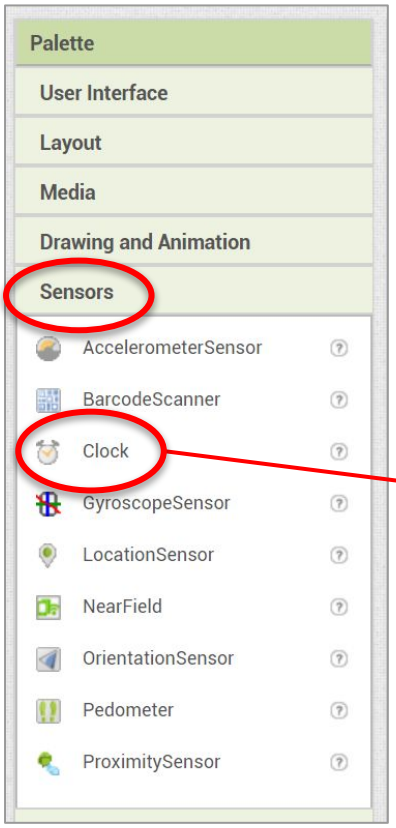
TWO-BUTTON GAME: PART 2

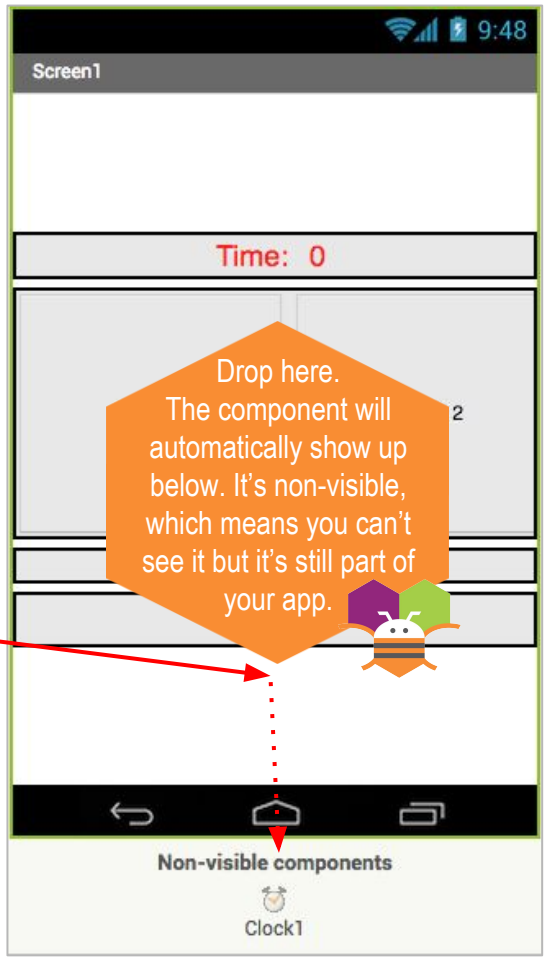
In this lesson, you will add a Clock.Timer to the game so users have to click fast to win !

ADD A CLOCK TIMER

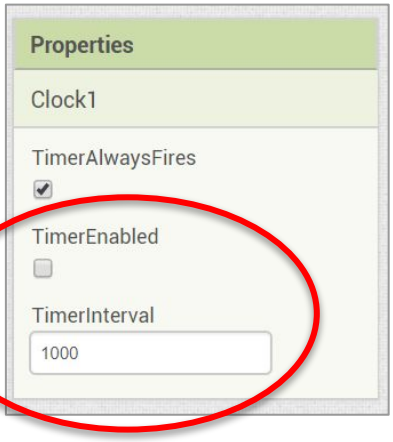
1. Switch to the Designer.

2. From the Sensors palette, drag in a **Clock** component.





3. Set *TimerEnabled* to **false** (uncheck the box), and change the *TimerInterval* to **1000** (1000 milliseconds = 1 second).



