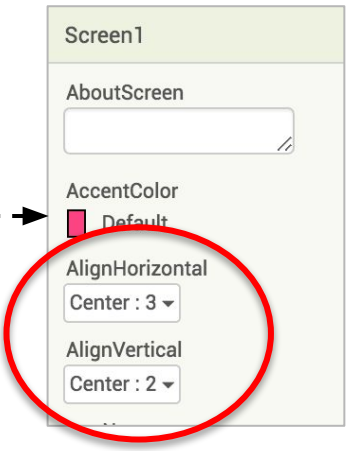
TWO-BUTTON GAME: PART 1

In this lesson, you will remake the two button game from Unit 1. Users click the buttons as fast as they can!

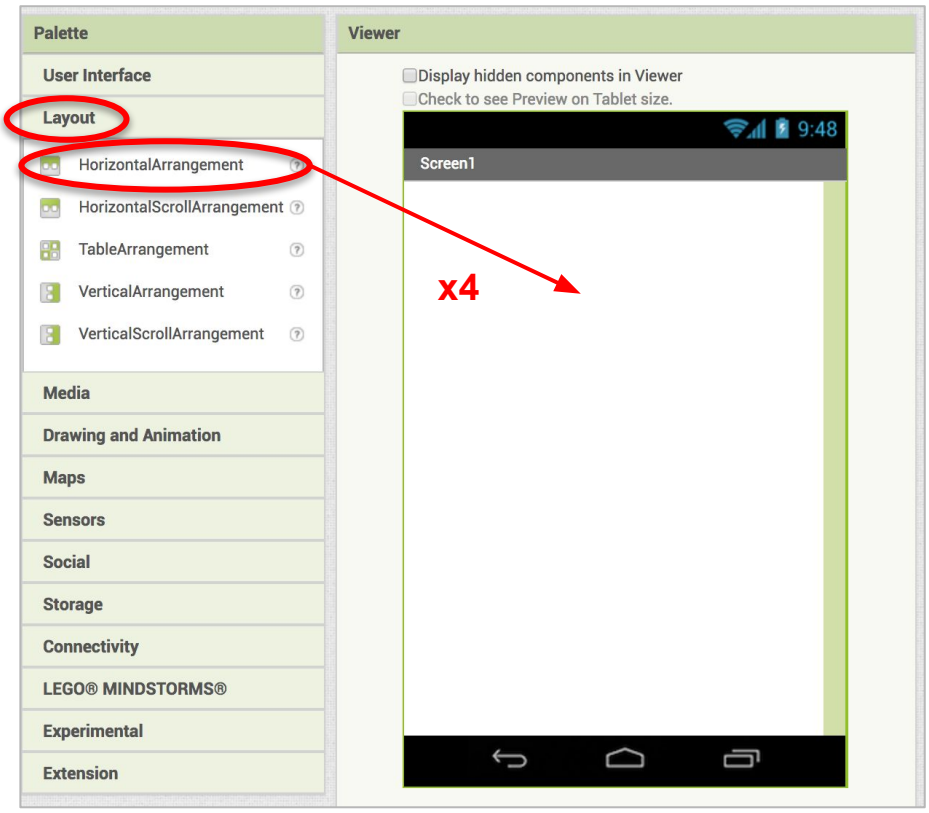
START HERE

1. Open a new project in MIT App Inventor and name the project "TwoButtonGame".

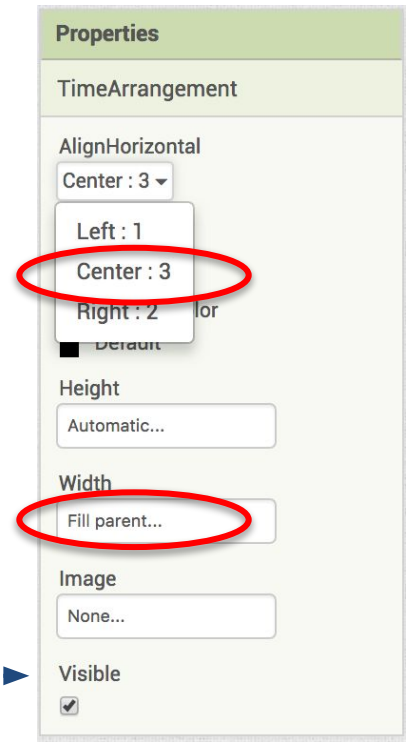
2. Set *AlignHorizontal* and *AlignVertical* for **Screen1** to **Center**.



