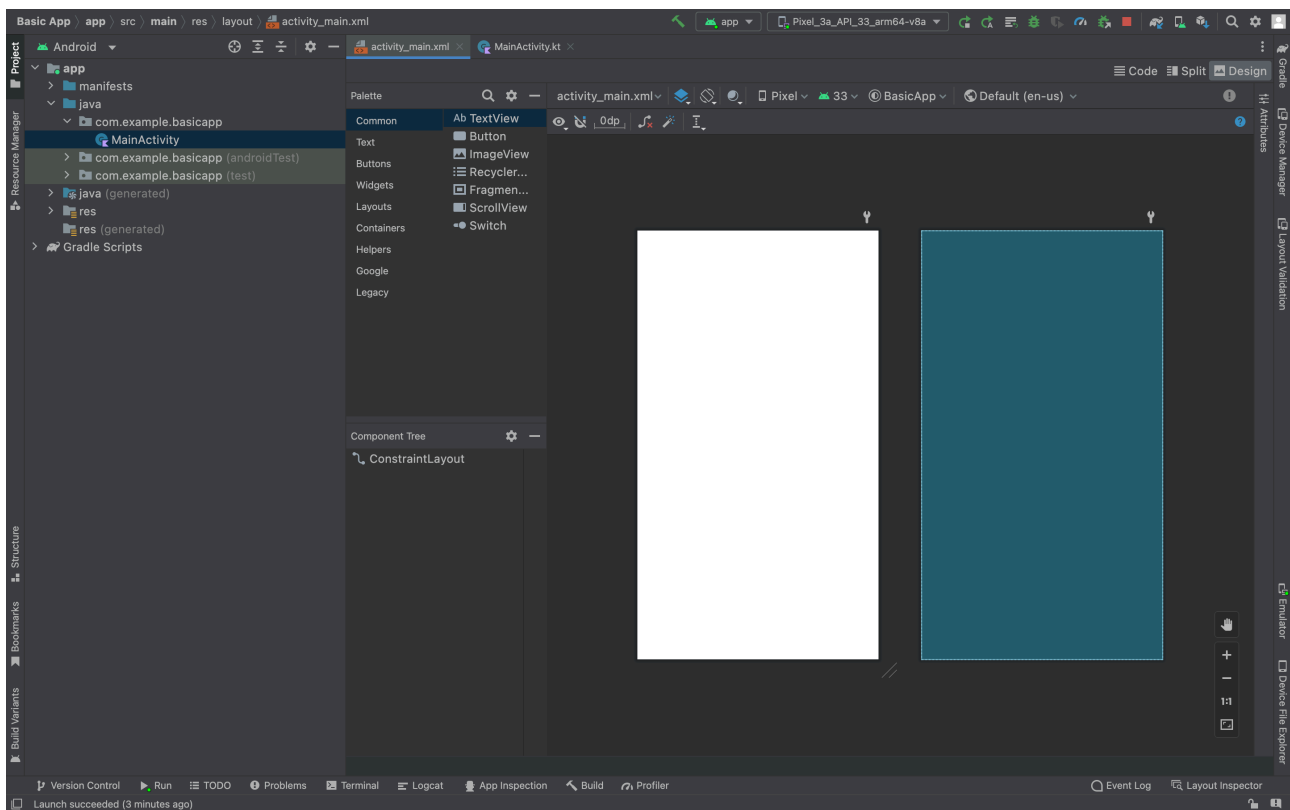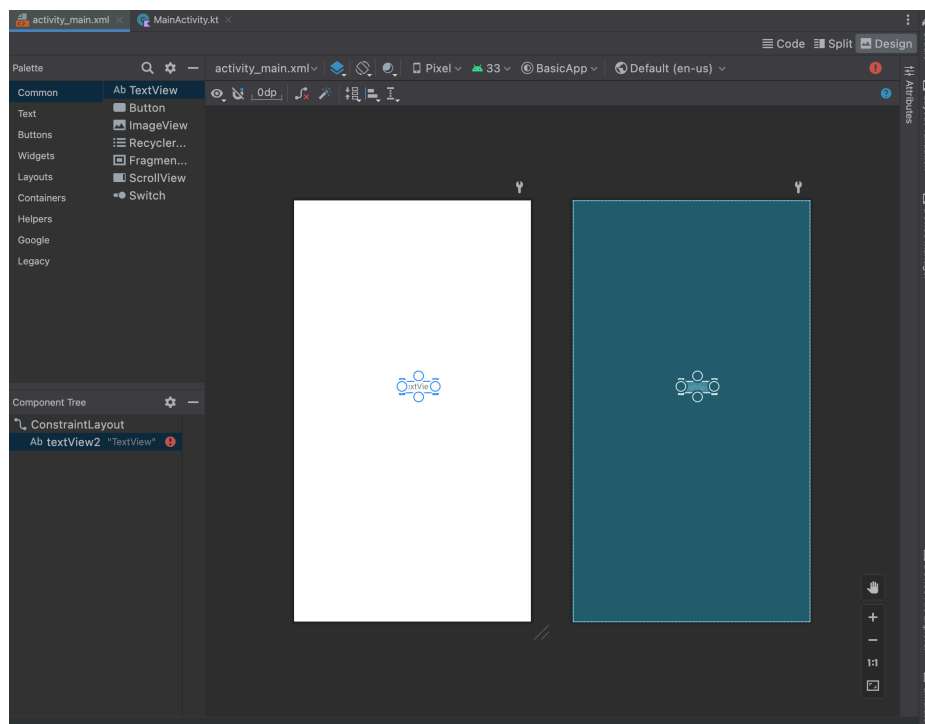This is where we design our app. Put all the text fields, buttons etc. (widgets)