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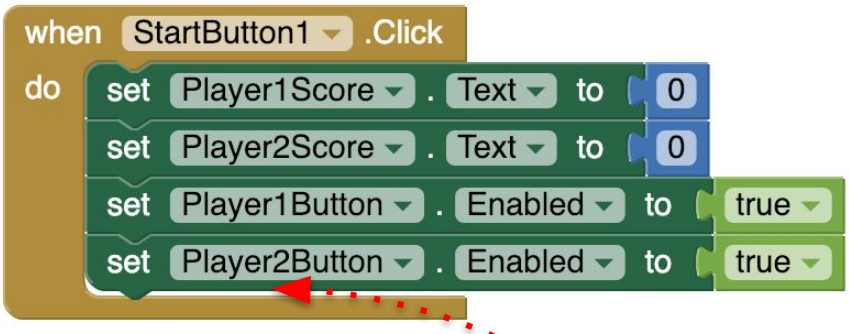
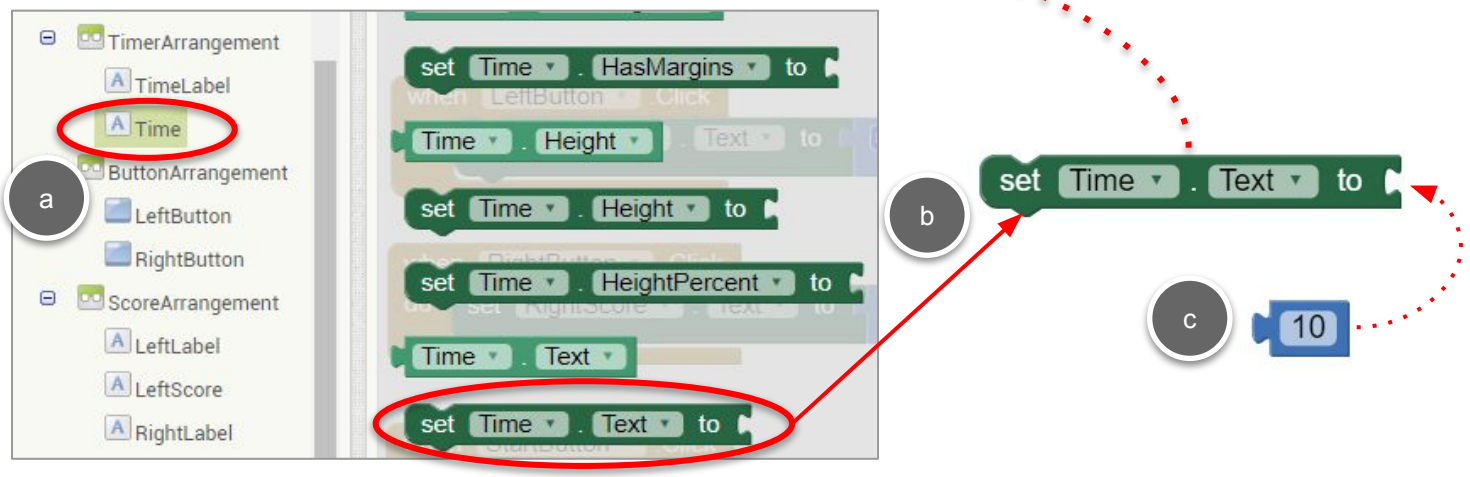
ENABLE CLOCK.TIMER