3. Drag in 4 **HorizontalArrangements**. Name them *TimeArrangement, ButtonArrangement, ScoreArrangement,* and *StartButtonArrangement*.



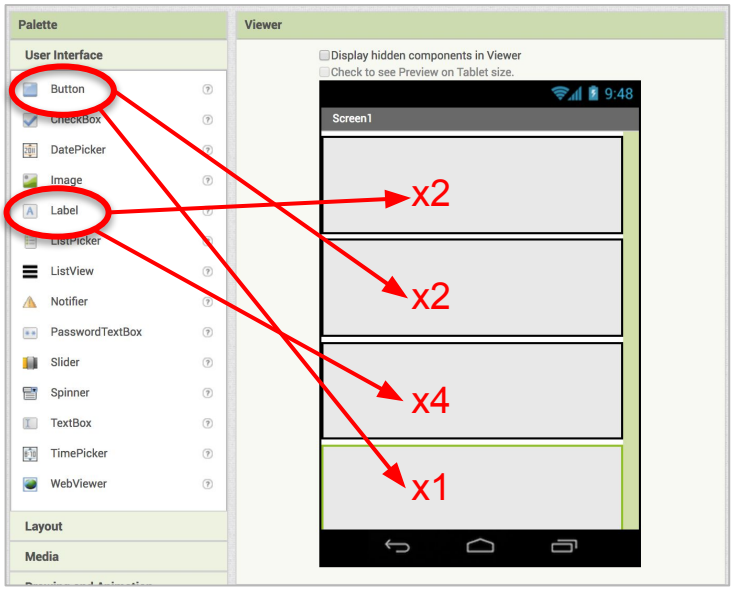
4. For each **HorizontalArrangement**, change its *AlignHorizontal* property to "Center" and its *Width* property to "Fill Parent".



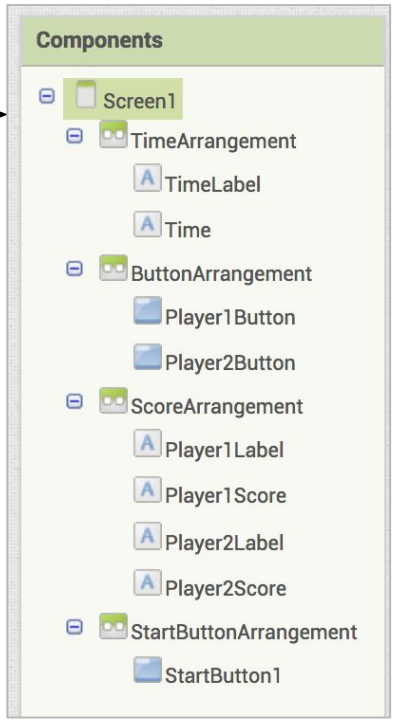
ADDING COMPONENTS

5 Drag in the following components to the corresponding HorizontalArrangement:

- TimerArrangement - 2 labels
- ButtonArrangement - 2 buttons
- ScoreArrangement - 4 labels
- StartButtonArrangement - 1 button

