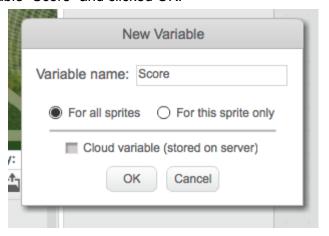
## Part 3 - Variables

Earlier this week I was browsing ScratchEd, and I found a post (<a href="http://scratched.gse.harvard.edu/resources/blocksscripts-you-might-use-games">http://scratched.gse.harvard.edu/resources/blocksscripts-you-might-use-games</a>) that discussed blocks/scripts that can be used in games. Reading this inspired me to try and add a scorekeeper to the soccer project I have been improving over the past few week. Here's how it went!

According to the resource I found, the first step in making a scorekeeper is to go to the Data Blocks section, and click "Make a Variable".



Then, I named the variable "Score" and clicked OK.



After I did that, four new blocks appeared in the Data Blocks section.



I wanted the score to go up whenever the soccer ball went into the net, so I tried adding the "change Score by 1" block to the soccer ball code, and it worked! I clicked the green flag and watched as the counter in the top left corner went to 1 when the ball went in the net.

#### Cat Code

```
when / clicked

go to x: -185 y: -41

glide 1 secs to x: -47 y: -49
```

### Soccer Ball Code

```
when / clicked

go to x: -14 y: -82

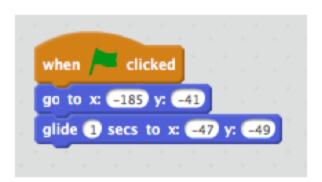
when I receive kick v

glide 1 secs to x: 139 y: -80

change Score v by 1
```

But then I clicked the green flag again, and the score increased again. Then I remembered the issues I had with the ball in the net in when I first started with this project, and I tried initializing the score to 0.

## Cat Code



#### Soccer Ball Code

```
when / clicked

set Score v to 0

go to x: -14 y: -82

when I receive kick v

glide 1 secs to x: 139 y: -80

change Score v by 1
```

Now that I've got a scoreboard in place, I want to come up with a way to make the game interactive so that a user can play the game and earn their own score. Maybe next time!

You can see my project here: <a href="https://scratch.mit.edu/projects/103307676/">https://scratch.mit.edu/projects/103307676/</a>. Feel free to run it, check out the code, or remix it! If you have any questions about it, you can leave a comment in the comments section.

# **Connecting to coding concepts**

Variables are an extremely important element of computer programming. Variables are used to store data, and consist of two parts: the identifier and the value. In this example, the identifier of the variable would be "score", while the value would be the number that it was set to. Variables can be used to store numbers, strings of text, or even entire objects.