**A Leap for Mankind – Step-by-Step Walkthrough**

**1)** [**Open the link to ScratchX (use Google Chrome**](http://scratchx.org/?url=http://khanning.github.io/scratch-leapmotion-extension/leapmotion_extension.js#scratch)**)**

**Enable Adobe Flash and restart Chrome *(if needed).***

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**2) Click “File” -> “Load Project”**

**A screenshot of a computer

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**3) Open the appropriate file:**

***LeapForMankind\_Racing\_Game.sbx* - to play the full game**

***starter\_code.sb2* - for the class workshop.**

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**4) If you opened starter\_code.sb2, you should now have a basic racing track and a red car. To edit the track, click the Stage and then click the “Backdrops” tab.**

**A screenshot of a cell phone

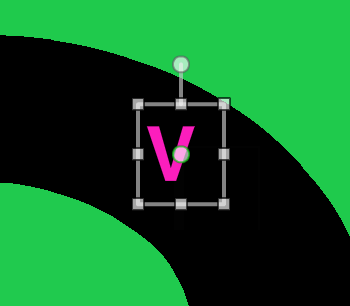
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**5) Switch to the text tool**

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**6) Create a blue ‘ V ’, resize it and place it on the track**

 A picture containing object, clock

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**7) Click the “Open” button on the left window pane**

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**8) Open the Sprite of your choice in the file explorer**

A picture containing screenshot

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**9) Events -> When [Flag] Clicked**

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**10) Looks -> Switch costume to [costume1]**

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**11) Motion ->** Go to x/y coordinates / **Motion ->** Point in direction 90 (right)

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**12) Events -> When [Flag] Clicked**

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**13) Looks ->** Say [] for 1 second (drag three times)

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**14) Control ->** Forever

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**15) Motion ->** Move 2 steps

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**16) Sensing ->** Touching color (green) -> click the “color” box then click the background

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**17) Control ->** If / then

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**18) Looks ->** Switch costume to [costume2]

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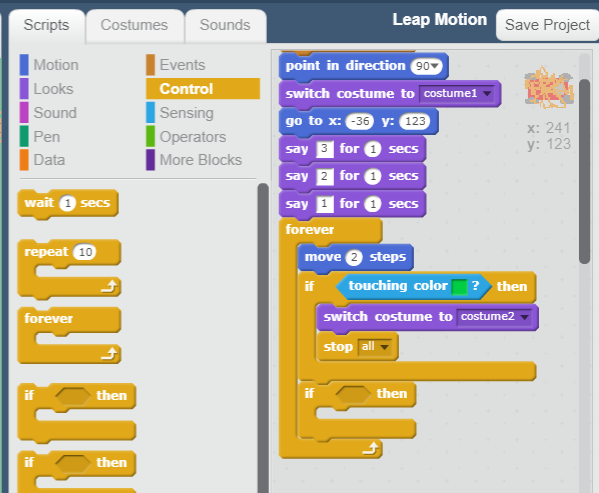
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**19) Control ->** Stop all

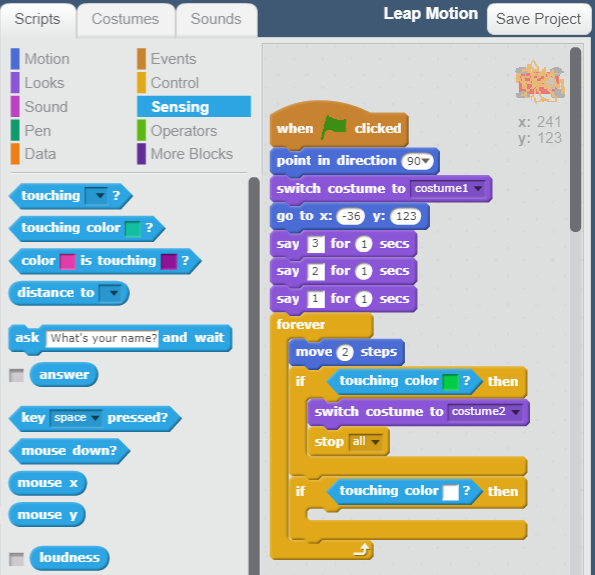
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**20) Control ->** If / then