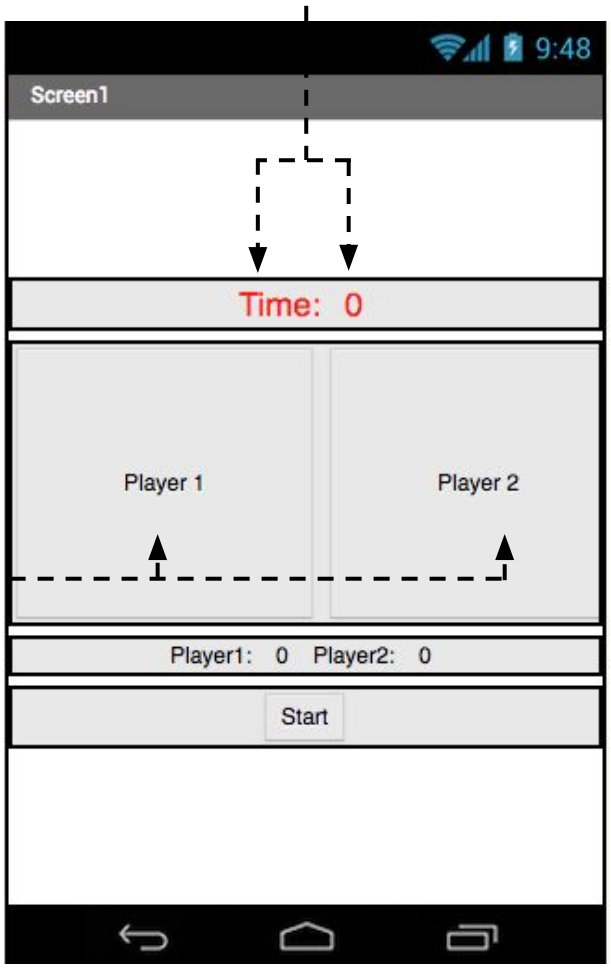


6 Name each new component as shown below.

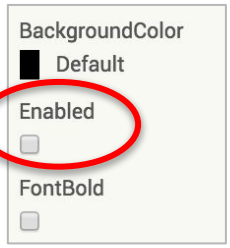


7 Change the *TextColor* for these labels to **Red** and the *FontSize* to **20**.

8 Set the *Text* property of each component so the final User Interface looks like this.



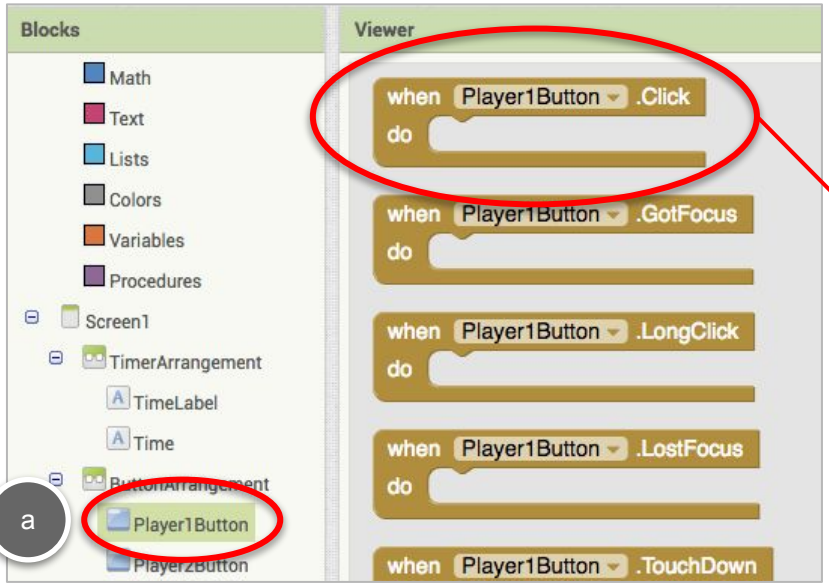
9 Set the *Height* property for these two buttons to **150 pixels**, and the *Width* property to **50 percent**. Then uncheck *Enabled* for both.

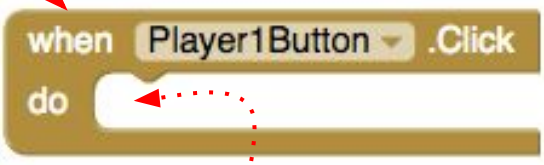


BLOCKS

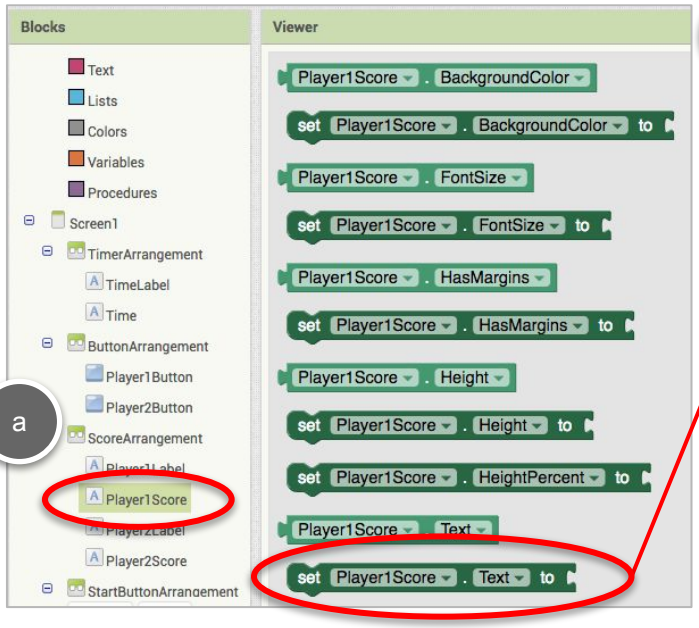
10 Switch to the Blocks editor from the Designer.

