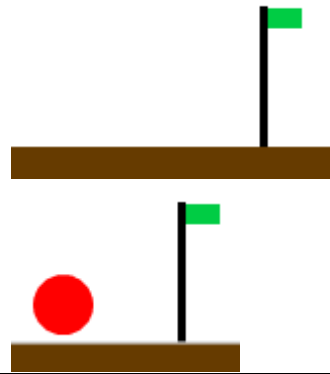


BoyJumper – Creation Tutorial

<https://scratch.mit.edu/projects/61690862/>

Create the first level – Create a backdrop on the stage

- We need a dark brown rectangle that will be our ground (from one side of the screen to the other!)
- We need a black line that will be our flag pole
- We need a small green rectangle that will be our flag
- Name this backdrop as *level1*
- Duplicate this level and add a small red circle as our obstacle
- Name this backdrop as *level2*



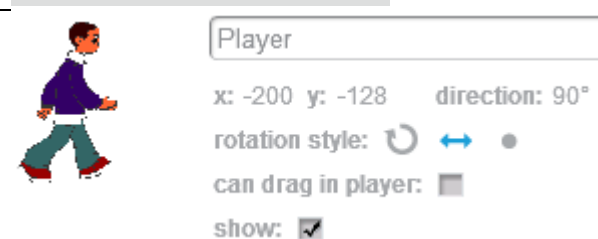
Script the Stage with the following scriptlet

- This will reset the jump of the player when the game is initialised
- Will load the first level
- Will send a message to other sprites that the game is starting



Create a new sprite (from the library)

- Choose *Boy3 Walking*
- Name the sprite as *Player*
- Make sure the rotational style is *left-right*



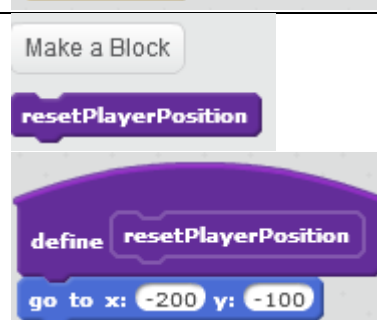
Script the sprite with the following scriptlet to make gravity and jumping ability

- This will make the *Player* be dragged until touching the dark brown colour (our representation of the "ground")
- Pressing the Up Arrow will make the *Player* jump
- *PlayerJumpHeight* is a variable you created at the start
- You can change how high the *Player* jumps when the up arrow key is pressed by changing the number of *set PlayerJumpHeight*




We must create a custom block to control where our *Player* is positioned when the level starts or when he hits an obstacle

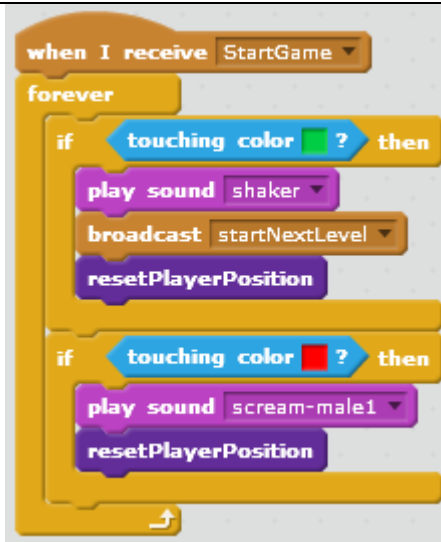
- Making a custom block instead of many *goto* blocks allows us to control all the references where a the *Player* is sent back with a single *goto* block rather than setting the XY in many places




Change the backdrop to *level2* (so that you can see the red circle)

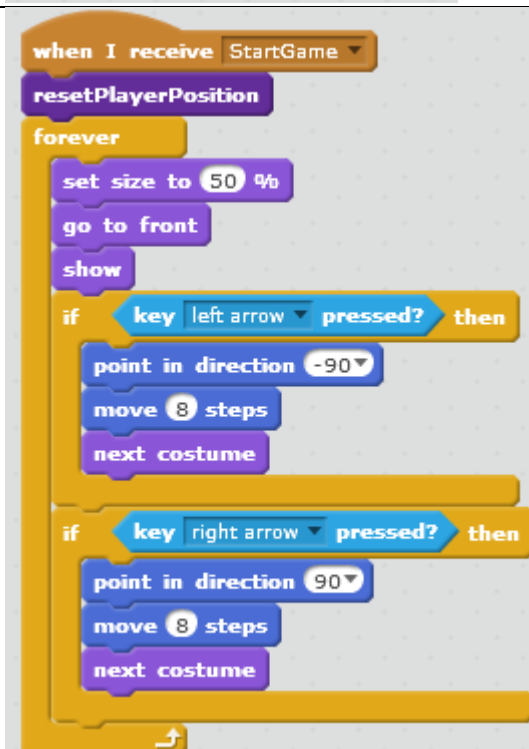
Script the  sprite with the following scriptlet to define the game rules

- The first IF statement is for winning the level
 - Touching the green colour of the flag
- The second IF statement is for obstacles in the level
 - Touching the red colour of the obstacle
- Add sounds to make the game more interesting

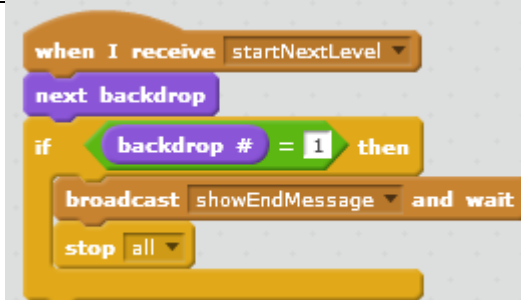


Script the  sprite with the following scriptlet to give our players horizontal control


- We want to make sure that the *Player* is always visible and is at a certain size, even if we have resized or hid him
- We also want to make sure he starts the game in the correct position



Go back to the **Stage** and add the following scriptlet to allow the levels to change and to end the game when we run out of levels



Create a **new sprite (paint new sprite)**

- Simple text  with a start game message
- Name your sprite *StartMessage*
- Add the scripts to make sure it shows at the start of the game, but hides after the first level

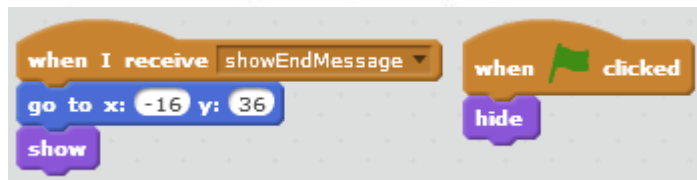
Get to the Green Flag!!!



Duplicate your *StartMessage* sprite

- Change the *costume*/text on your sprite to an end-game message
- Call your new sprite *EndGameMessage*
- Remove the blocks about receiving the *startNextLevel* broadcast

You Finished The Game!



That's It!

We'll almost... We only have two levels!

To make more, simply:

- go to the **Stage** backdrops
- duplicate *level1* (or *level2*)
- draw whatever obstacles you want
- add as many platforms as you want

And.....done! The game will automatically load your new level as the next one (after *level2*). Add as many more as you like!

Quick Note:

When adding new levels, it is important to remember:

You must use the same red and brown colours as the ones you selected on the Player scriptlets!!!!

Easy way to make sure your using the right colour is to use the *Dropper* on the backdrop to select the correct colour

