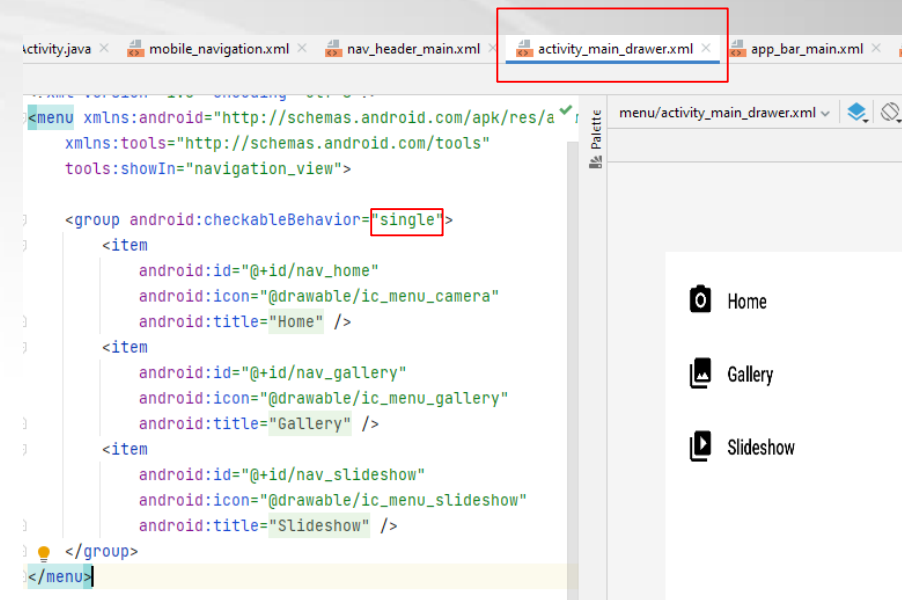
E dentro de frangment é que será carrega o conteúdo



# NavigationView



Dentro de activity\_main, também é carregado o NavigationView, que é onde é carregado o menu por meio do nav\_view





# activity\_main\_drawer

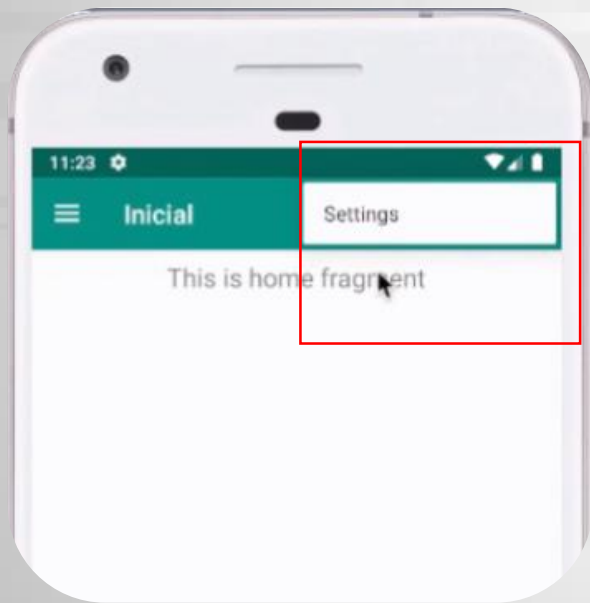
**checkableBehavior=:** define o comportamento de itens que podem ser marcados ou desmarcados

“**single**”: os itens contidos nesse grupo terão um comportamento de seleção única, ou seja, apenas um item pode ser selecionado de cada vez. Isso significa que, quando um item for selecionado, qualquer item anteriormente selecionado será desmarcado automaticamente.