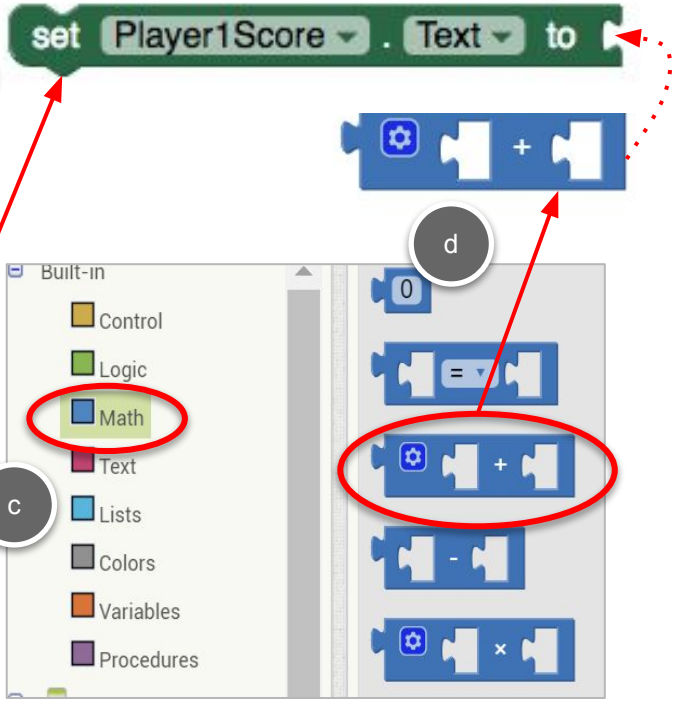
11 Drag out a **Player1Button.Click** event block.





