SKETCH & GUESS: PART 1

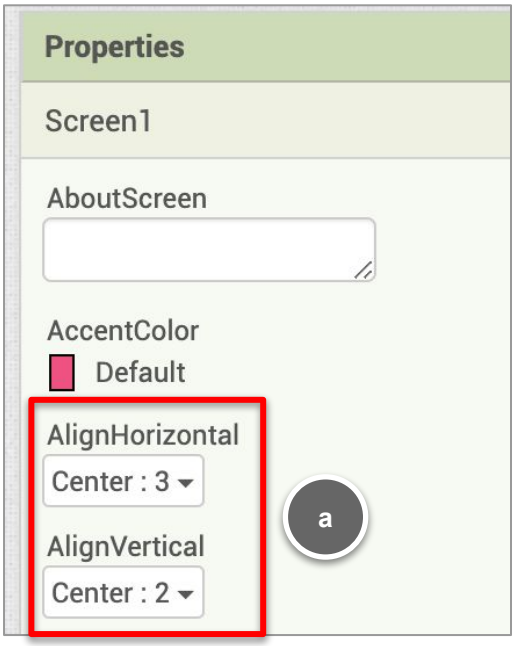
In this lesson, you will build the three screens for the Sketch and Guess app

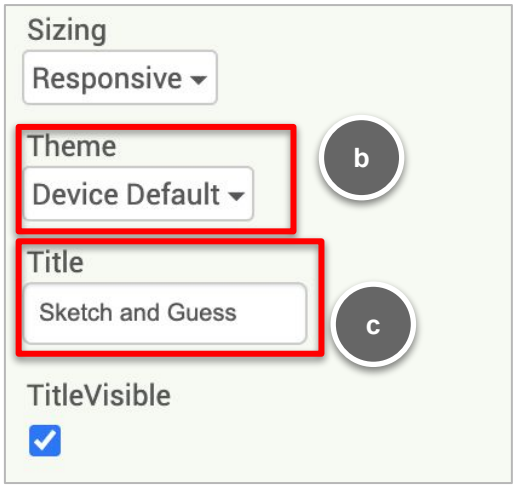
START HERE

1. Open a new project in App Inventor. Name it SketchAndGuess.

With this app, there will be three screens. The opening screen, **Screen1**, merely let's the user choose what they want to do with the app. Do they want to be the sketcher or the guesser? Choosing a button will take the user to one of the other two screens - **SketcherScreen** or **GuesserScreen**.

2. First, change some of the properties for Screen1.
   - Change the *AlignHorizontal* and *AlignVertical* properties to **"Center: 3"** and **"Center: 2"** so the components fit in the center of the screen.
   - Change the *Theme* to **"Device Default"** so you get a larger title bar along the top.
   - Change the *Title* to **"Sketch and Guess"** so it appears in the title bar.





ADD BUTTONS

3 Add two Buttons. Name the first Button **SketcherButton** and the second, **GuesserButton**

4 You want the buttons to be large, so change their *Height* to **30%** and their *Width* to **80%**.

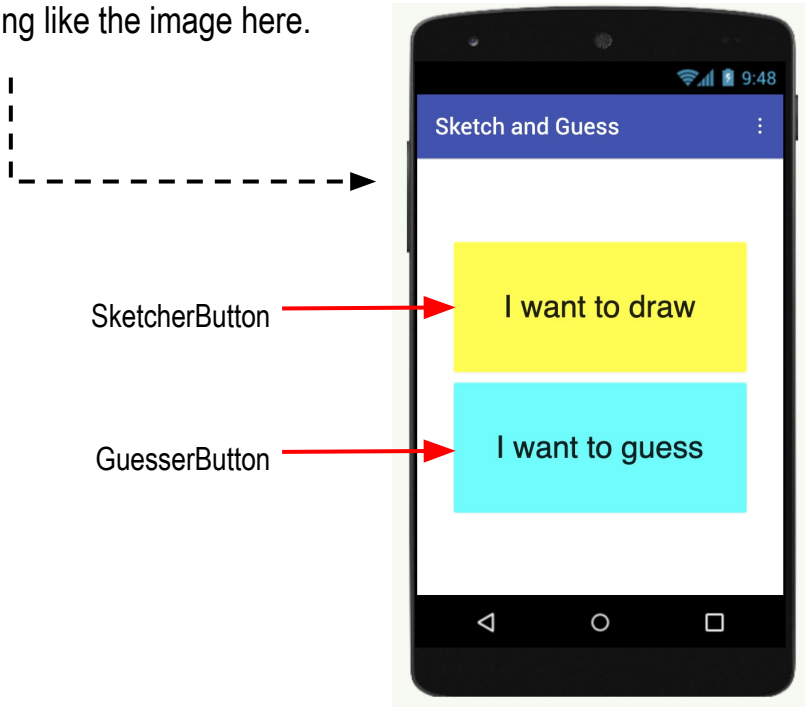
5 Change the *FontSize* to **30**.