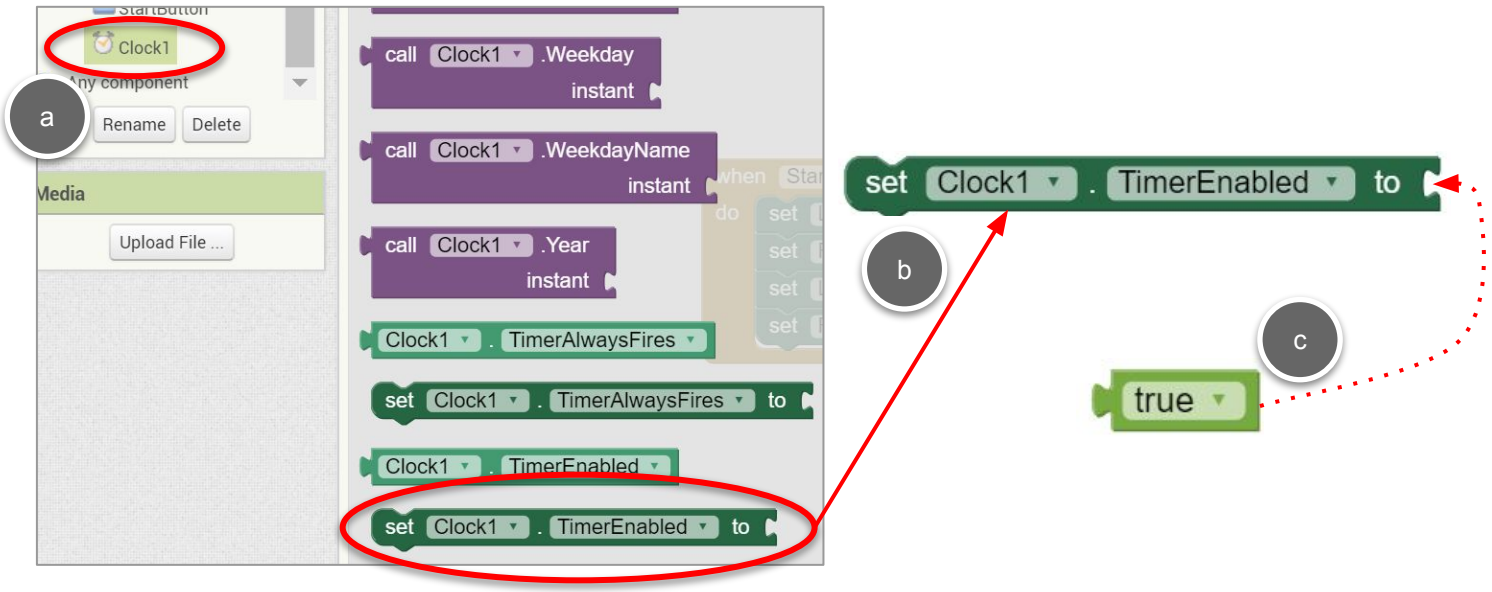
4 Switch back to the Blocks Editor.

5 Set the Time to 10 (seconds).





6 And enable the **Clock** to start ticking!



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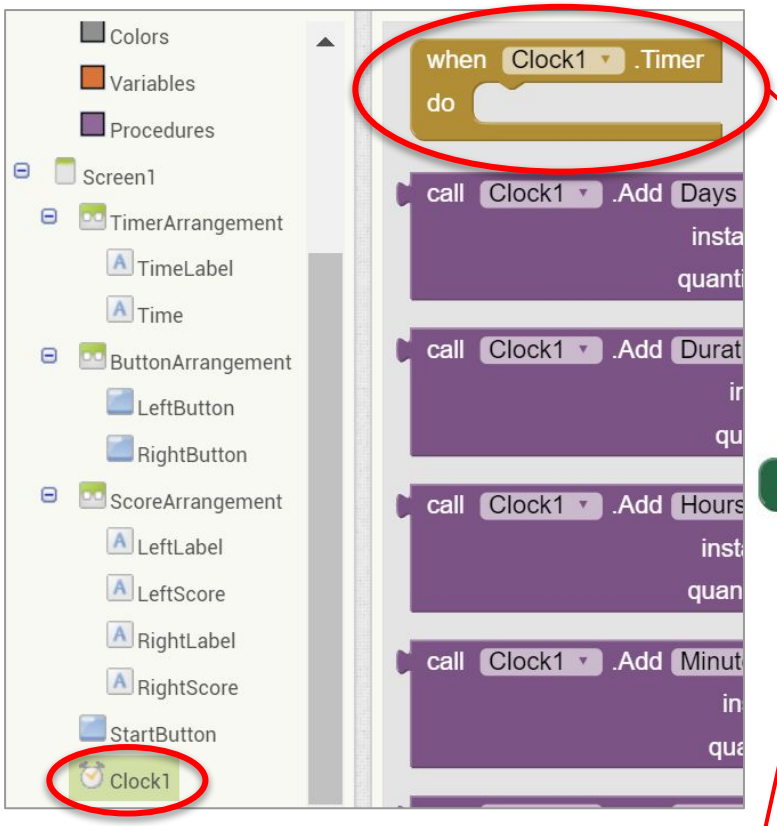
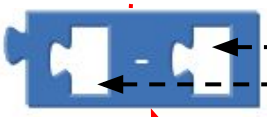
CLOCK TIMER EVENT

Every time the Clock Timer "fires", you need to update the time counter.

