All teaching moments are mentioned in a youtube video attached in the “Student Step By Step Guide Jumping Game in Scratch” along with the steps mentioned in this document.

Picking your character : This is where you prompt the students to click on the chick sprite as all of this code is only going to affect the variable of the egg.

Step 5 : Make sure that all students have one sprite in their toolbar under the console window.

Steps 5-8: The reason why we select the block change y by 10 is because that is how high the chick will jump vertically up. In order for the sprite to return to the ground in the same place, we place a change y by -10 indicating downward motion.

Making Obstacle : This is where you prompt the students to click on the egg sprite as all of this code is only going to affect the variable of the egg.

Step 11 : Ensure that the size of the obstacle is smaller than sprite in order for the character to jump over it.

Step 12-13 : In order to tell the egg to start at a certain point, remind the students that every position on the stage has a certain x and y coordinate. X is how far your sprite is from the left to the right of the screen. Where Y is how far your sprite is up and down from the screen.

Step 14-15 : The glides x and y coordinates will also populate if you drag the egg to the furthest most left spot on the screen. An increase in the default glide value which lays in the bubble on the right of the “glide” indicates a slower speed the egg will come at the chick.

Stop the Game : The egg sprite will remain highlighted for this section of code as this code concerns the egg.

Chick in the air : This is where you prompt the students to click on the chick sprite as all of this code is only going to affect the variable of the egg.

Step 19-20 :There comes a case where the chick may get stuck in the air. This is due to the code getting stopped when the chick runs into the egg but may not be finished with the run so it may be frozen there. We fix this by making the chick go to a starting position when the game starts.

Add More Obstacles : Ensure that students go to previously created egg sprite and right click and select duplicate shown in (Step 21).

Step 22 : The reason you can not see the second egg is because it is right on top of the first egg due to having the same code from the duplication code. This is why we make the second egg wait one second before going into the forever loop.

Beginners Tip With Coding: Each code change makes sure to run the program to see how it acts. This will help with debugging. Debugging is a practice in computer programming where you identify an error and troubleshoot to fix it so the program runs smoothly. Running the program often to see how it acts makes troubleshooting an error way easier than waiting till all code changes are made.