6 Change the *Text* as follows:

- SketcherButton: "**I want to draw**"
- GuesserButton: "**I want to guess**"

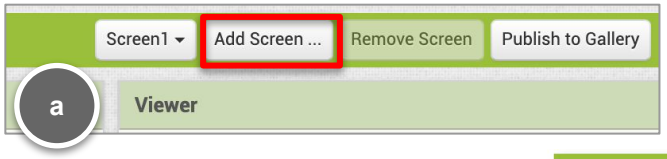
7 Change the *BackgroundColor* for each button to colors of your choice.

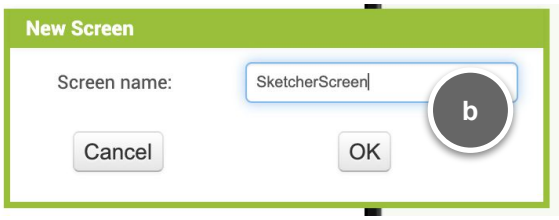
Your screen should something like the image here.



ADD SKETCHERSCREEN

8 Click the **Add Screen** button at the top of your screen. Name the new screen "**SketcherScreen**".





9 Change the *Title* for SketcherScreen to "**Sketch and Guess (Sketcher)**" so when the user runs the app, they'll know which screen they have open.

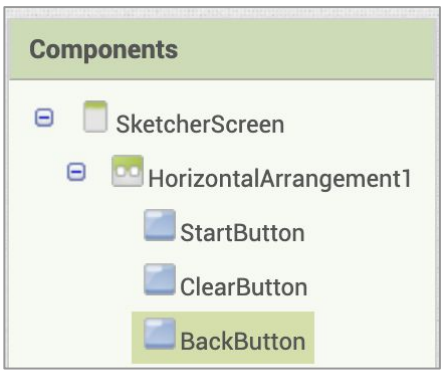
10 Set its *AlignHorizontal* property to :"**Center: 3"**.

This will be the screen for the Sketcher to draw on. They'll need some components to do so.

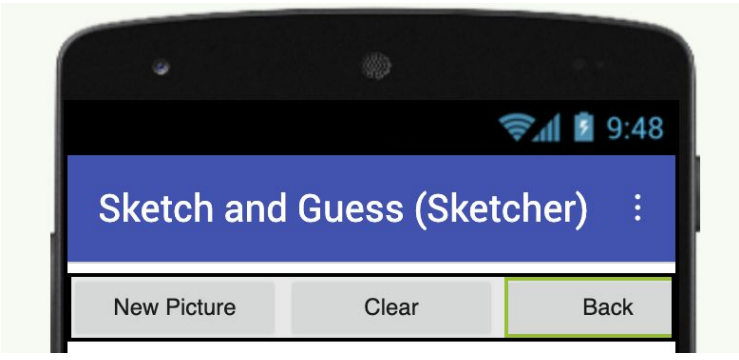
11 Add a **HorizontalArrangement** from the Layout drawer.

12 Set its *Width* to **"Fill parent"** so it fills the width of the screen.

13 Drag in 3 Buttons from the User Interface drawer. Name them **StartButton**, **ClearButton**, and **BackButton**, from left to right.