Just simply drag and drop

Constraint Layout - there are multiple types of layouts like linear, frame etc. These are containers and inside these containers we put our widgets. Every container has its own property
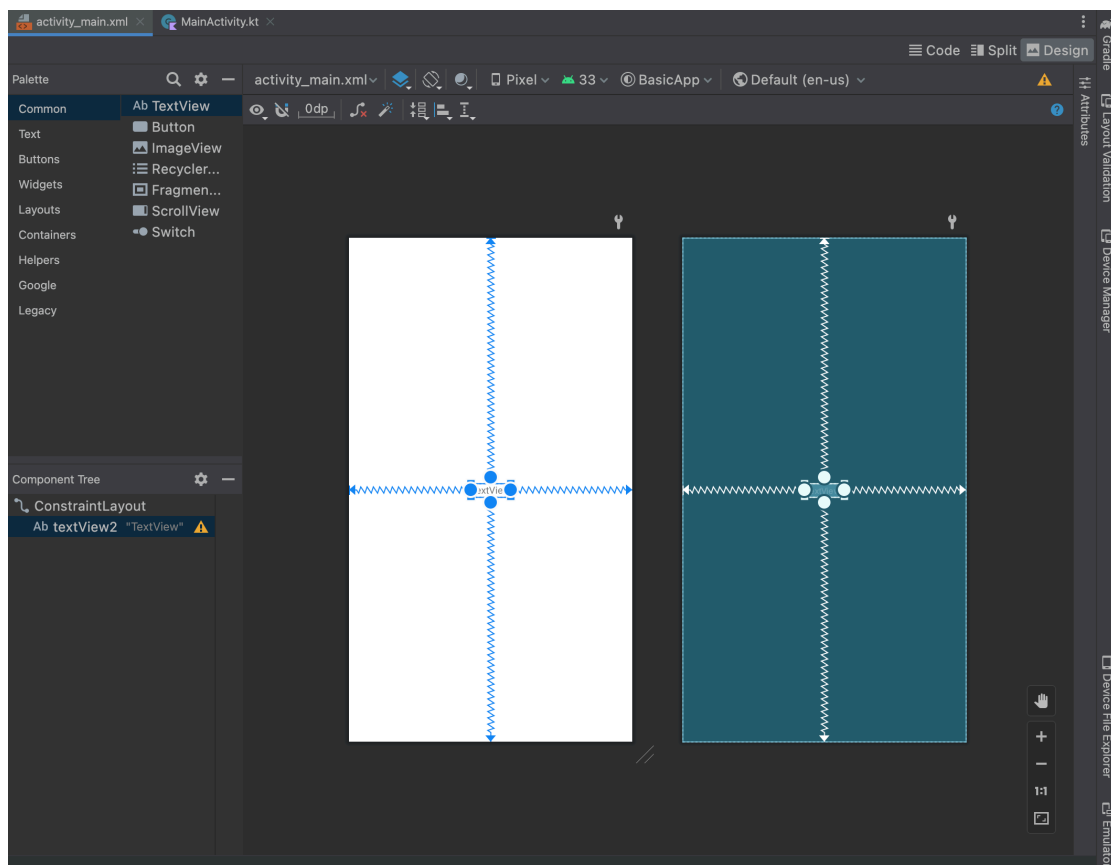
Simply drag a text view onto the screen