The **when Clock1.Timer** event works like a timer. It is triggered every *TimerInterval* milliseconds.

7 Drag out a **Clock1.Timer** block.

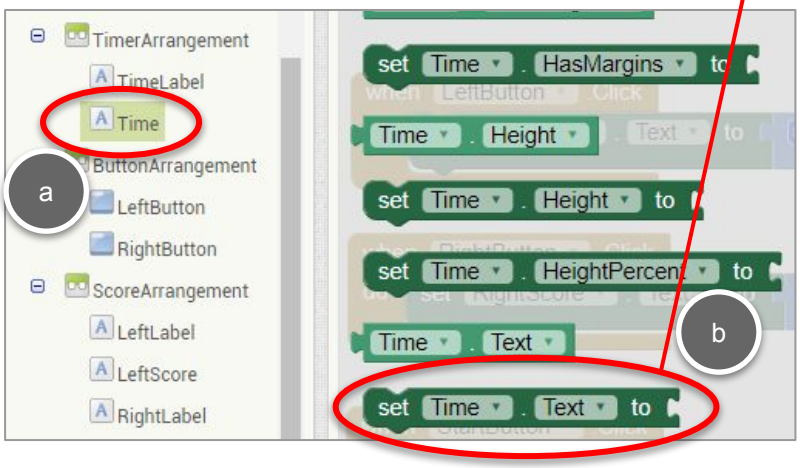




d

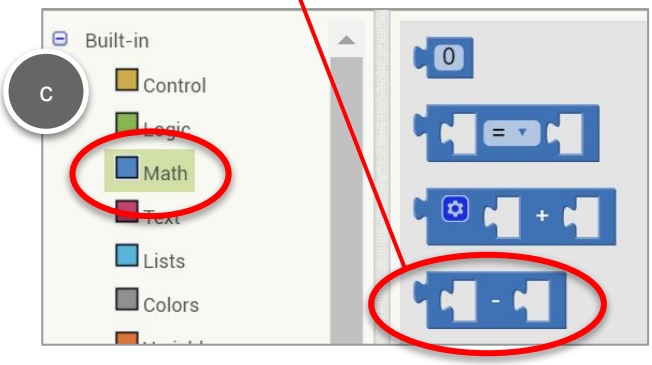
8 Each time the Clock Timer fires, decrease the Time by 1.