14 Change the *Text* as follows:
StartButton: "**New Picture**",
ClearButton: "**Clear**",
and BackButton: "**Back**".



SET PROPERTIES

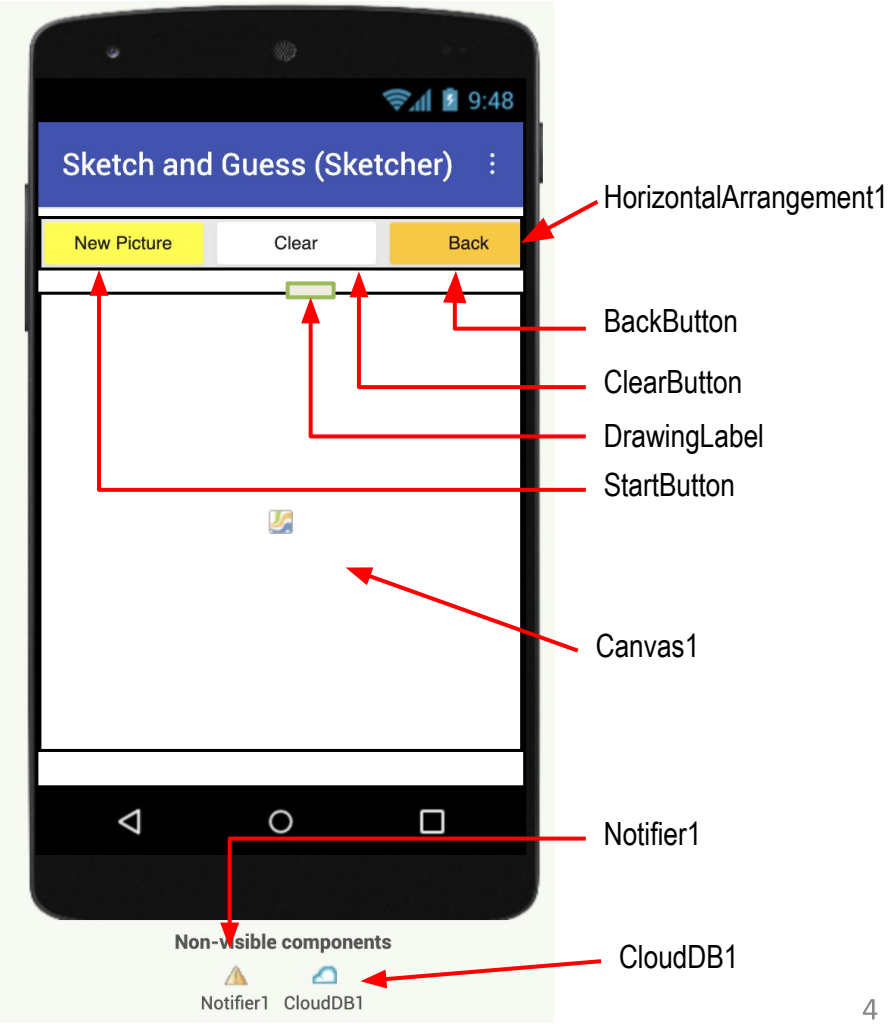
15 Set the *Width* for each Button to **33%** so they fill out the width of the Screen. Change the *BackgroundColor* for each button to a color of your choosing.

16 Add a **Label** below the HorizontalArrangement. Name it **DrawingLabel**. Delete what is in the *Text* property so it is blank.

17 From the **Drawing and Animation** drawer, drag out a **Canvas**, and set its *Width* and *Height* properties to **"Fill parent"**. This is what the Sketcher will draw on.

18 Although you won't use these components immediately, add a **Notifier** component from the **User Interface** drawer, and a **CloudDB** component from the **Storage** drawer.

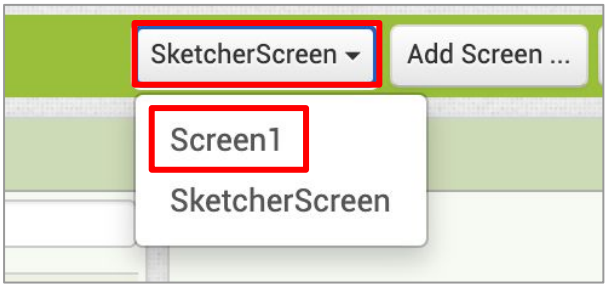
Your SketcherScreen should look something like this: - - - - - - - ►