You can see the 4 circles on the 4 sides of the text view. Click on these and match them to the corners to place the position of your text in your app
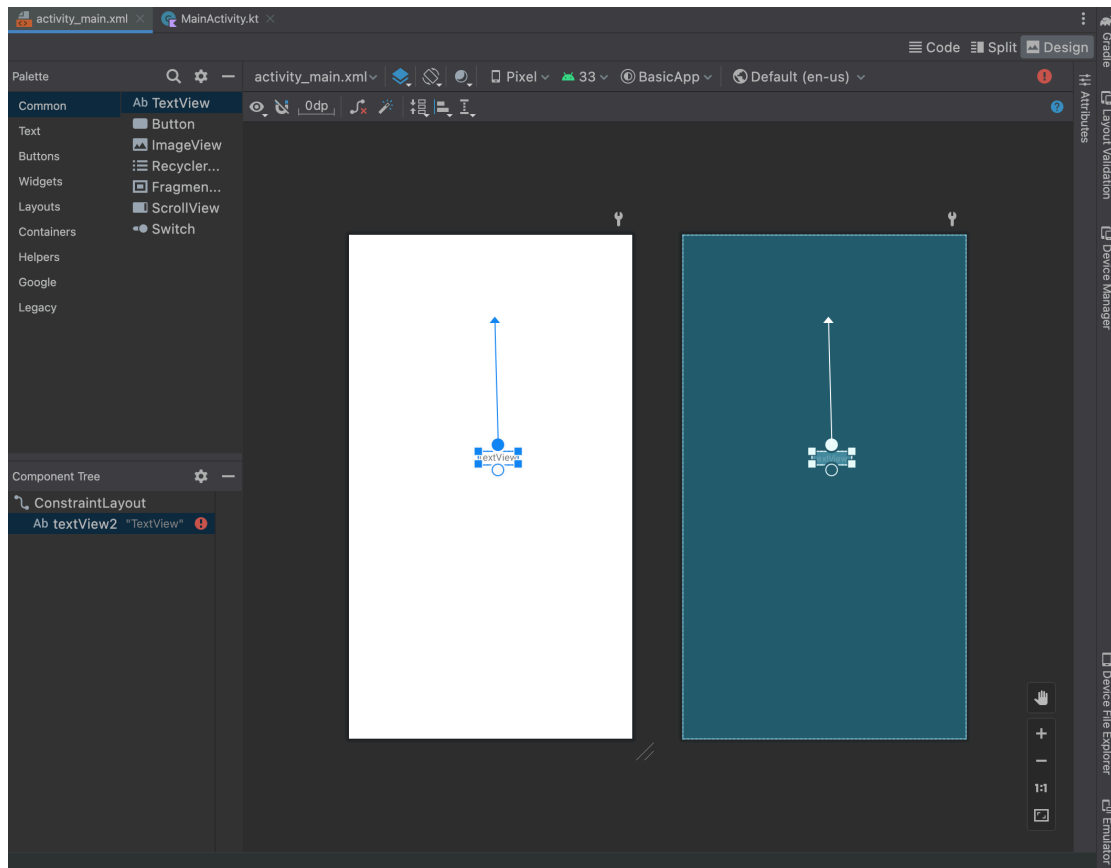
Putting the box in centre