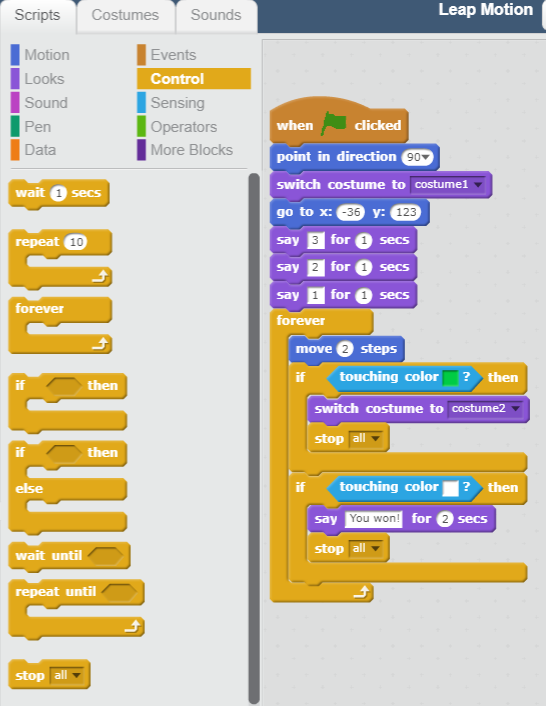
**21) Sensing ->** Touching color (white) -> click the “color” box then click the white line



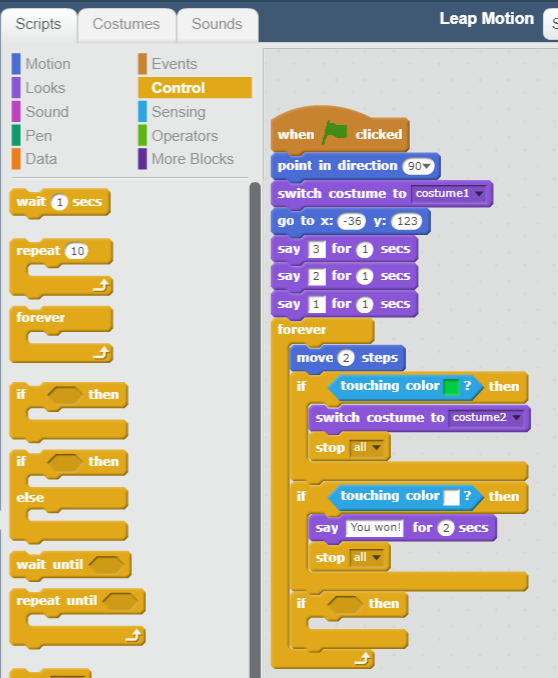
**22) Looks ->** Say “You won!” for 2 seconds