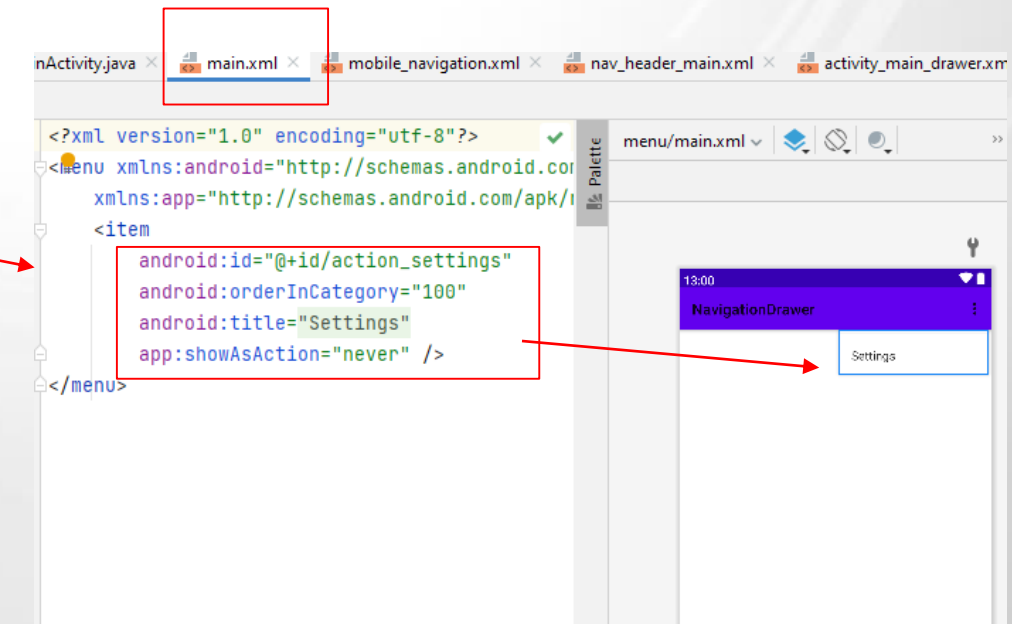
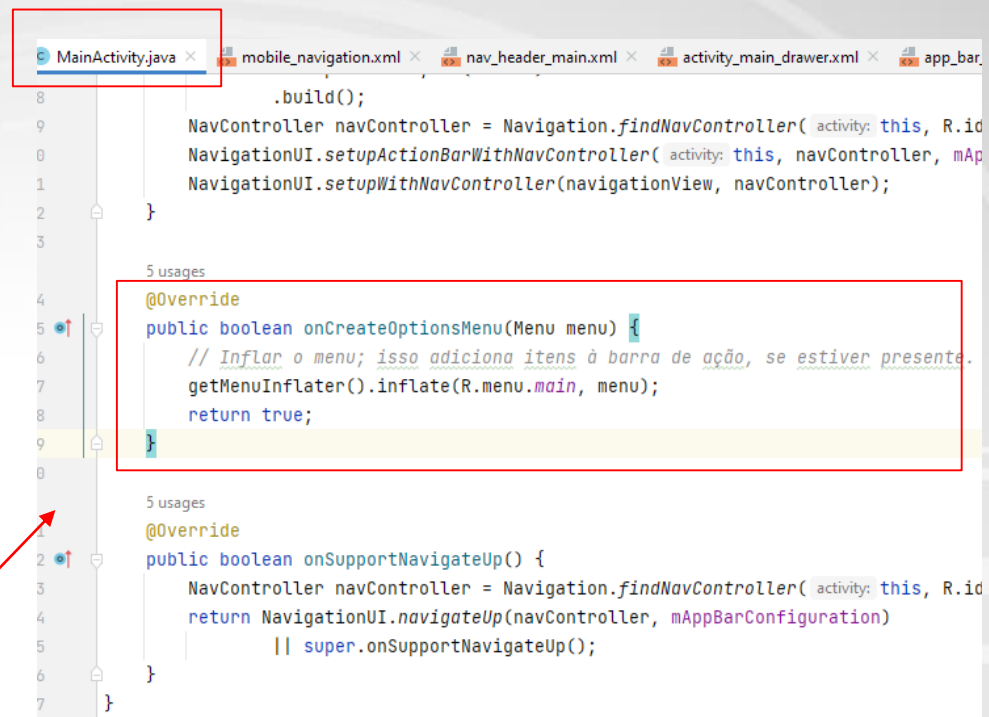
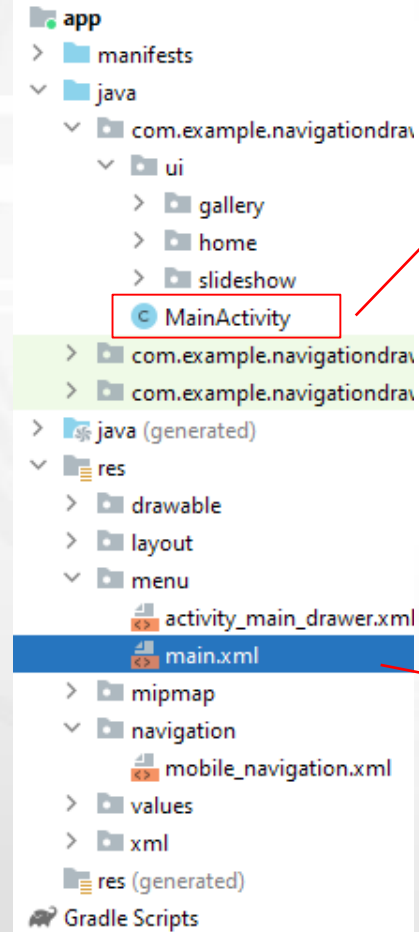
```
activity_main_drawer.xml
<menu xmlns:android="http://schemas.android.com/apk/res/a"
      xmlns:tools="http://schemas.android.com/tools"
      tools:showIn="navigation_view">

    <group android:checkableBehavior="single">
        <item
            android:id="@+id/nav_home"
            android:icon="@drawable/ic_menu_camera"
            android:title="Home" />
        <item
            android:id="@+id/nav_gallery"
            android:icon="@drawable/ic_menu_gallery"
            android:title="Gallery" />
        <item
            android:id="@+id/nav_slideshow"
            android:icon="@drawable/ic_menu_slideshow"
            android:title="Slideshow" />
    </group>
</menu>
```





Aqui é configurado o menu.





# ActivityMain

ml x MainActivity.java x mobile\_navigation.xml x nav\_header\_main.xml x activity\_main\_drawer.xml x app\_bar

```
public class MainActivity extends AppCompatActivity {
```

3 usages

```
private AppBarConfiguration mAppBarConfiguration;
```

4 usages

```
private ActivityMainBinding binding;
```

@Override

```
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);

    binding = ActivityMainBinding.inflate(getLayoutInflater());
    setContentView(binding.getRoot());
```

```
DrawerLayout drawer = binding.drawerLayout;
```

```
NavigationView navigationView = binding.navView;
```

```
//Passando cada ID de menu como um conjunto de IDs porque
// cada menu deve ser considerado como destinos de nível superior
```

```
mAppBarConfiguration = new AppBarConfiguration.Builder(
    R.id.nav_home, R.id.nav_gallery, R.id.nav_slideshow)
    .setOpenableLayout(drawer)
    .build();
```

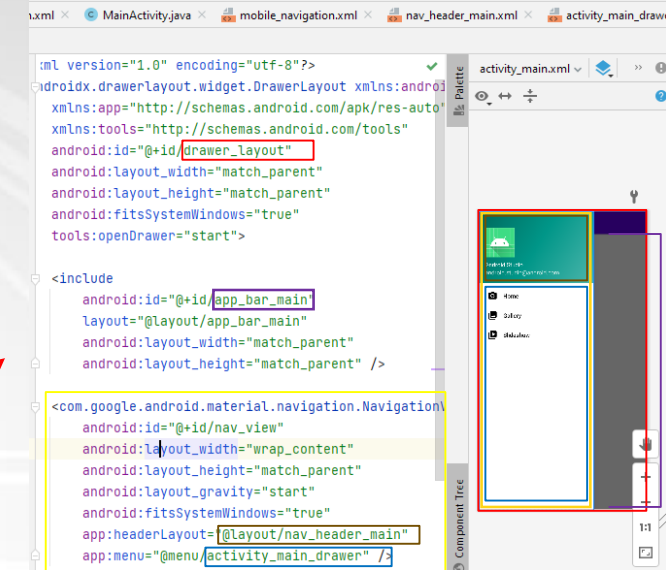
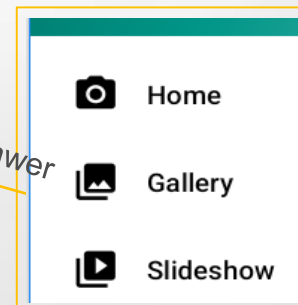
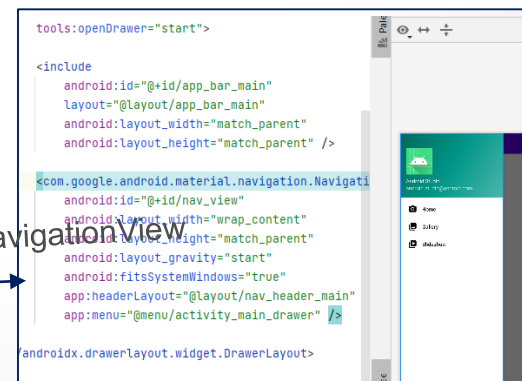
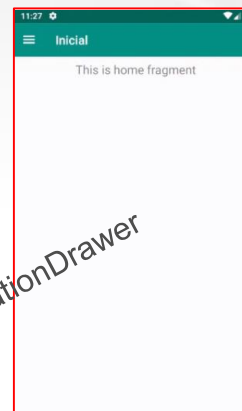
```
NavController navController = Navigation.findNavController( activity: this, R.id.nav_host_fr
NavigationUI.setupActionBarWithNavController( activity: this, navController, mAppBarConfigur
NavigationUI.setupWithNavController(navigationView, navController);
```

```
}
```

Cria referencia para toda área de NavigationDrawer

Cria referencia para toda área de NavigationView

Define a configuração do NavigationDrawer





```

MainActivity.java x content_main.xml x mobile_navigation.xml x nav_header_main.xml x activity_main_d
//Cria referencia para toda area do NavigationDrawer
DrawerLayout drawer = binding.drawerLayout;

//Cria referencia para toda área de navegação
NavigationView navigationView = binding.navView;

//Define configuração do NavigationDrawer
mAppBarConfiguration = new AppBarConfiguration.Builder(
    R.id.nav_home, R.id.nav_gallery, R.id.nav_slideshow)
    .setOpenableLayout(drawer)
    .build();

//área que carrega os conteúdos do fragments
NavController navController = Navigation.findNavController( activity: this, R.id.nav_host_fr
//Configura as três linhas da Barra de Menu
NavigationUI.setupActionBarWithNavController( activity: this, navController, mAppBarConfigur
//Permite que os menus sejam aberto(onclicked)
NavigationUI.setupWithNavController(navigationView, navController);
}
  
```

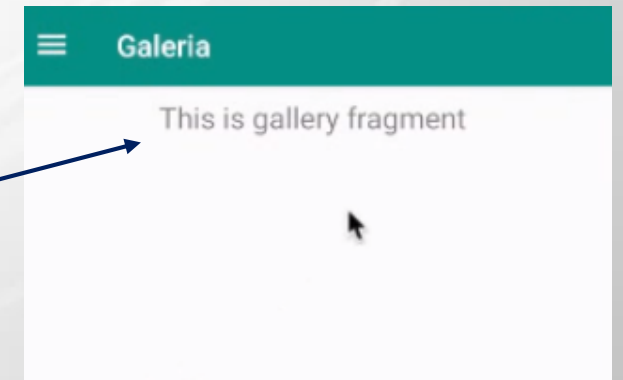
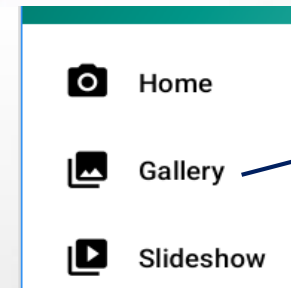
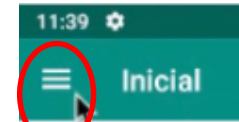
content\_main.xml

```

<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res-auto"
    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"
    app:layout_behavior="com.google.android.material.appbar.AppBarLayout"
    tools:showIn="@layout/app_bar_main">

    <fragment
        android:id="@+id/nav_host_fragment_content_main"
        android:name="androidx.navigation.fragment.NavHostFragment"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        app:defaultNavHost="true"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:navGraph="@navigation/mobile_navigation" />

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





```
xml x MainActivity.java x NavigationView.java x content_main.xml x mobile_navigation.xml x fragment_home.xml x
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    app:layout_behavior="com.google.android.material.appbar.AppBarLayout"
    tools:showIn="@layout/app_bar_main">

    <fragment
        android:id="@+id/nav_host_fragment_content_main"
        android:name="androidx.navigation.fragment.NavHostFragment"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        app:defaultNavHost="true"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:navGraph="@navigation/mobile_navigation" />

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

```
xml x MainActivity.java x NavController.kt x NavigationView.java x content_main.xml x mobile_navigation.xml x fragment_home.xml x
<navigation xmlns:android="http://schemas.android.com/apk/res-auto"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/mobile_navigation"
    app:startDestination="@+id/nav_home">

    <fragment
        android:id="@+id/nav_home"
        android:name="com.example.navigationdrawer.ui.home.HomeFragment"
        android:label="Home"
        tools:layout="@layout/fragment_home" />

    <fragment
        android:id="@+id/nav_gallery"
        android:name="com.example.navigationdrawer.ui.gallery.GalleryFragment"
        android:label="Gallery"
        tools:layout="@layout/fragment_gallery" />

    <fragment
        android:id="@+id/nav_slideshow"
        android:name="com.example.navigationdrawer.ui.slideshow.SlideshowFragment"
        android:label="Slideshow"
        tools:layout="@layout/fragment_slideshow" />

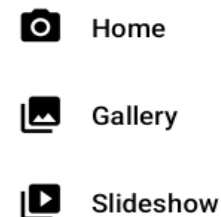
</navigation>
```