9 Can you figure out what goes in these 2 slots?



a

b



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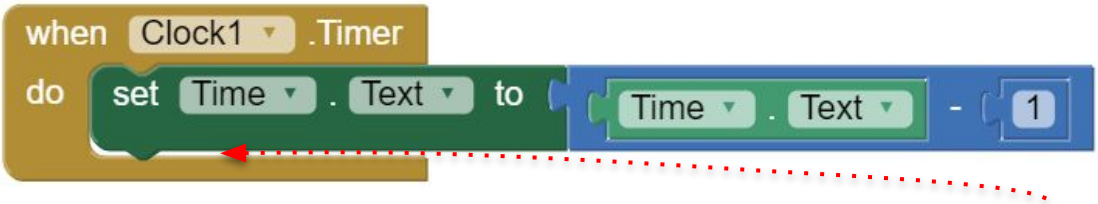
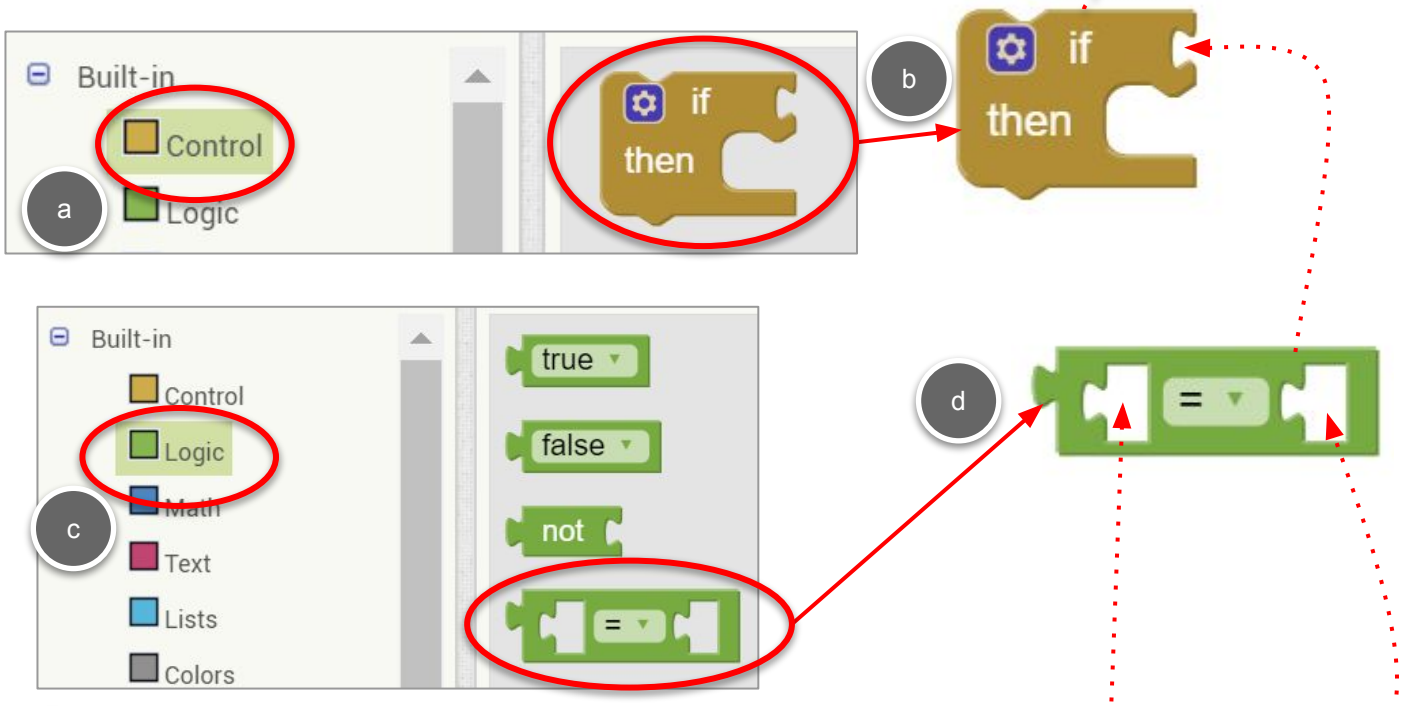
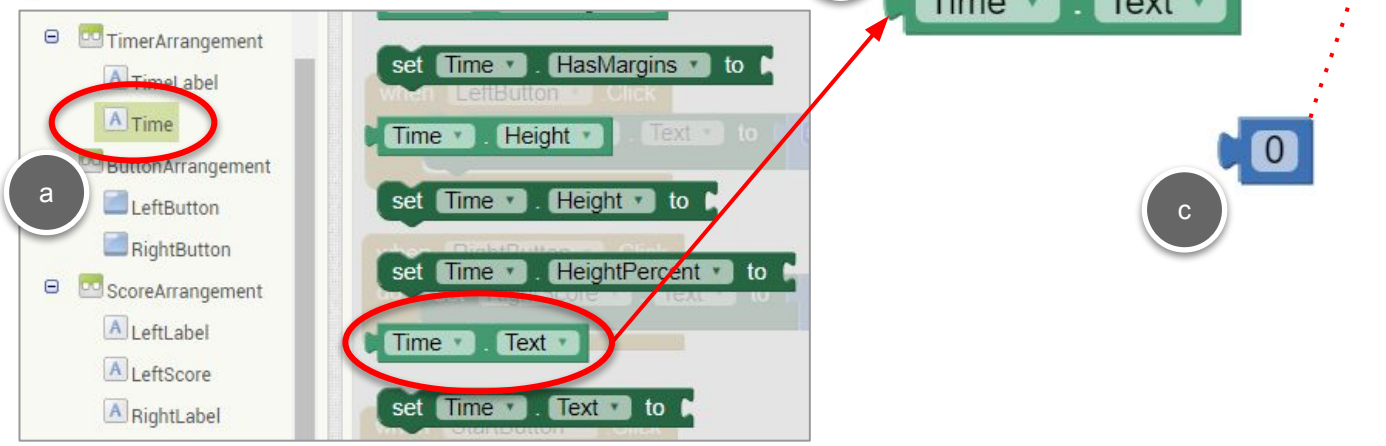
CLOCK.TIMER EVENT (continued)