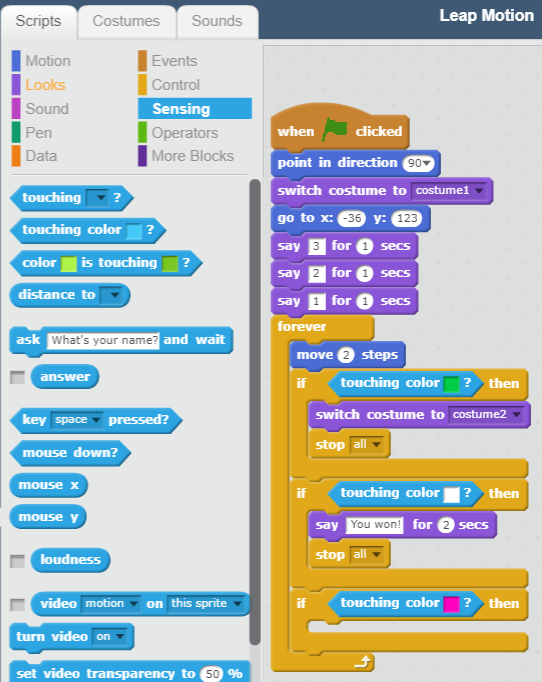
**23) Control ->** Stop all



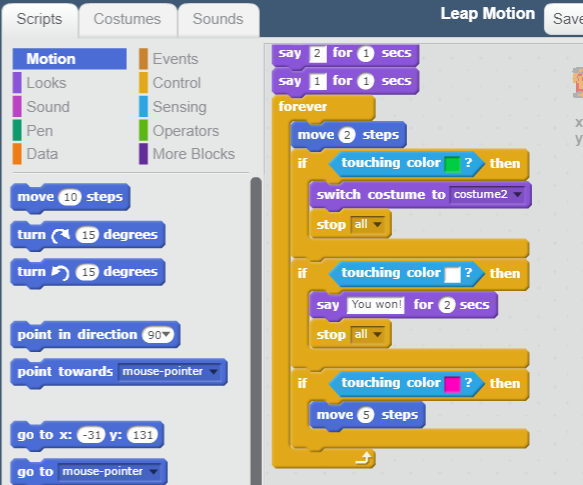
**24) Control ->** If / then



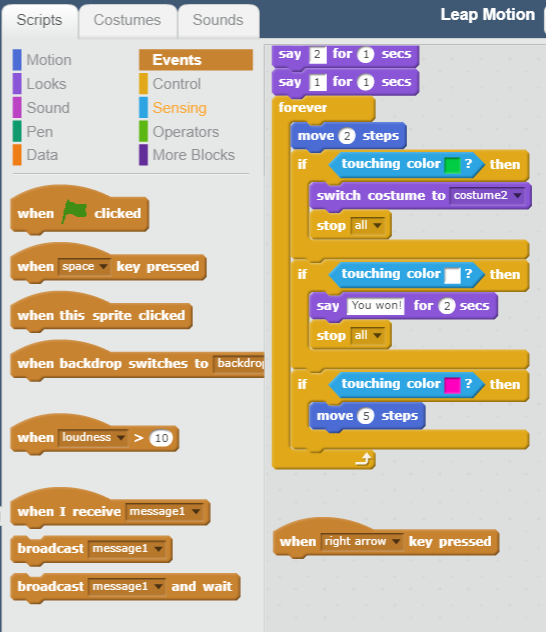
**25) Sensing ->** Touching color (pink) -> click the “color” box then click the boost “V”