To place it at a particular position use margin on that particular side instead of the constraint

Ex- placing the text at the top with a little spacing
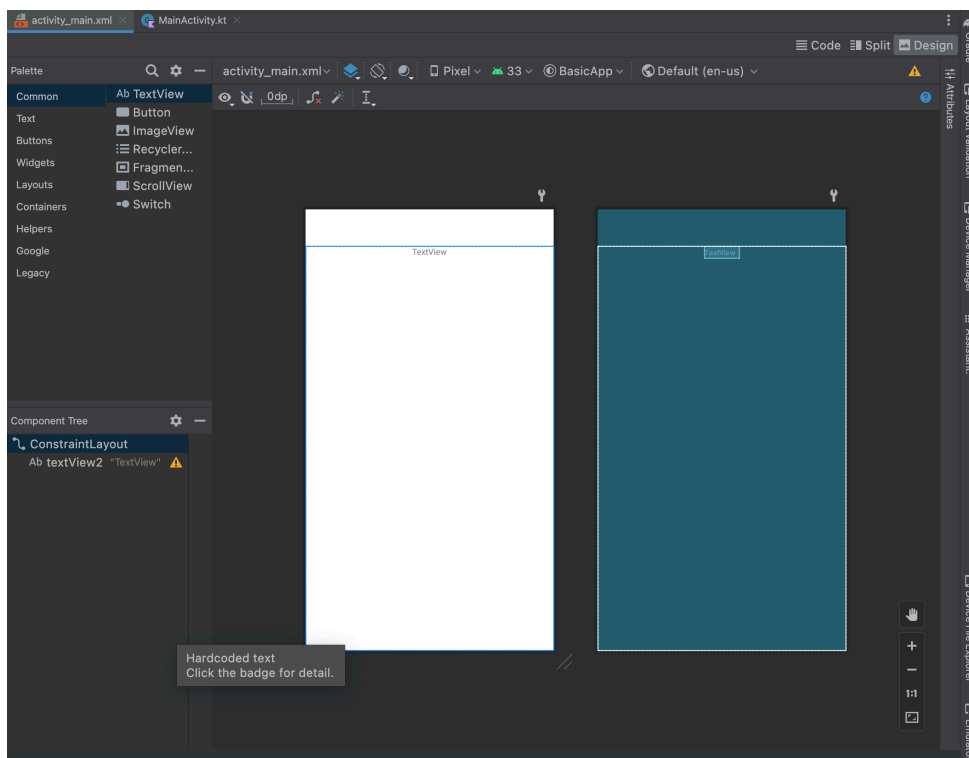