10 Add an **if** block to test if the Time = 0, which means the time is up and the game is over.





11 Fill in the slots for the equals block.



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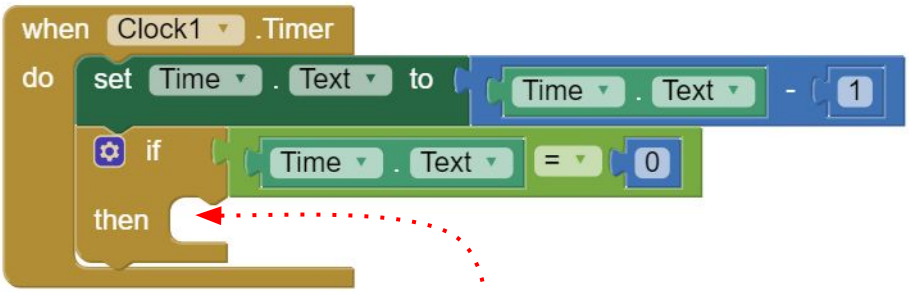
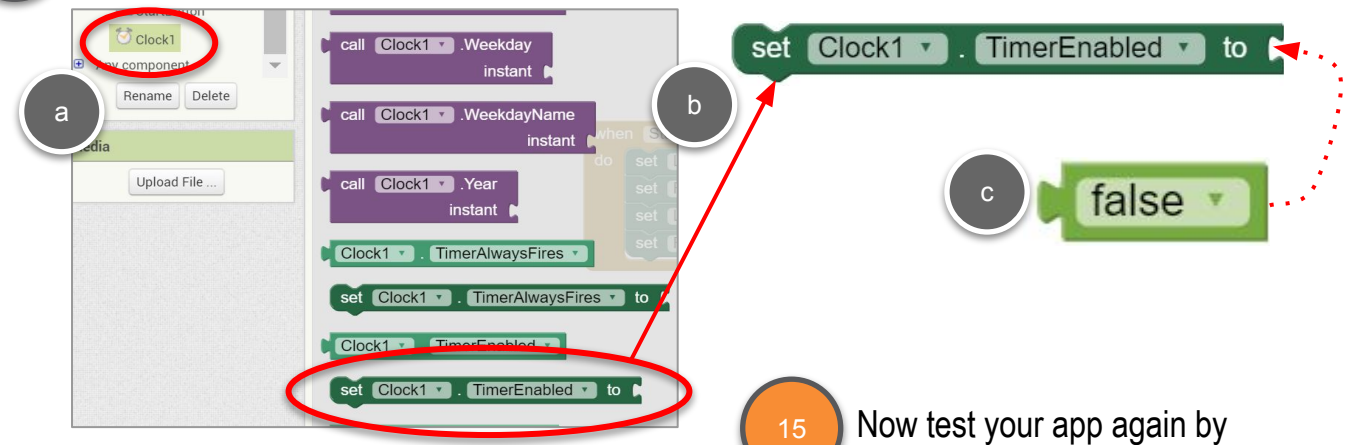
ENABLE COMPONENTS



12 If time is up, disable **Player1Button** so the users cannot continue clicking it.

13 Disable **Player2Button** too.

14 Disable the **Clock.Timer** so it stops ticking.



15 Now test your app again by connecting to the MIT AI2 Companion. Does the time count down from 10 to 1 and then stop?

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TWO-BUTTON GAME: PART 2

COMPUTATIONAL THINKING CONCEPTS

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

Two-Button Game
1. Events: 
2. Conditionals: 

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