12 Increase Player1's score by 1.



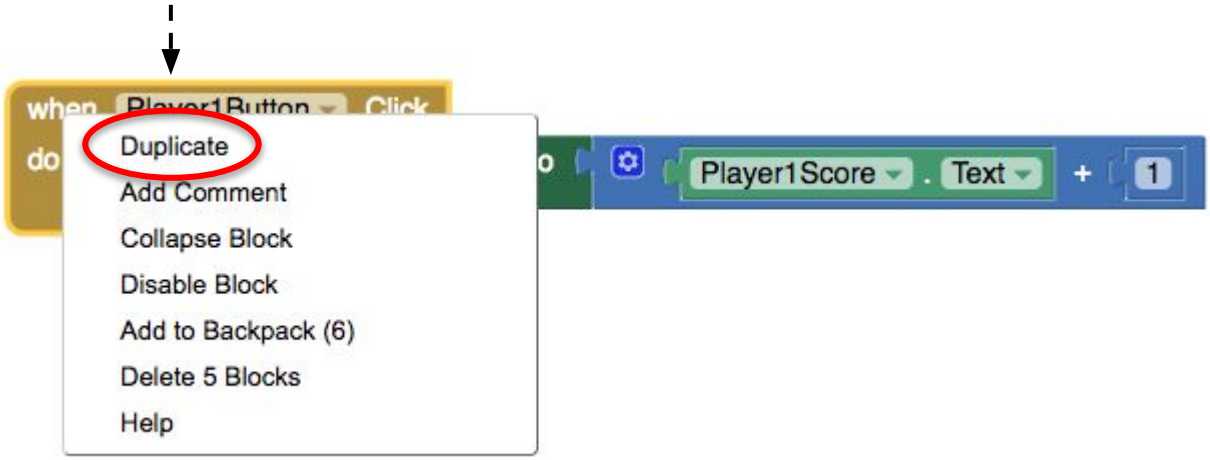


INCREASE SCORE

13 Fill in the addition block.

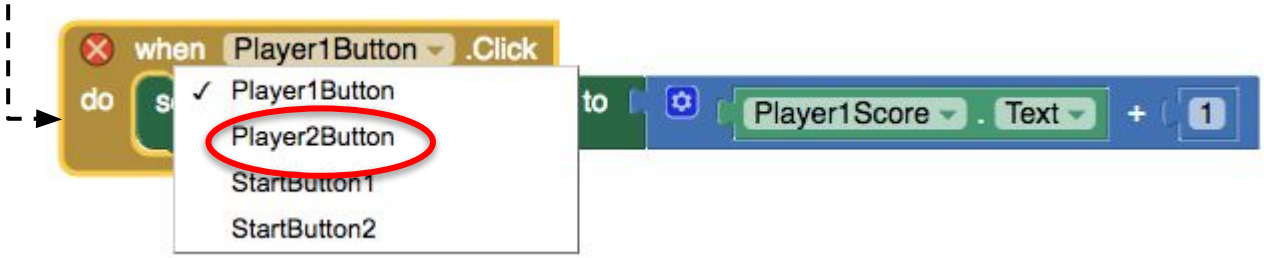
Now, code the **Player2Button** by duplicating the **Player1Button.Click** event and changing it slightly.

