# Use Material Design button

The meat of our project is done, and now we can put some polish on it, to make it look a little nicer. The design language that is used for Android is called material design. There are a few elements that are a part of material design that we can use in our project. Open the project, and open the content\_main.xml file in design view. At the bottom-right corner is a circular button. This is called a floating action button, and it is used for the primary action that you will complete in your app. In this app, it's pretty simple.

The only action we can perform is, roll the dice. We can update our code to take advantage of this button, remove our existing button and update the design of the floating action button, with a new image and a unique color. First, let's remove our existing button. Select the button, and then press the delete key. Now we need to add the on-click action to the floating action button. Open the mainActivity.java file, and we can do that here. If you look in the onCreate method, there's already some code that is a placeholder for the button.

We can replace the code that is there, and add a call to our existing rollDice method. If you go ahead and select into this area, where it says fab.setOnClickListener. Fab is the instance name for the floating action button, which it is getting by using the findViewById. Inside of our onClick method here, we're going to modify and remove what we currently have. We're then going to insert rollDice. But rollDice requires a property.

In this case, it requires a view. The view is already passed into the onClick method that we are currently in. So we can go ahead and just pass in that view. Let's go ahead and run the game, and see if it works. Hrm, it looks like we have an error. We get an error because, although we removed the widget from the XML layout, we forgot to remove our old button from Java. Let's remove the Java code from the roll button and try again. We need to do this in two places, first at the top, where we will take the roll button, where we define it here in our class, and we'll remove those two lines.

Then, further down, we'll then look at the roll button here, where we link the instance with our activity view object. We'll go ahead and remove that there. Now, we are going to be using the floating action button to roll the dice. The next issue that we need to fix, is that the default icon for the button is an envelope. We can import a new graphic, place it in the button, and update the color. In the exercise files for this movie is a folder called assets. Inside is a single image that we will use for the icon of our button. Go ahead and select the file, right-click, and copy it to the clipboard.

Then, go into the res, drawable, folder, right-click, and paste, and click Ok to confirm. Now, with the image imported, we can add it to our button. But where is it? Our content\_main.xml file is just one part of the overall layout for the activity. The entire activity layout is located in activity\_main.xml. So if we open that file, and then go to text view, we can look at the XML code. At the bottom is the code for the floating action button.

If we look at the last line, we'll see that there is a reference to ic\_dialog\_email, that is in our app resource. We can change this to work with our imported image. We can replace this with @drawable/dice\_100px. You can see that the button icon has now changed, and our image was resized to fit within the button. Let's also change the color of the button. Go ahead and switch into design view. Select the button, in the properties panel, there is an option for background tint.

Click on the three dots to the right of that. This opens the resource color picker for us to work with. We can select a specific color that is part of the Android material design color spec. Let's pick holo\_red\_dark, click Ok. You'll see the background for the button is now red. Let's go ahead and run the app and see the changes that we made. There, our button is now customized. And we are using the floating action button to control our game.