Click on attributes panel on the left side
search for margin
Click on layout_margin
Select layout_marginTop
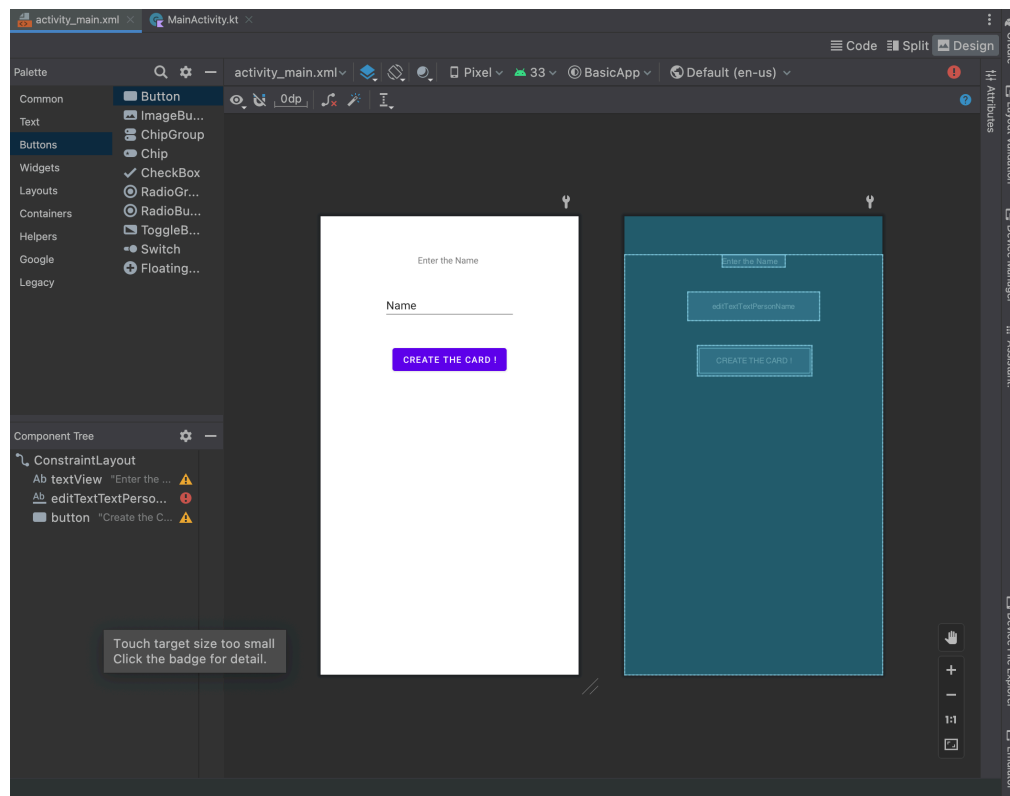The values entered here are in dp (density independent pixel)