NAVIGATE BETWEEN SCREENS

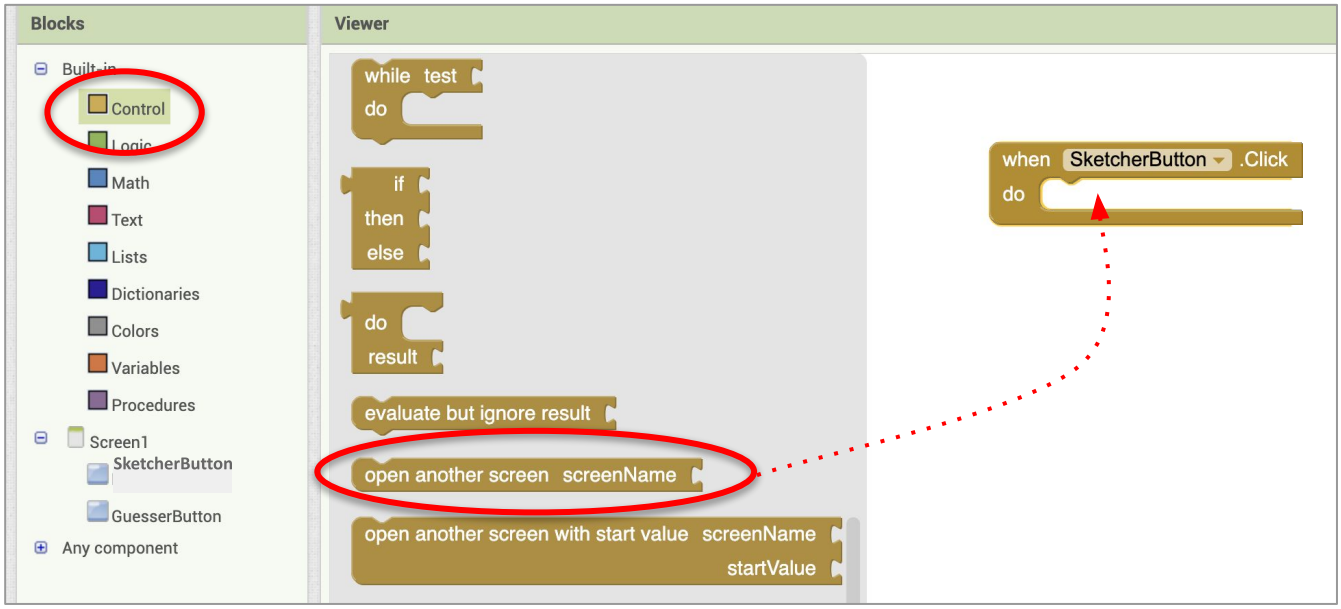
The first thing to code is opening the **SketcherScreen** from **Screen1**, and also returning back to **Screen1** from **SketcherScreen**.

19 Make sure you are in **Screen1**, and then in the **Blocks Editor**.



20 Drag out a **SketcherButton.Click** event block.

21 To open another screen, drag out an **open another screen** block from the **Control** drawer.



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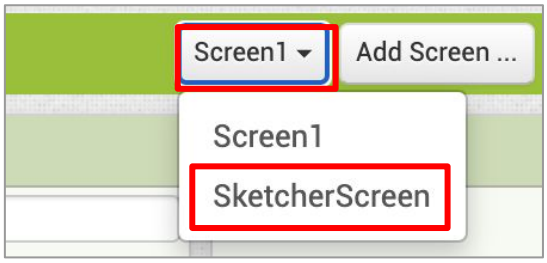
OPEN SCREEN

22 From the Text drawer, drag out a blank text block, type in “SketcherScreen”, and snap it to **open another screen**.

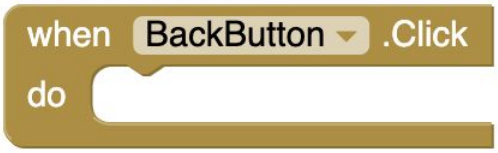
CLOSE SCREEN

Users need a way to navigate back to **Screen1**, so they can swap who is the Sketcher and who is the Guesser in the game.

23 Switch to **SketcherScreen**.

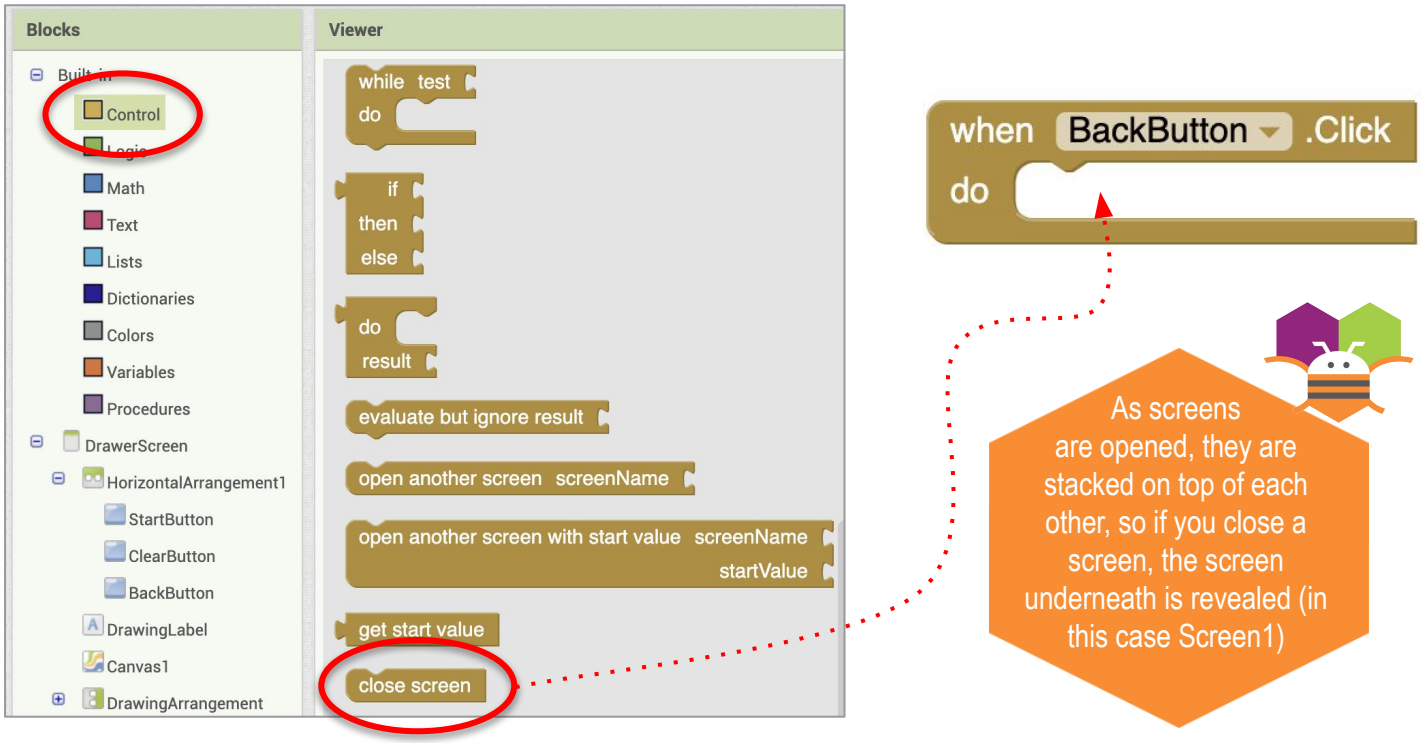


24 Drag out a **BackButton.Click** event block.

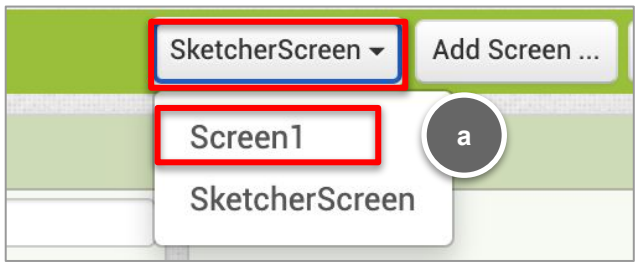


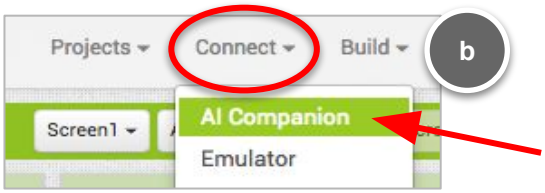
CLOSE SCREEN (continued)

25 From the **Control** drawer, drag out a close screen block and snap it into **BackButton.Click**.



26 Test it out with the MIT AI2 Companion. Make sure you have **Screen1** open. Test that you can click on "I want to draw" and it opens the **SketcherScreen**, and that it returns to **Screen1** when "Back" is pressed.





COMPUTATIONAL THINKING CONCEPTS

Sketch And Guess Part 1
1. Events 
2. Naming