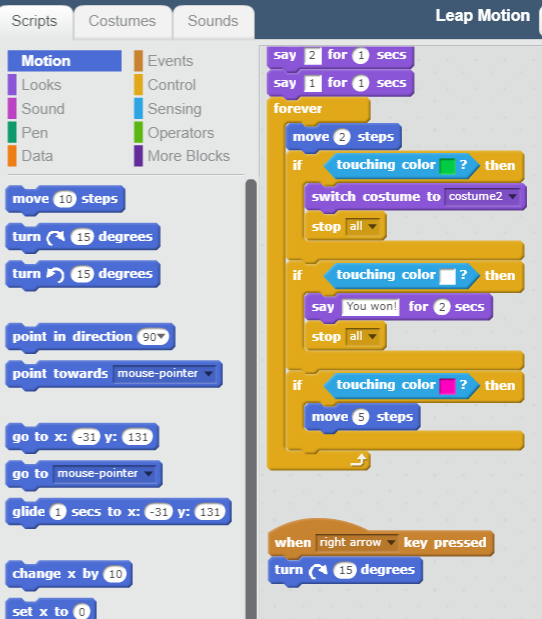
**26) Motion ->** Move 5 steps



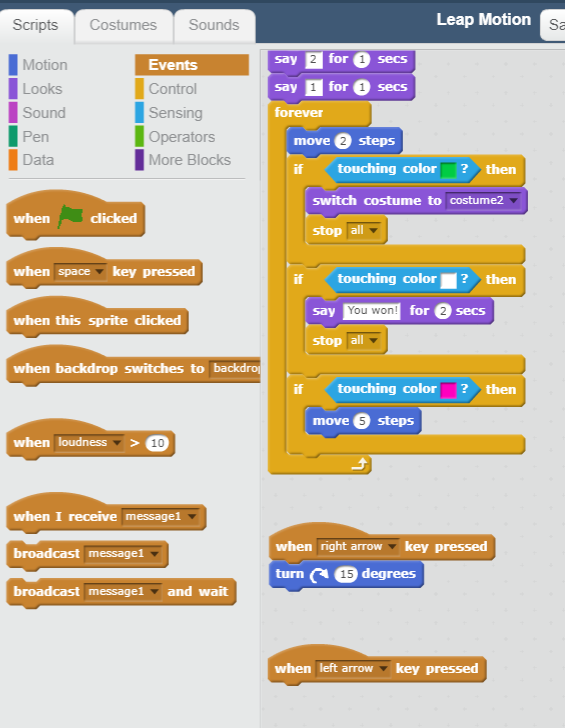
**27) Events ->** When (right arrow) key pressed



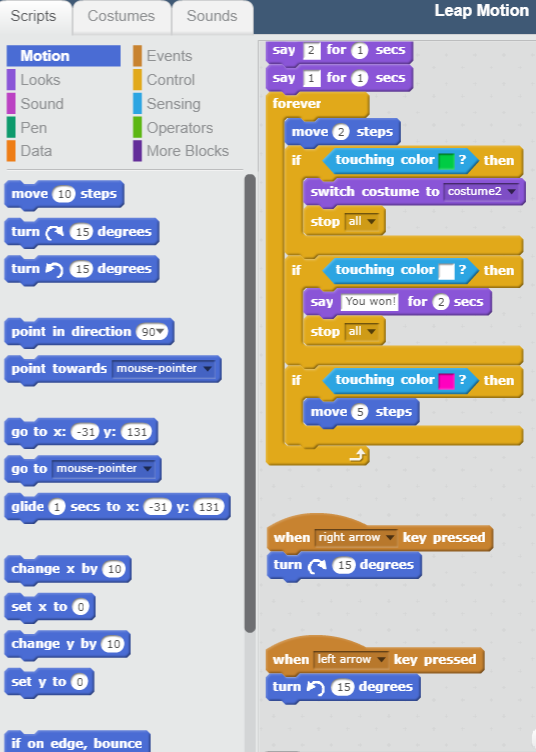
**28) Motion ->** Turn (right 15 degrees)



**29) Events ->** When (left arrow) key pressed



**30) Motion ->** Turn (left 15 degrees)



**31) To play the game, click on the blue box to maximize the screen, then click the green flag to begin.**

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**Summary**

**Steps 9-11: What happens when you start the game?**

Set the car’s X / Y start coordinates, the direction that car is facing, and the non-crashed car

**Steps 14-15: What about moving forward?**

The “forever” block will continue moving the car forward indefinitely

**Steps 16-19: What about crashing? How do they know they’ve crashed?**

The “if” statement will stop the car from moving and change it to a crashed car when it touches the “green” color

**Steps 20-23: What about winning? What signals that you’ve won the game?**

If the car touches the white line, you’ve won. Display a winning message and stop the game.

**Steps 24-26: What about “boost”? How do we make the car go faster?**

If the car touches the pink “V” we want it to go faster. Instead of moving just 2 steps, we want to move 5 steps.

**Steps 27-30: How do we steer the car?**

The “listeners” watch for the left / right keyboard arrows and then turn the car 15 degrees. You can change the “15 degrees” value to make the car turn more / less. Try it!