14 Right-click on the **when Player1Button.Click** event block, and click **Duplicate.**

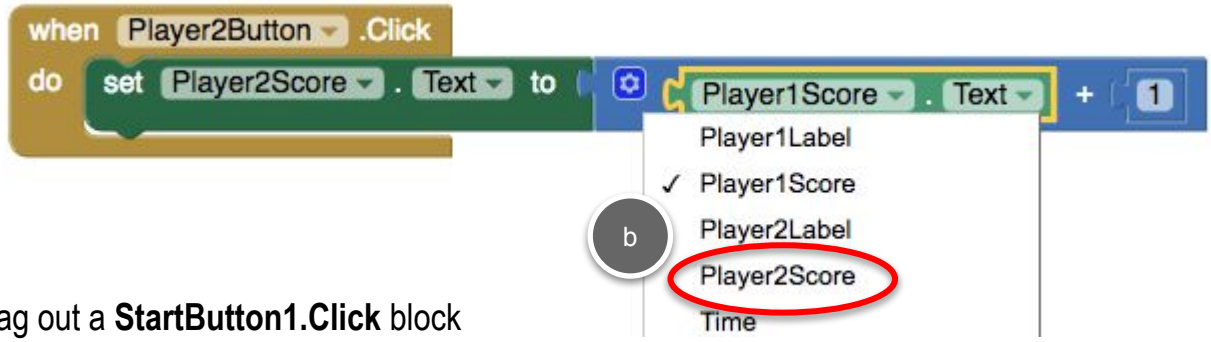


PLAYER2 BUTTON

15 Click the dropdown menu of **Player1Button**, and select **Player2Button.**



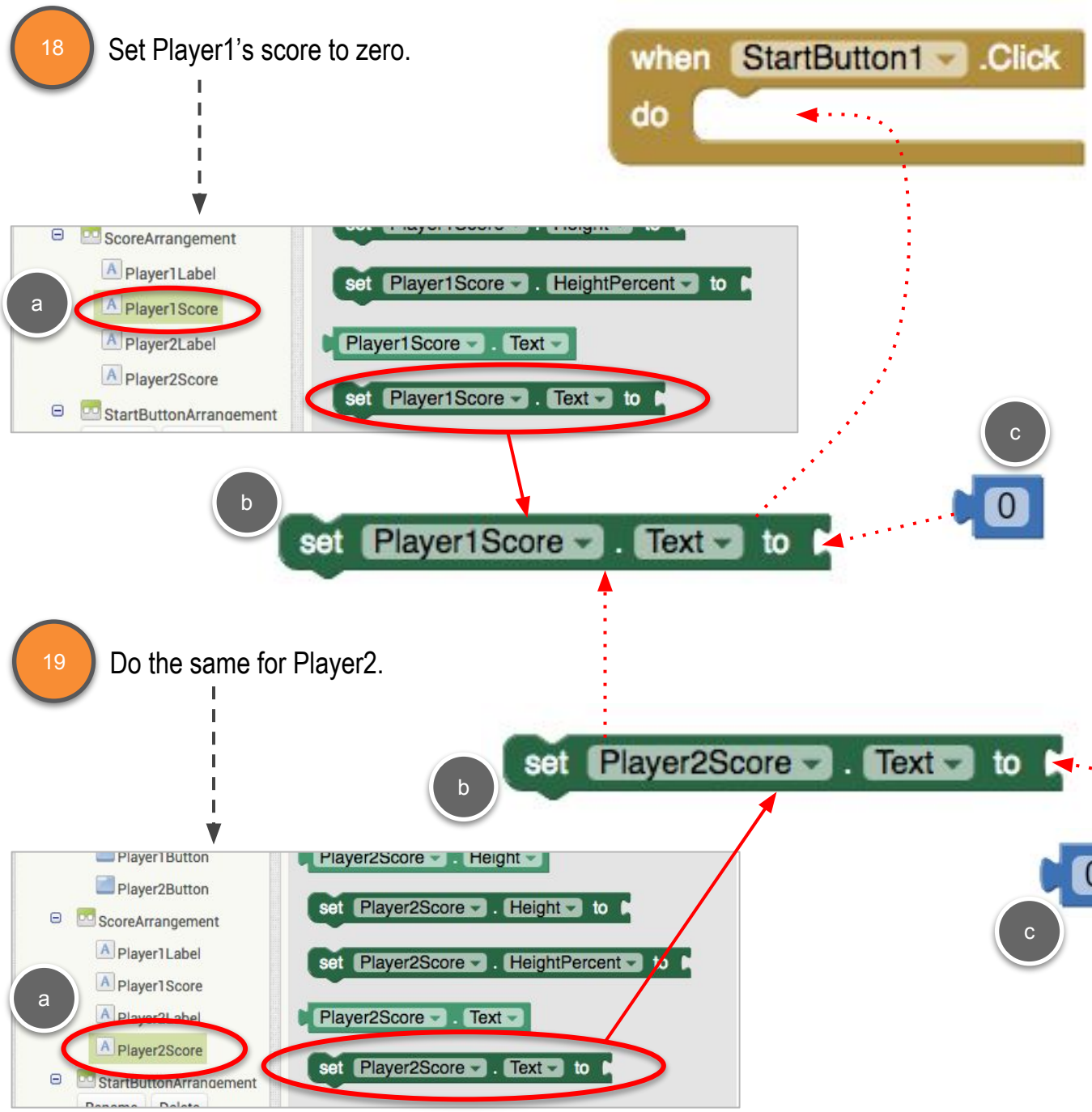
16 Click the dropdown menu of **Player1Score**, and click **Player2Score.**