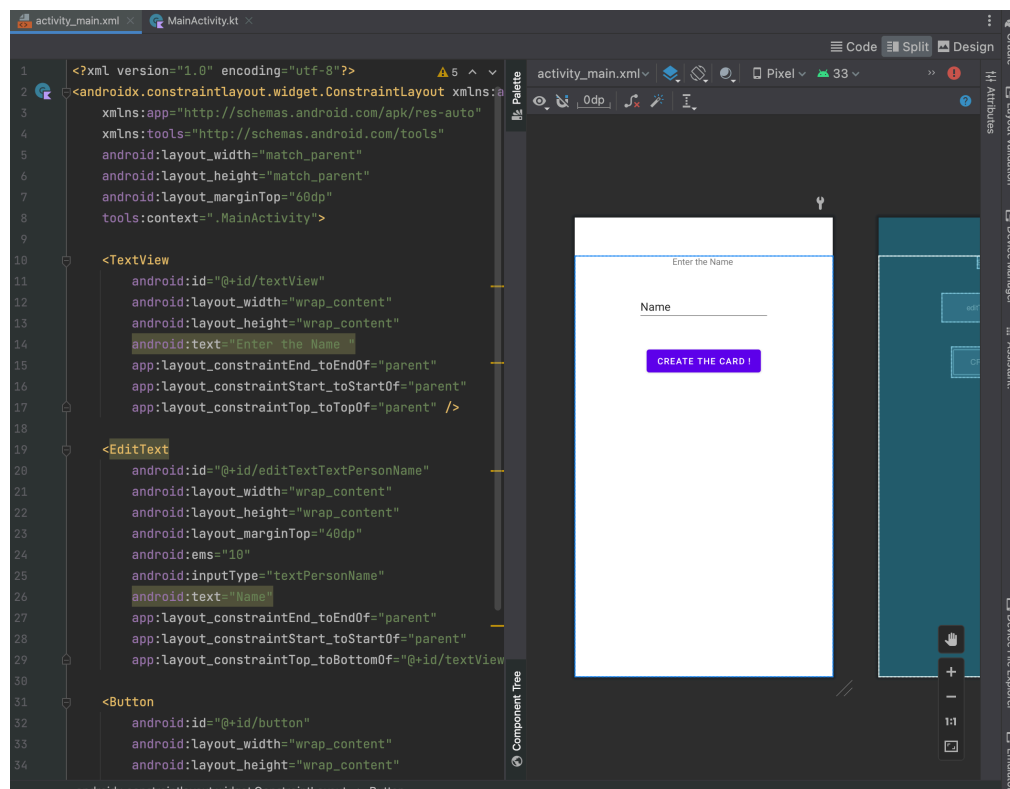Enter a desired value lets say 60dp
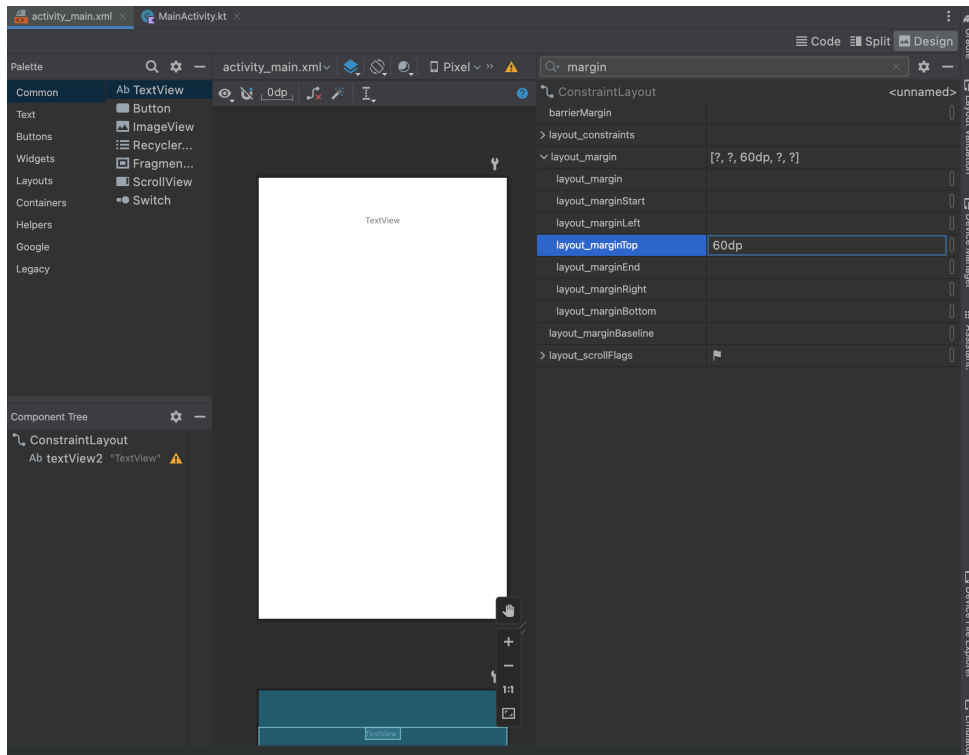
This is how you place your elements / widgets in you app and position them

Doing the same for some more widgets

This was all done using widgets as we get more and more advanced in android we will just use code to do the same. To see the code for the same click on split on top left side

```
30        <Button
31            android:id="@+id/button"
32            android:layout_width="wrap_content"
33            android:layout_height="wrap_content"
34            android:layout_marginTop="40dp"
35        💡  android:text="Create the CARD !"
36            app:layout_constraintEnd_toEndOf="parent"
37            app:layout_constraintStart_toStartOf="parent"
38            app:layout_constraintTop_toBottomOf="@+id/editText
39    </androidx.constraintlayout.widget.ConstraintLayout>
```

The text line is showing a warning (highlighted in yellow). This is because as previously discussed we have different files for storing our string resources (res folder) and the string we entered (Create the CARD !) is not in that file to put it in that file follow the steps

```
30        <Button
31            android:id="@+id/button"
32            android:layout_width="wrap_content"
33            android:layout_height="wrap_content"
34            android:layout_marginTop="40dp"
35     💡▼   android:text="Create the CARD !"
36      💡  Extract string resource
37      ✕  Suppress: Add tools:ignore="HardcodedText" attribute        :"
38      📑  Override Resource in Other Configuration...          >   ditText
39      📑  Rearrange tag attributes                            >   ,
        📑  Remove attribute                                   >
        📑  Remove tag (preserves children)                    >
        Press F1 to open preview
```

Extract Resource

Resource name: create_the_card

Resource value: Create the CARD !

Source set: main src/main/res

File name: strings.xml

Create the resource in directories:

+ − ☑ ⊟

☑ values
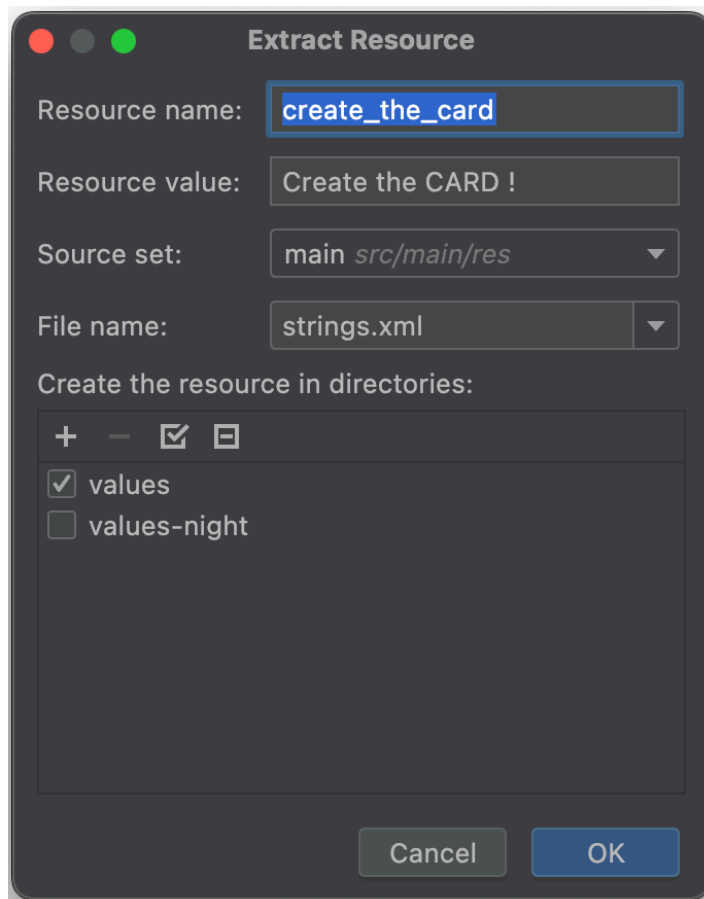☐ values-night

Cancel   OK

```xml
30    <Button
31        android:id="@+id/button"
32        android:layout_width="wrap_content"
33        android:layout_height="wrap_content"
34        android:layout_marginTop="40dp"
35        android:text="@string/create_the_card"
36        app:layout_constraintEnd_toEndOf="parent"
37        app:layout_constraintStart_toStartOf="parent"
38        app:layout_constraintTop_toBottomOf="@+id/editText
39    </androidx.constraintlayout.widget.ConstraintLayout>
```

Android studio is very smart (most of the times 😬) so if its shows and warnings / errors go to the bulb option and resolve it, and hopefully it will get resolved without breaking other things.