Os fragmentos são criados separadamente, e carregados no content\_main por meio do objeto NavController





# Adicionando mais um Item de menu



```
MainActivity.java | activity_main_drawer.xml | strings.xml | main.xml | C | NavigationView.java | content_main.xml
2 | <menu xmlns:android="http://schemas.android.com/apk/res/android"
3 |   xmlns:tools="http://schemas.android.com/tools"
4 |   tools:showIn="navigation_view">
5 |
6 |   <group android:checkableBehavior="single">
7 |     <item
8 |       android:id="@+id/nav_home"
9 |       android:icon="@drawable/ic_menu_camera"
10 |      android:title="Home" />
11 |
12 |     <item
13 |       android:id="@+id/nav_gallery"
14 |       android:icon="@drawable/ic_menu_gallery"
15 |       android:title="Gallery" />
16 |
17 |     <item
18 |       android:id="@+id/nav_slideshow"
19 |       android:icon="@drawable/ic_menu_slideshow"
20 |       android:title="Slideshow" />
21 |
22 |     <item
23 |       android:id="@+id/nav_contato"
24 |       android:icon="@drawable/ic_menu_contato"
25 |       android:title="@string/menu_contato" />
26 |   </group>
27 | </menu>
```

```
n_drawer.xml | MainActivity.java | strings.xml | main.xml | C | NavigationView.java | content_main.xml | mobil
//Cria referencia para toda área do NavigationDrawer
DrawerLayout drawer = binding.drawerLayout;

//Cria referencia para toda área de navegação
NavigationView navigationView = binding.navView;

//Define configuração do NavigationDrawer
mAppBarConfiguration = new AppBarConfiguration.Builder(
    R.id.nav_home, R.id.nav_gallery, R.id.nav_slideshow, R.id.nav_contato
).setOpenableLayout(drawer)
    .build();

//área que carrega os conteúdos do fragments
NavController navController = Navigation.findNavController( activity: this, R.id.nav_host_fragment_c
//Configura as três linhas da Barra de Menu
NavigationUI.setupActionBarWithNavController( activity: this, navController, mAppBarConfiguration);
//Permite que os menus sejam aberto(onclicked)
NavigationUI.setupWithNavController(navigationView, navController);
}
```

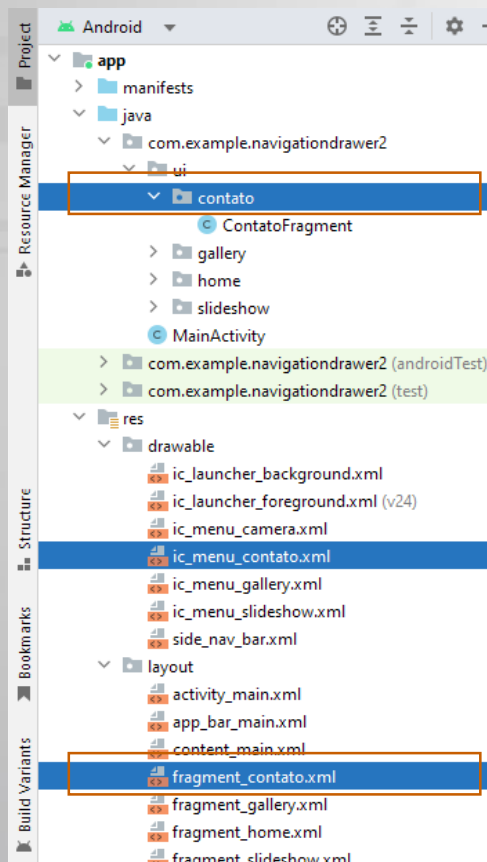
1. Primeiramente, vamos criar um item xml para criar o novo menu com o id = nav\_contato

2. Agora precisamos configurar o id do componente dentro do MainActivity





# Adicionando um Fragment para o menu contato



Crie um fragmento para seu menu e em seguida adicione o fragmento dentro de mobile\_navigation para que ele possa abrir o novo fragmento