17 Drag out a **StartButton1.Click** block

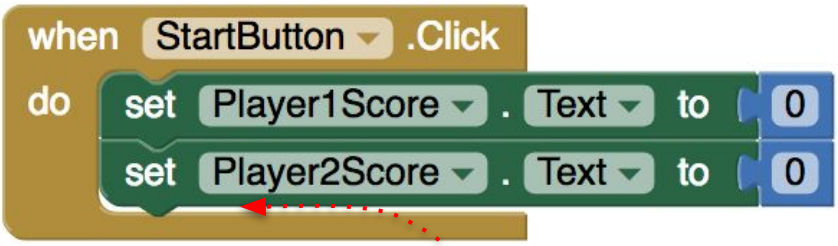
START BUTTON

18 Set Player1's score to zero.

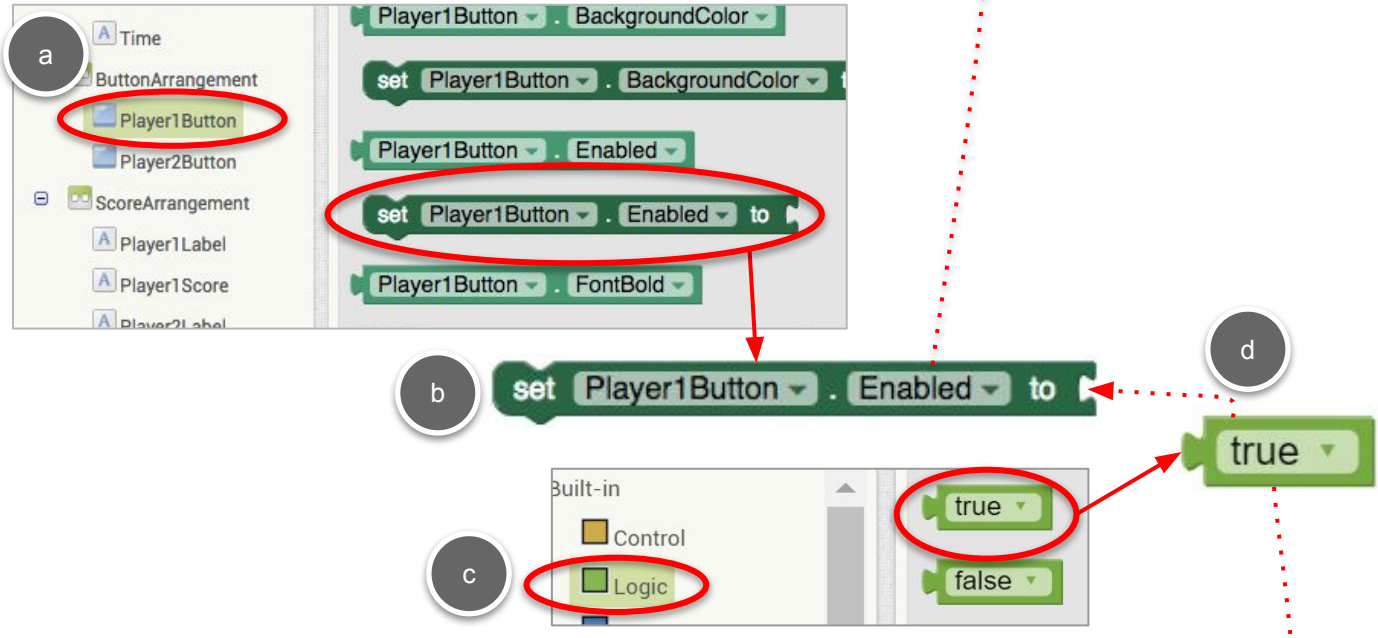


19 Do the same for Player2.

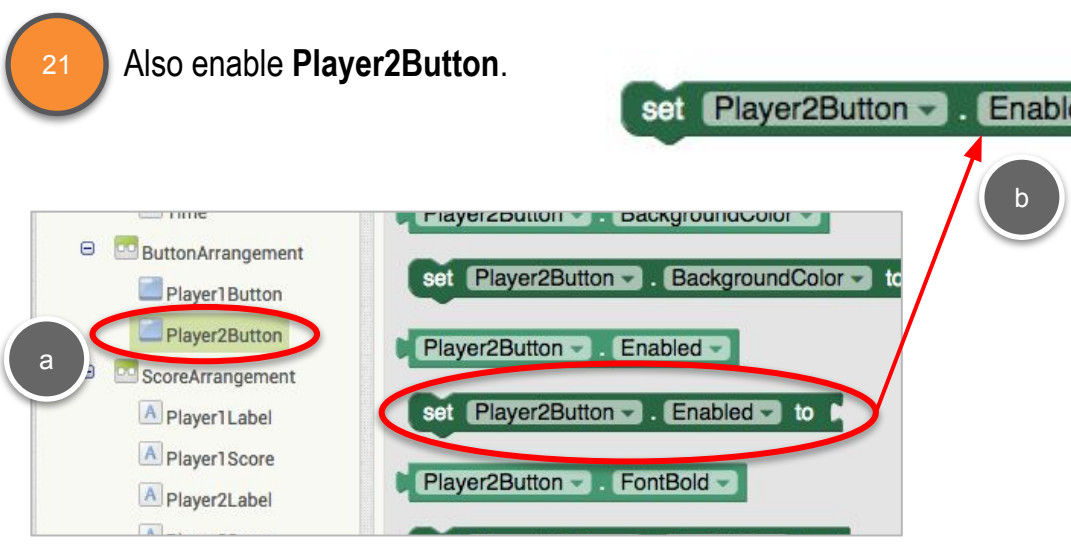
START BUTTON (continued)



20 Now enable **Player1Button** so users can click on it.

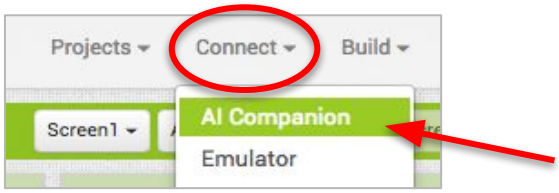


21 Also enable **Player2Button**.



TESTING!

22 Now test your app by connecting to the MIT AI2 Companion. Start the game and press both buttons. Do the scores update correctly?



TWO-BUTTON GAME: PART 1

COMPUTATIONAL THINKING CONCEPTS

The following are the Computational Thinking Concepts learned in this lesson.

Two-Button Game
1. Events: 
3. Naming: 
4. Operators: