An Introduction to Alice

By Teddy Ward
Under the direction of Professor Susan Rodger
Duke University, May 2013

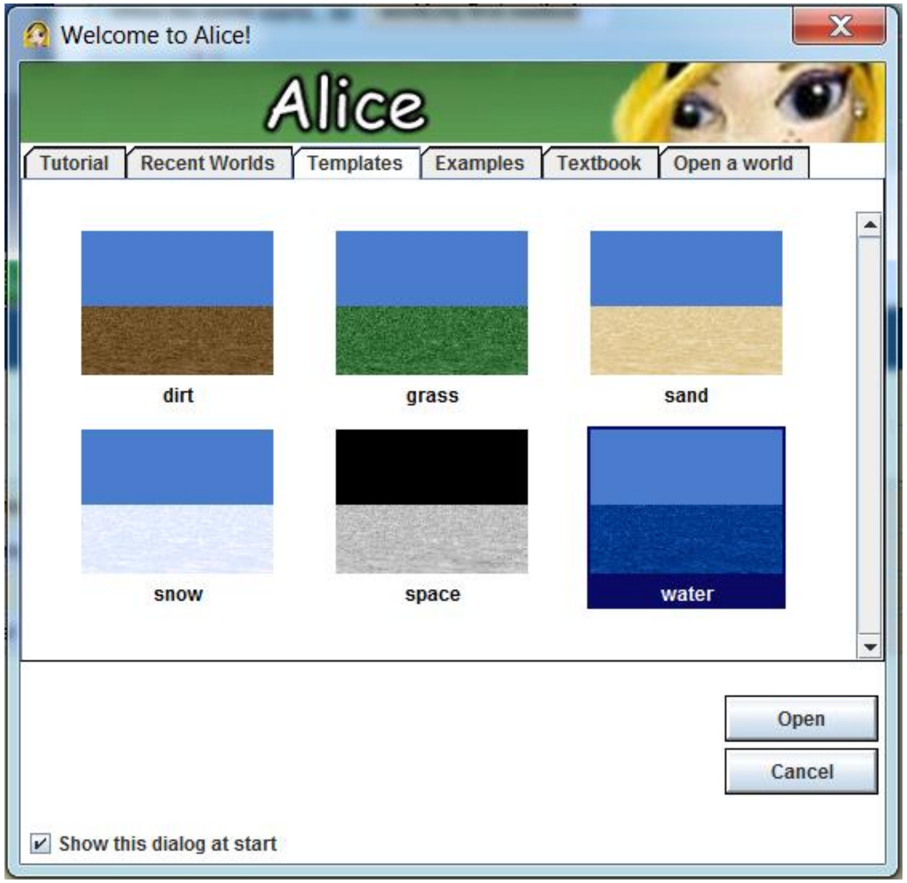
“Begin at the beginning," the King said, very gravely, "and go on till you come to the end”

- Lewis Carroll, Alice in Wonderland

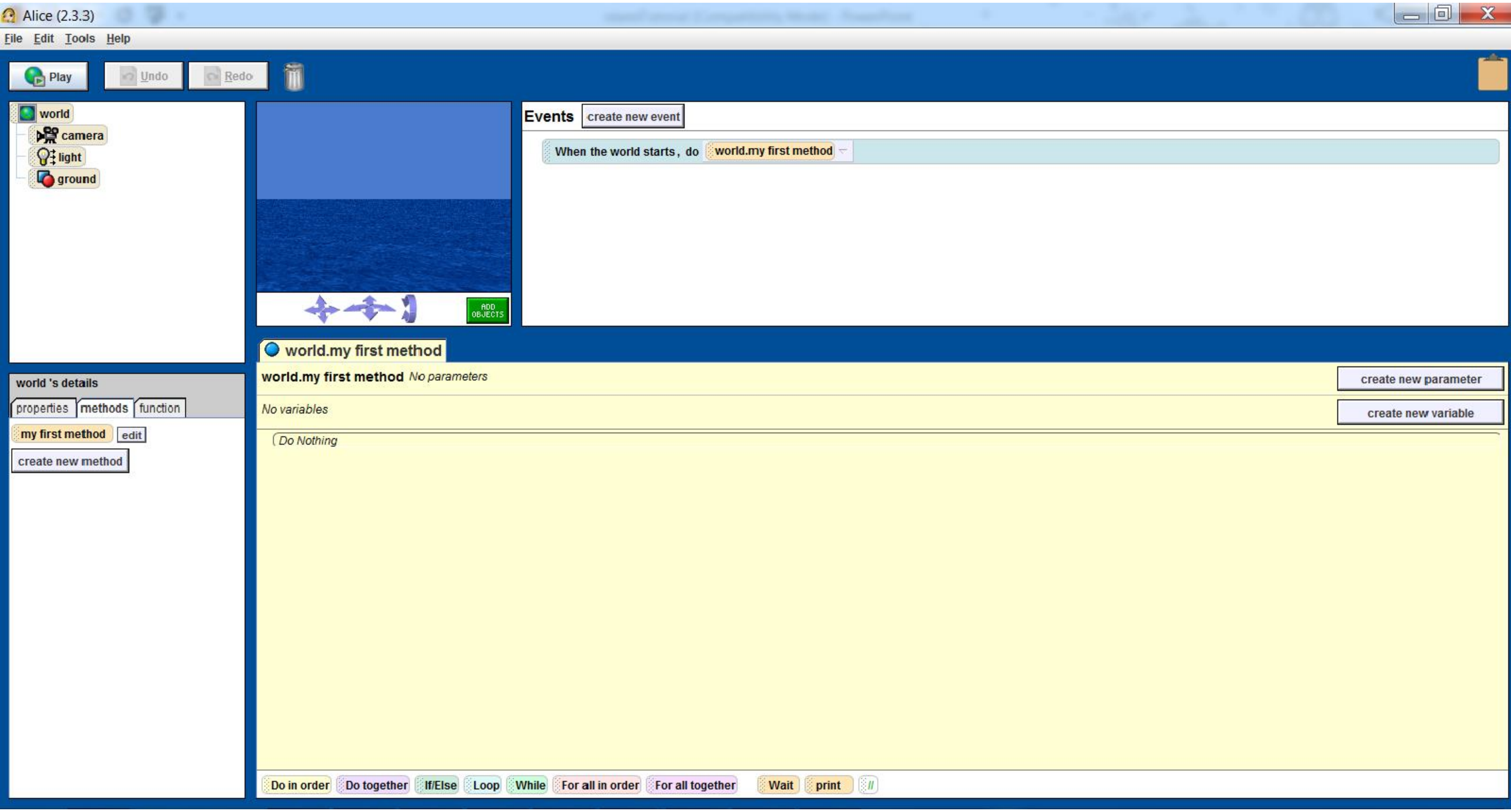
Hello! I’m Alice, and I’m going to teach you how to use the Alice program. With Alice, you can make your own animations, using tons of different characters.

Part 1: Creating a Scene

- Our first step is to choose a background.
- When you open Alice, a box will pop up that has six different choices of background. It looks like the box to the right.
- Select the **water** background, because our world will be on an island.
- Click on **water** and then click **Open**.



After you click **Open**, your screen will look like this:



world.my first method *No parameters*

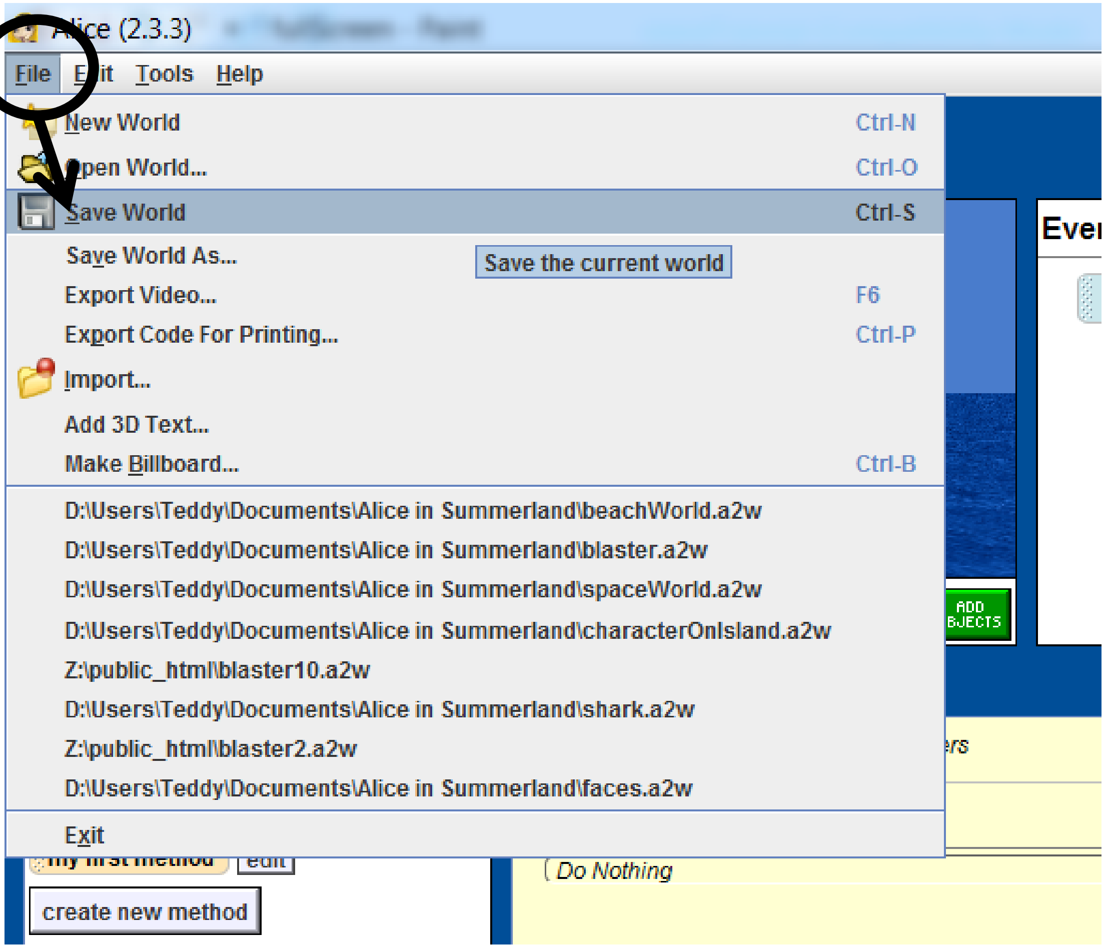
No variables

Do Nothing

Saving your world

•Before we do anything else, let's save our world. You should also always do this before you close out of Alice.

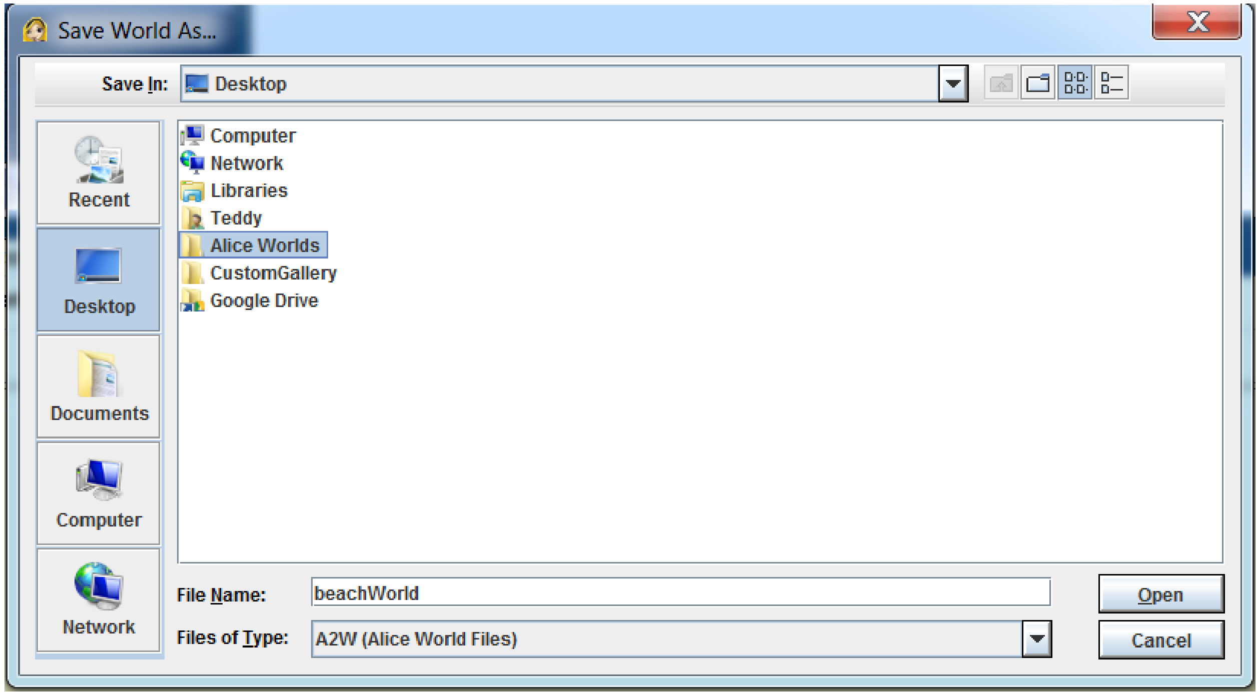
•Click on **File** at the top left-hand corner of your screen, and then click on **Save World**.



Alice (2.3.3)
File Edit Tools Help
New World Ctrl-N
Open World... Ctrl-O
Save World Ctrl-S
Save World As...
Save the current world
Export Video... F6
Export Code For Printing... Ctrl-P
Import...
Add 3D Text...
Make Billboard... Ctrl-B
D:\Users\Teddy\Documents\Alice in Summerland\beachWorld.a2w
D:\Users\Teddy\Documents\Alice in Summerland\blaster.a2w
D:\Users\Teddy\Documents\Alice in Summerland\spaceWorld.a2w
D:\Users\Teddy\Documents\Alice in Summerland\characterOnIsland.a2w
Z:\public_html\blaster10.a2w
D:\Users\Teddy\Documents\Alice in Summerland\shark.a2w
Z:\public_html\blaster2.a2w
D:\Users\Teddy\Documents\Alice in Summerland\faces.a2w
Exit
ADD OBJECTS
Do Nothing
create new method

Saving your world

- In the box that pops up, name your world **island**, and save it in a place that you will be able to find again, such as in a folder on your Desktop.


Save World As...

Save In: Desktop

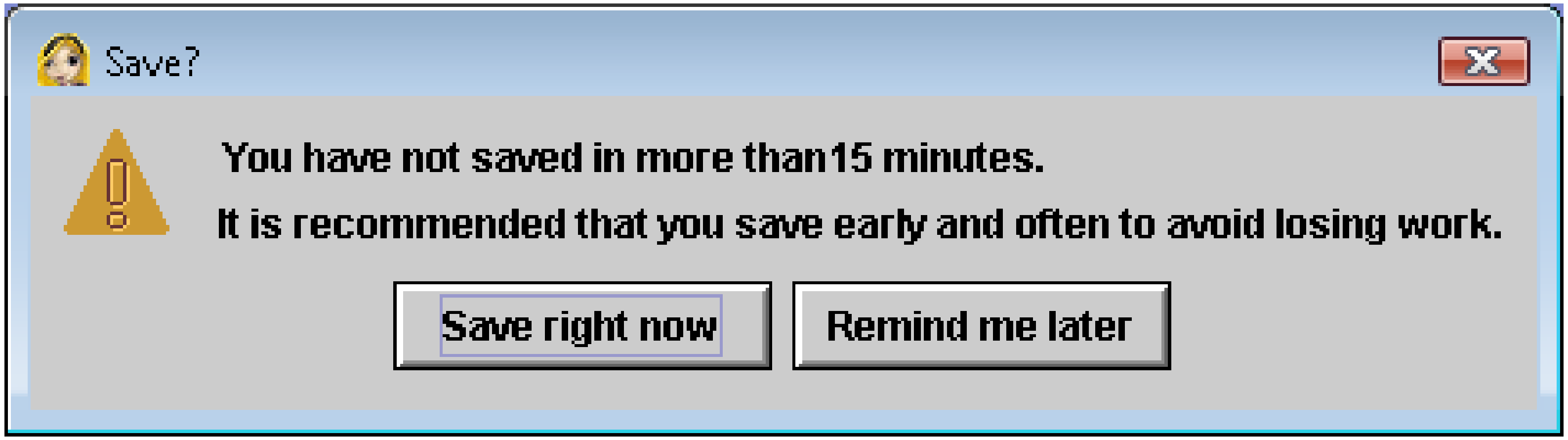
Computer
Network
Libraries
Teddy
Alice Worlds
CustomGallery
Google Drive

File Name: beachWorld

Files of Type: A2W (Alice World Files)

Saving your world

•Also, while you' re working on your Alice world, this box will pop up about every 15 minutes.



Save?

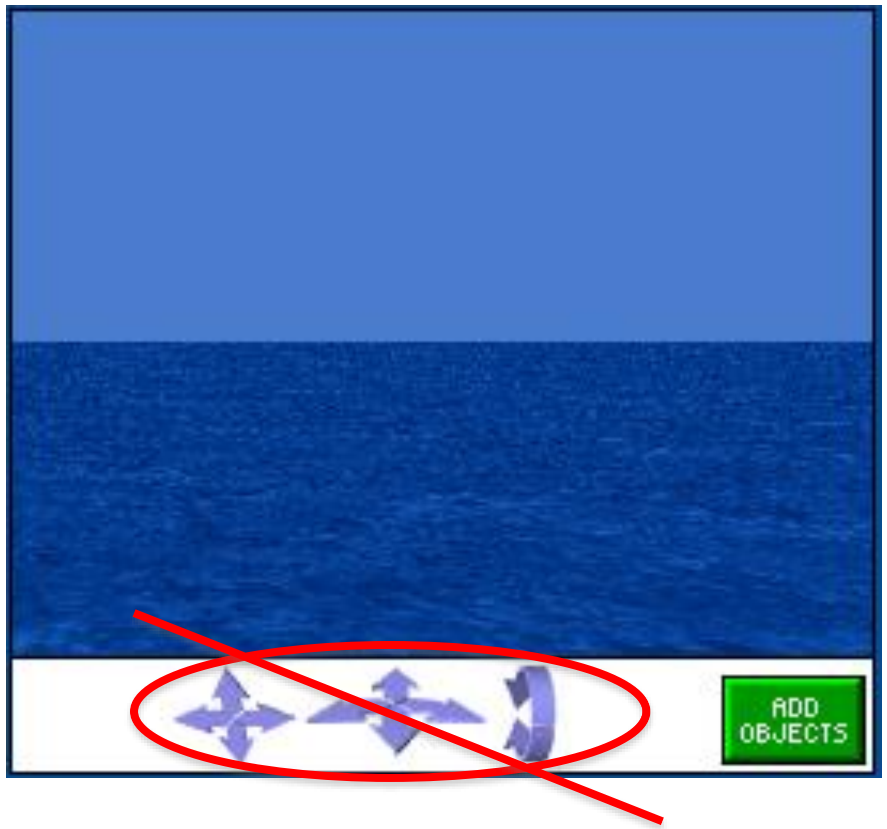
You have not saved in more than 15 minutes.

It is recommended that you save early and often to avoid losing work.

•You should always click **Save right now**. This way, if Alice crashes, or if your computer crashes, you will have backups of your world and will not lose all of your work!

The Viewer

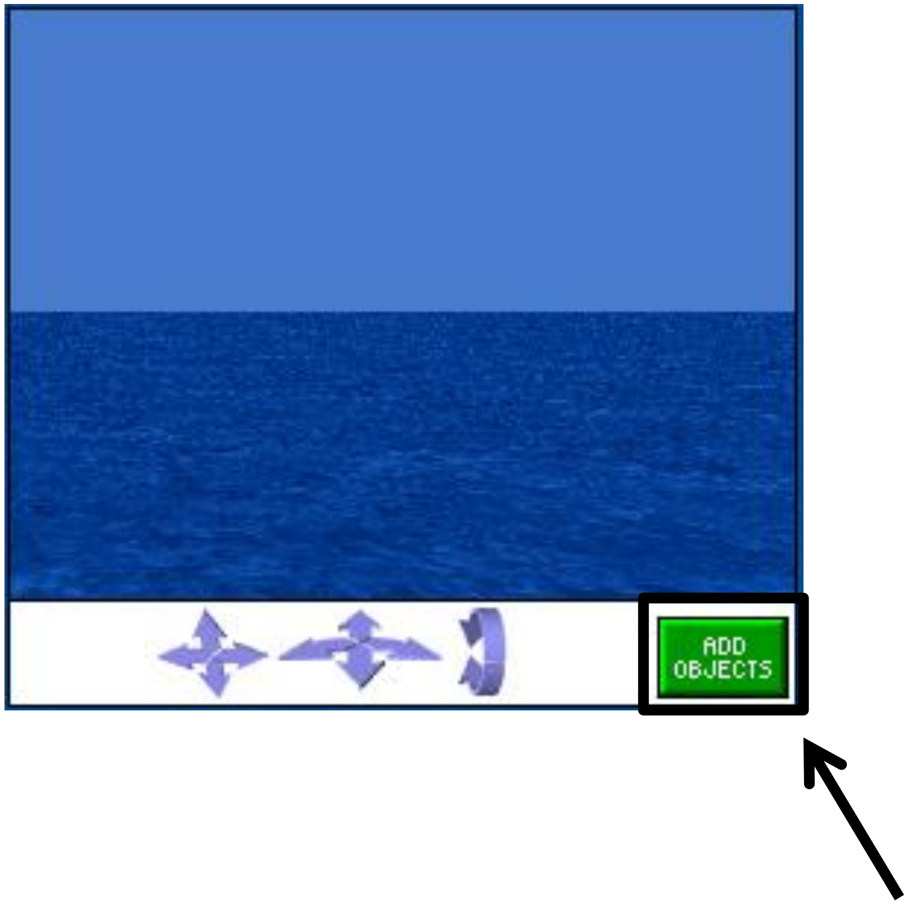
- The viewer lets you view what your world looks like:



- The arrows move the camera. **DO NOT touch them** for now as it' s hard to get the camera back to the original camera view

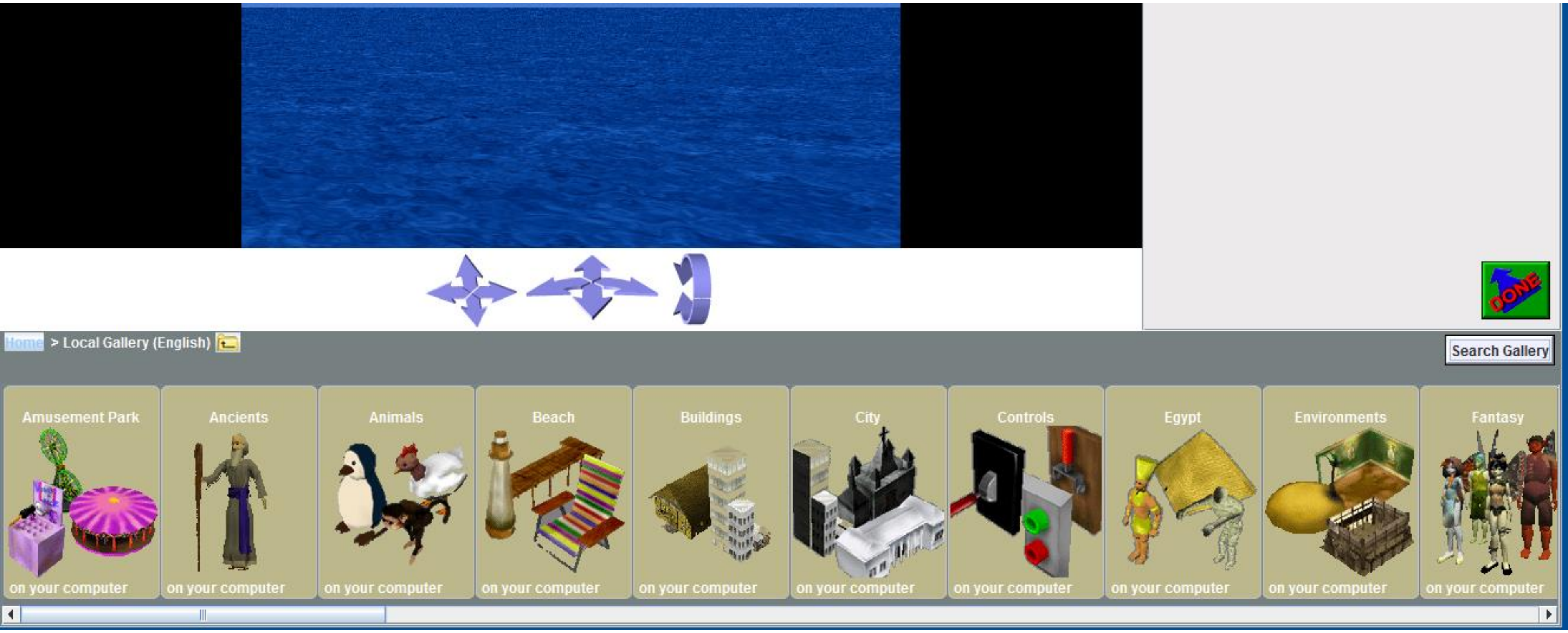
Adding objects to your world

- Now, we will add some objects to the world.
- Just below the picture of your empty space world, there is a small green button that says **Add Objects**.
- Click on this button.



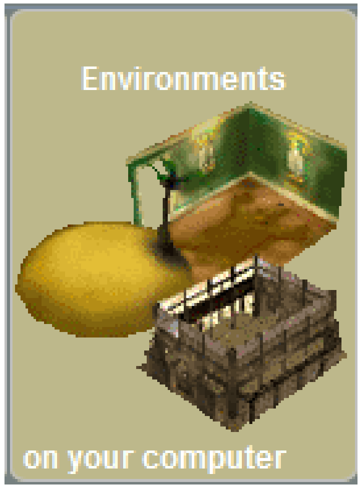
Adding objects to your world

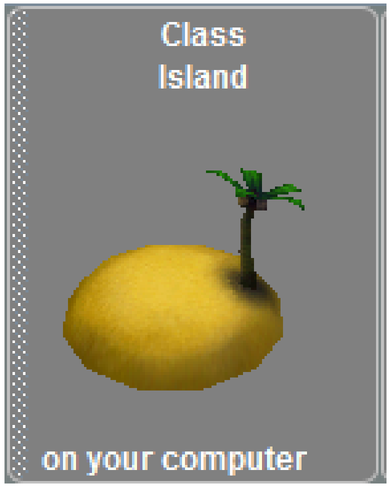
A new screen will appear, on which there is a large selection of objects below the space screen that you can add into your world. This is called the **Local Gallery**. Each folder of objects in the gallery has a different theme.



Adding objects to your world

- Find the **Environments** folder in the gallery – you may have to scroll to the right a bit.

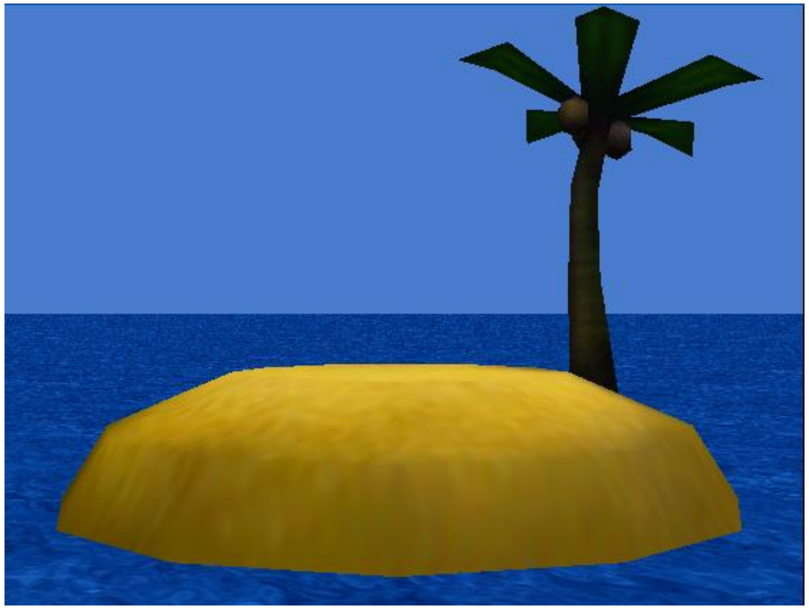


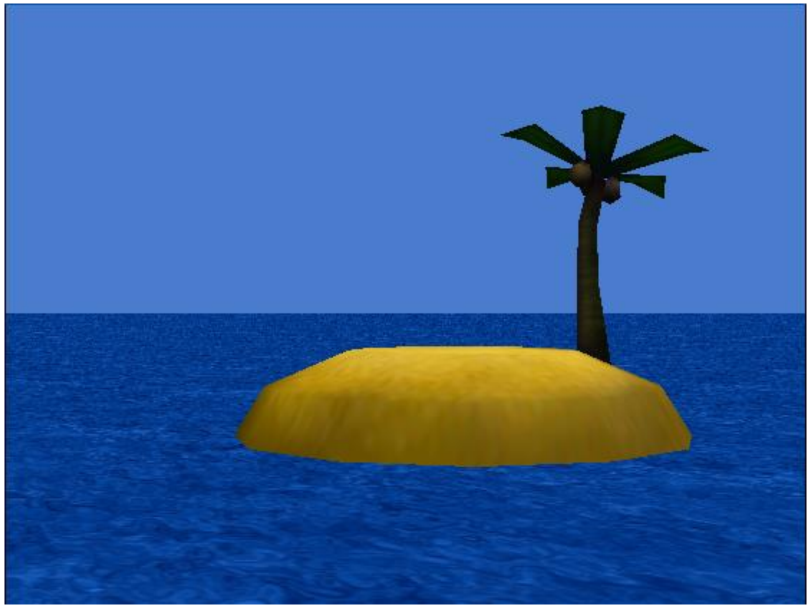


•Scroll to the right again until you see the **Island**.
•Click on the **Island**.
•On the box that pops up, click **Add instance to world**.
•The island will appear in the center of the ocean screen.

Adding objects to your world

The island will take up most of your viewer, which will cause problems when we want to add more objects in a minute

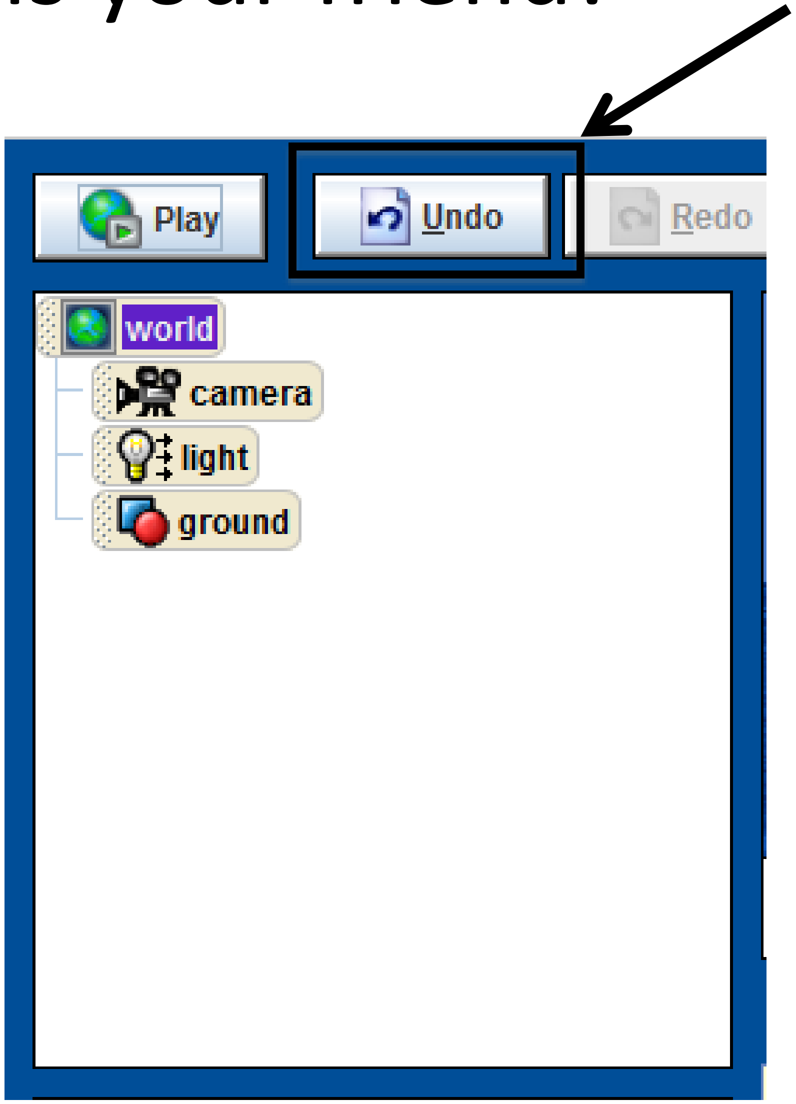




To fix this, **click and drag the island** around the viewer until it looks like the picture on the **left**

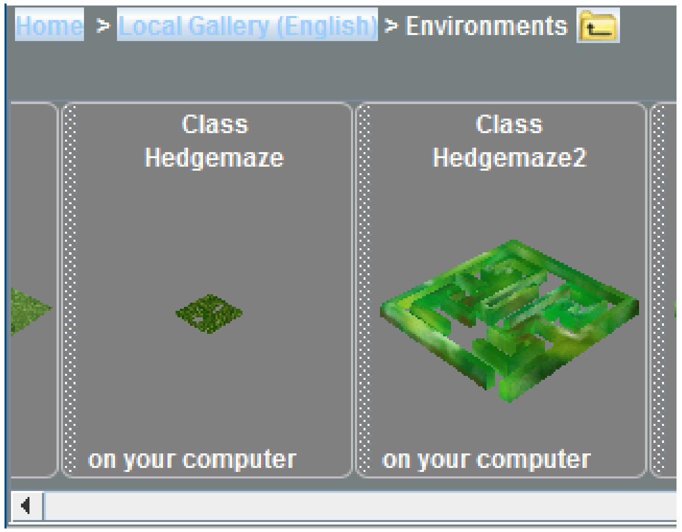
The Undo button is your friend!

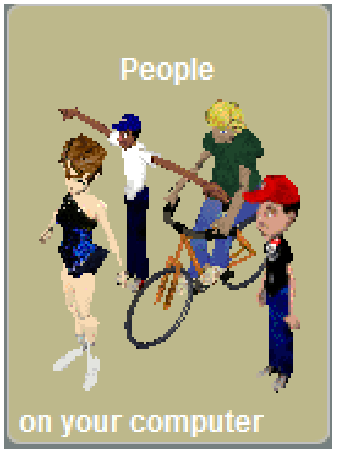
•What if you make a mistake, like accidentally clicking on the ocean and moving it? Or what if your island "jumps" offscreen?
•You can click on the **Undo** button above the object tree to undo the last thing you did.
•Use this button whenever you mess up, or want to get rid of something you just did.



Adding a character to your world

Anyway, we' re going to add a person to our world now. Click **Local Gallery** above the pictures of objects to go back to the main gallery of objects.

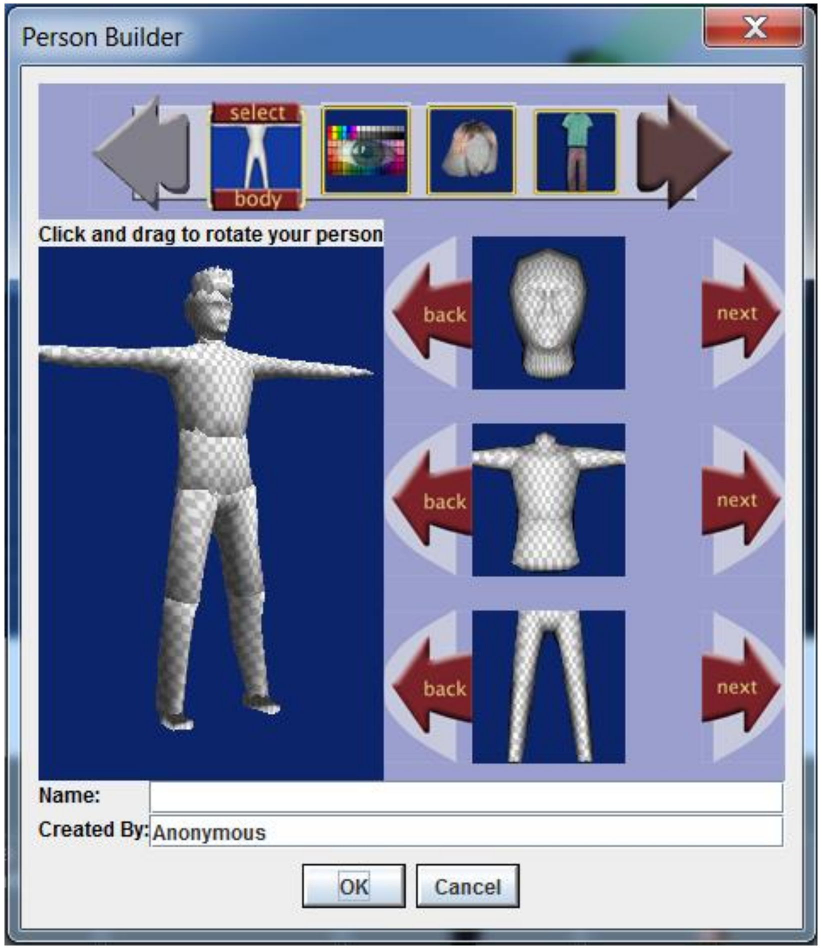




Scroll to the right until you see a folder called **people.** Click on it.

Adding a character to your world

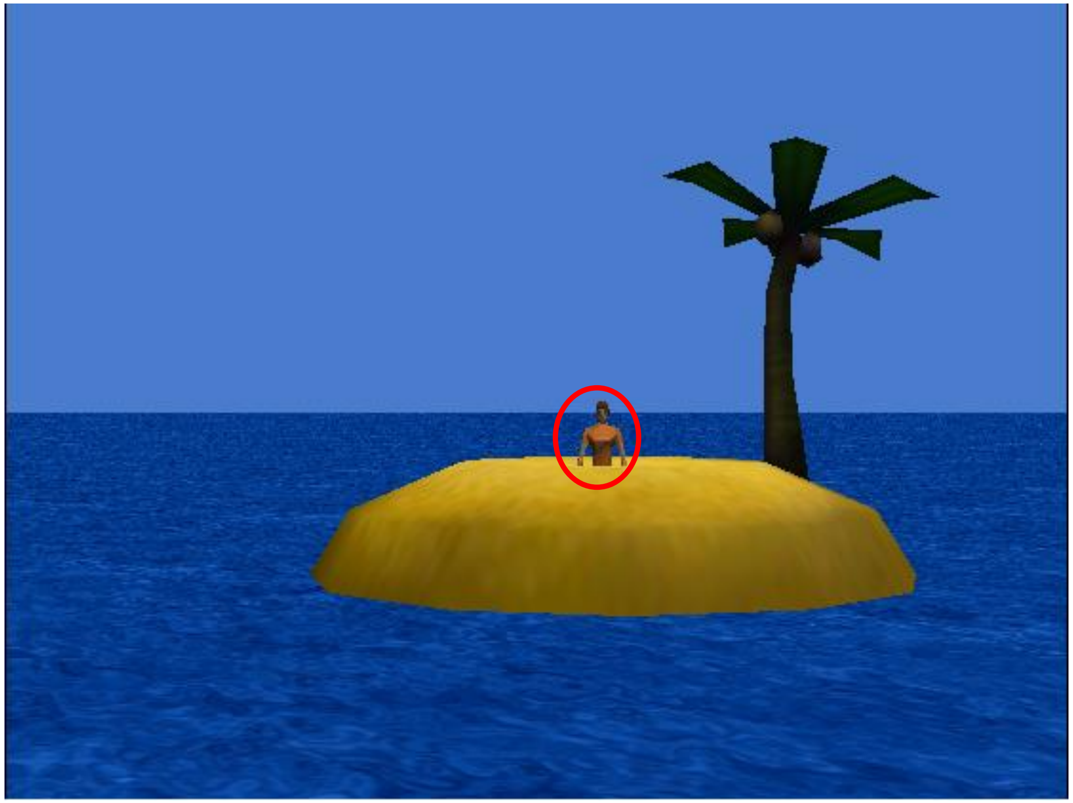
- Click your favorite person from the gallery and then click **add instance to world**.
- You can also create your own character by clicking **hebuilder** (boys) or **shebuilder** (girls) on the far right
- Don't spend too long on this!



Name:
Created By: Anonymous

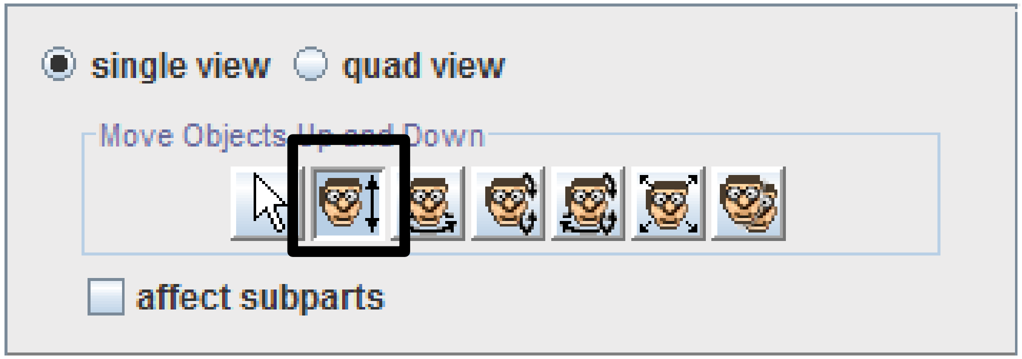
Positioning the objects

- **Click and drag** your character into the middle of the island as shown. We' ll get him/her unstuck from the sand in a second.



Positioning the objects

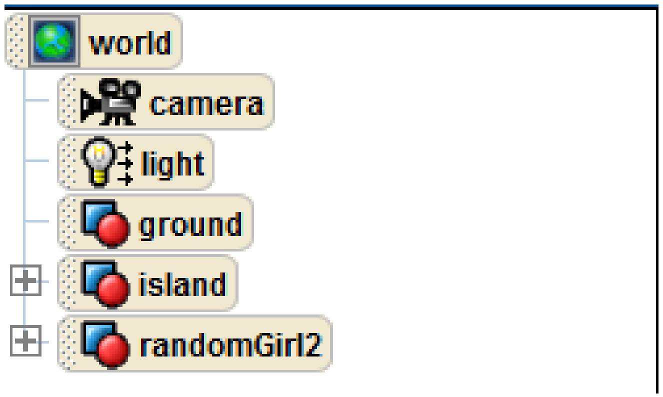
•Look at the right side of your screen.
•There is a group of buttons with faces on them that are used to position objects.
•We want to have our hero stand on the island, so click **Move objects up and down** (the 2nd one)

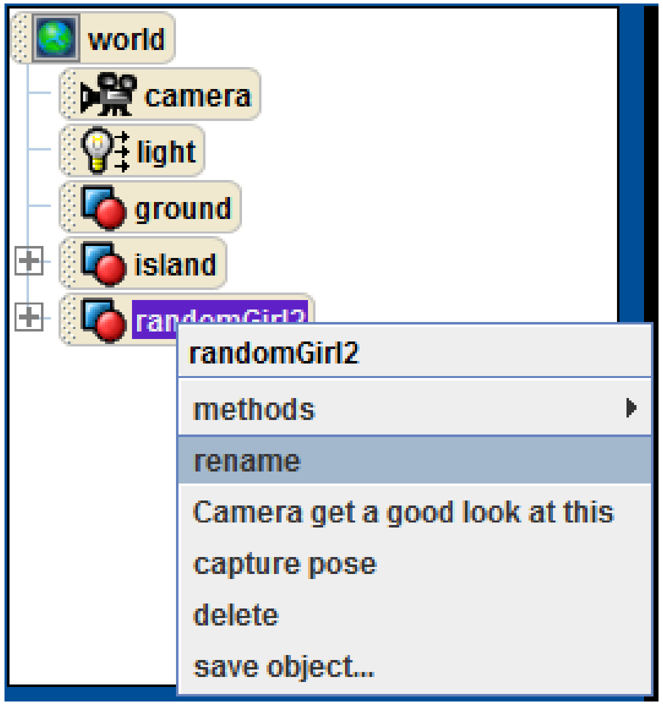


•Click on your character, hold, and move your mouse up until his/her feet just touch the sand.
•Bonus: move the island down into the water a little bit (move the character down again, too)

The Object Tree

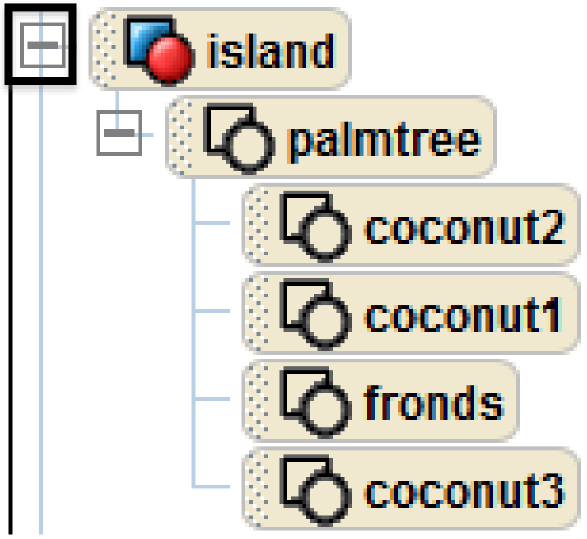
- When you add objects to your world, they will appear in a list on the left of your screen, called the **Object Tree**.
- You should see both your island and your character there
- If you want, right click on your character's name, select **rename**, and type any name you want. I renamed mine "heroine."





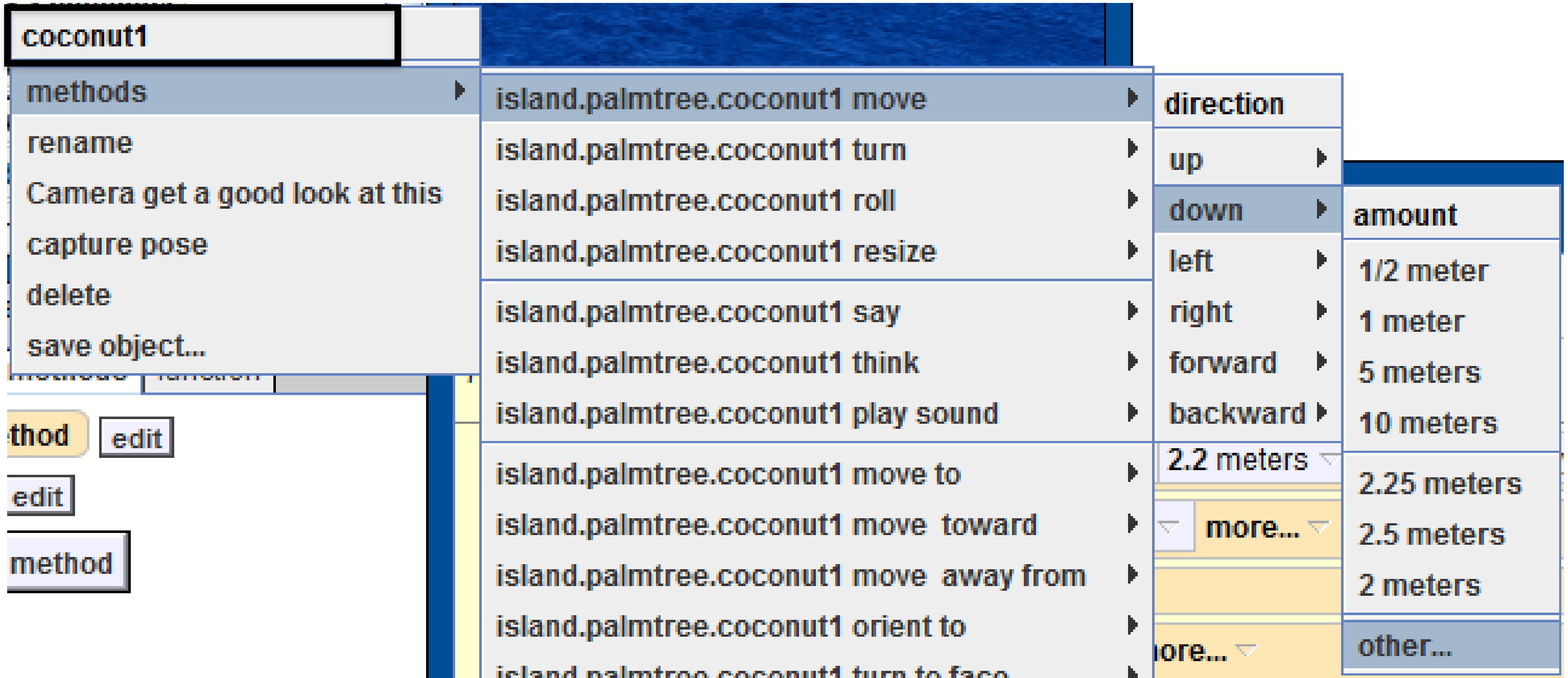
Object Parts

- Some objects have parts.
- For example, if you click on the plus mark next to the island in your object tree, you' ll see that the palm tree and its fronds and coconuts are all objects in your world
- These are fixed in position, unless you move them with *methods.*



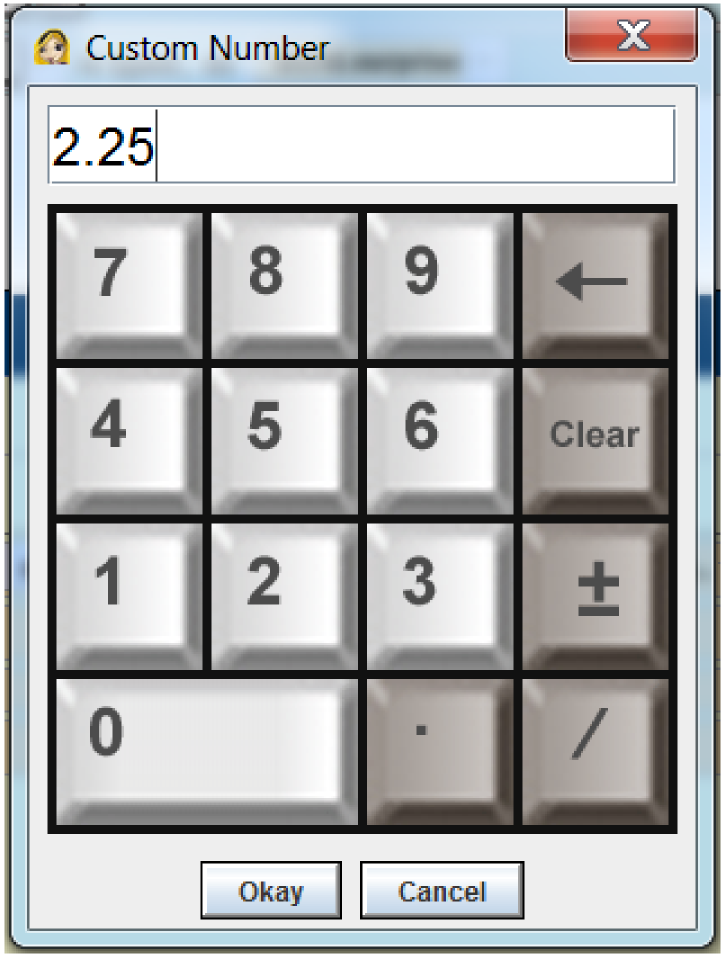
Object Parts

- Right click on **coconut1**, choose **methods, move, down, other…,** and then a calculator will pop up for input.


coconut1
methods
rename
Camera get a good look at this
capture pose
delete
save object...
thod
edit
edit
method
island.palmtree.coconut1 move
island.palmtree.coconut1 turn
island.palmtree.coconut1 roll
island.palmtree.coconut1 resize
island.palmtree.coconut1 say
island.palmtree.coconut1 think
island.palmtree.coconut1 play sound
island.palmtree.coconut1 move to
island.palmtree.coconut1 move toward
island.palmtree.coconut1 move away from
island.palmtree.coconut1 orient to
direction
up
down
left
right
forward
backward
2.2 meters
more...
amount
1/2 meter
1 meter
5 meters
10 meters
2.25 meters
2.5 meters
2 meters
other...

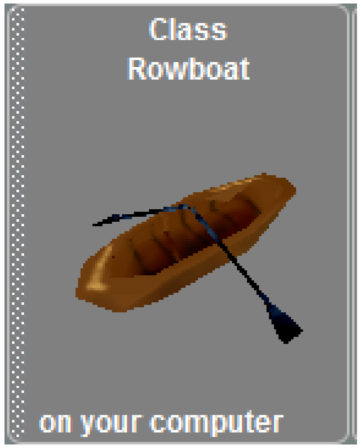
Object Parts

- Type **2.25** into the calculator, and when you press **okay** one of the coconuts will fall to the ground.
- Turning, rotating, and moving object parts is a good way to make more complex animations look more realistic!
- Note: “move” may detach a part from its object but “turn” and “roll” may move parts without detaching them

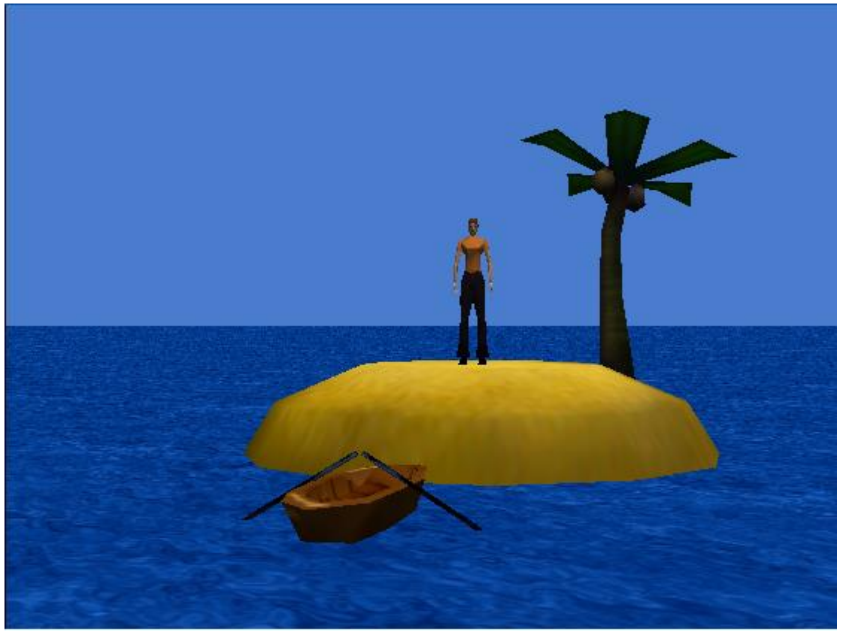


Adding objects to your world

- Now return to the **Local Gallery.**
- Scroll over to the **Vehicles** folder and click on it.
- Scroll over to **Rowboat** and add that to your world.



Your world should look like this:



Positioning the objects

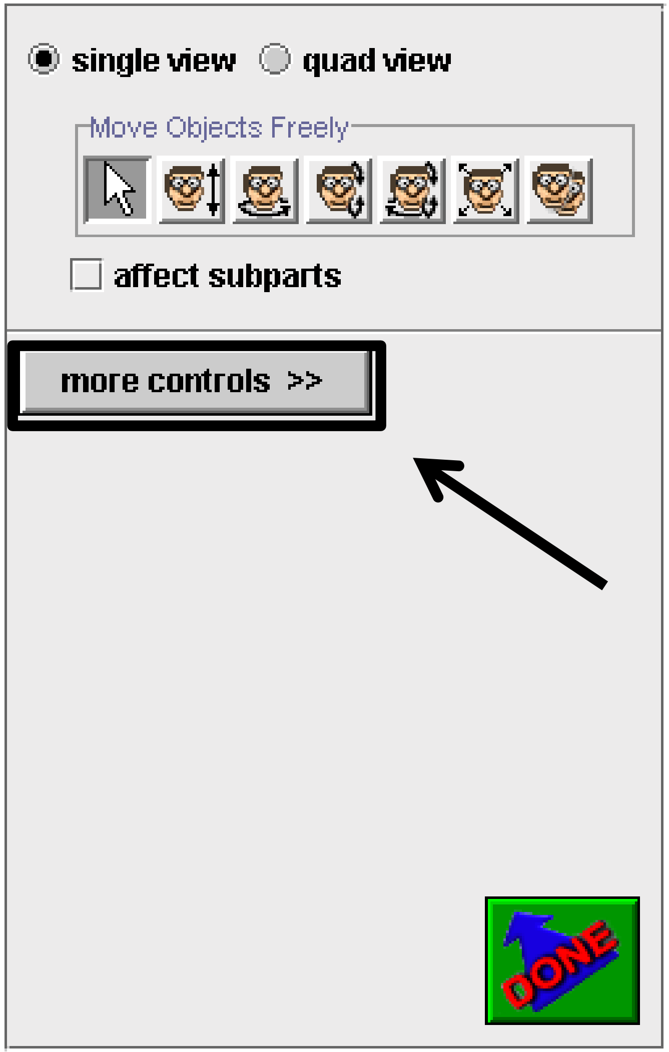
- Now move the rowboat to the front left of the island using the first three buttons in that group on the top right
- Click **Move objects freely** (the 1st one) to move it around
- Click **Move objects up and down** (the 2nd one) to lower it into the water
- Click **Turn objects left and right** (the 3rd one) to align it with the shore

Nice job setting up the scene! Now we’re going to learn about the camera!

(If you have extra time, add more scenery! Use the **Ocean** folder in the local gallery to add shells, fish, etc. Don’t add a shark just yet, though ☺)

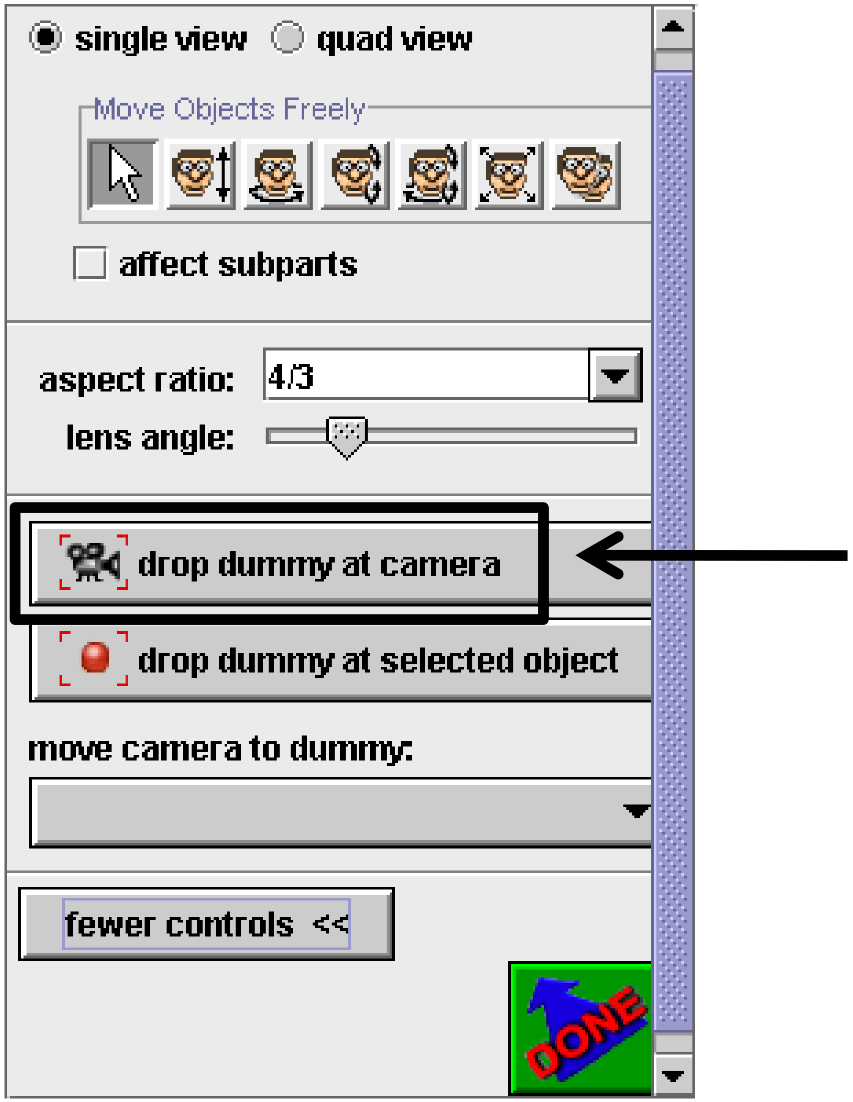
Part 2: The Camera

- A *Dummy camera* is like a camera tripod – it saves the location of your camera view. This way, if you move your camera around, you can always get back to a certain position by moving to a dummy camera location.
- Look to the right side of your screen, and find a gray button under your object positioning buttons labeled **more controls**



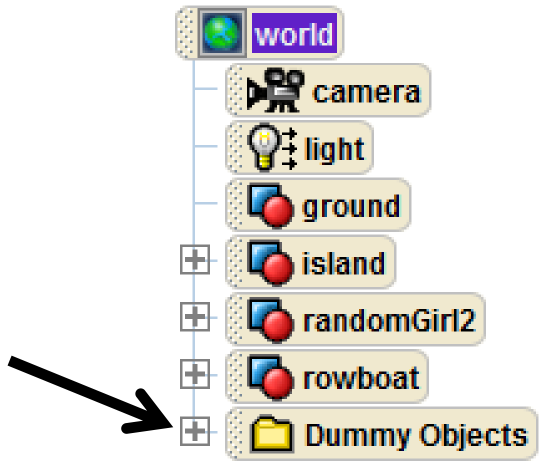
The Dummy Camera

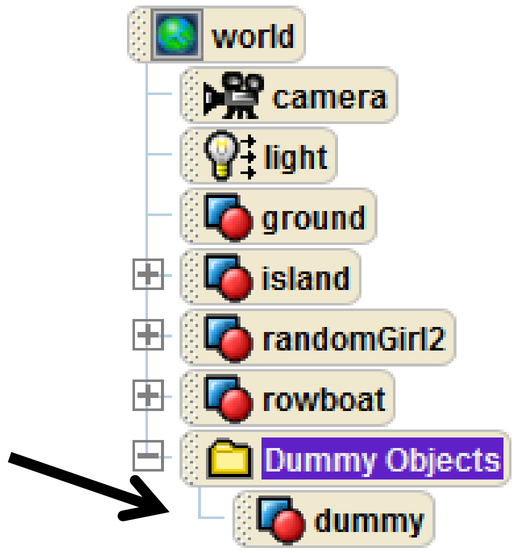
- More buttons will appear after you click **more controls**.
- Click on the button that says **drop dummy at camera**. It will seem like nothing happens, but don't worry, and only click the button <u>one time</u>.



The Dummy Camera

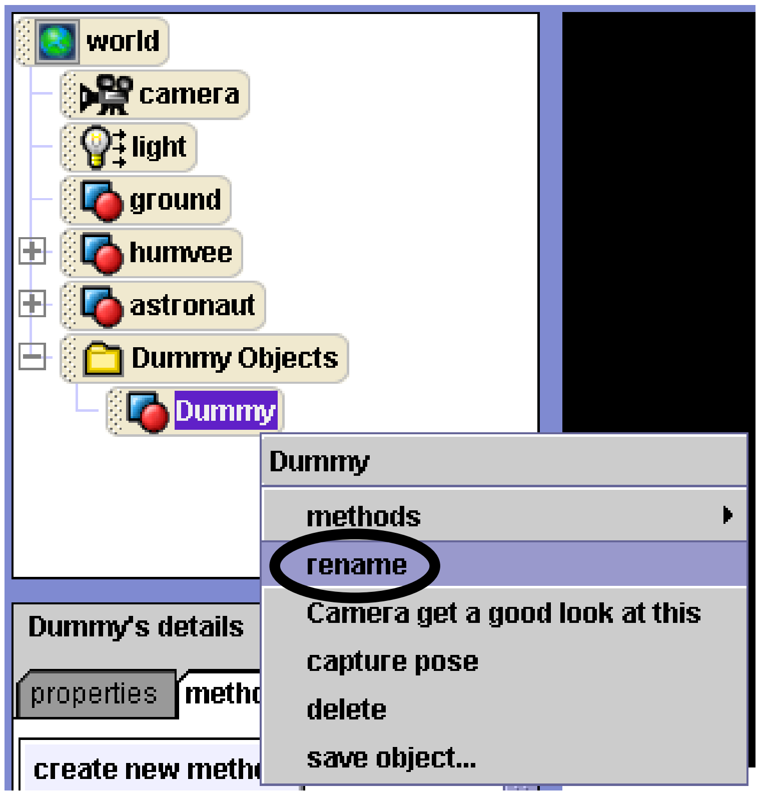
- Once you have clicked this button, a folder will appear on your object tree labeled **Dummy Objects**.
- If you click on the **plus sign** next to the **Dummy Objects** folder, a list of your dummy camera positions will appear.
- Right now, there is only one position, called **dummy**.

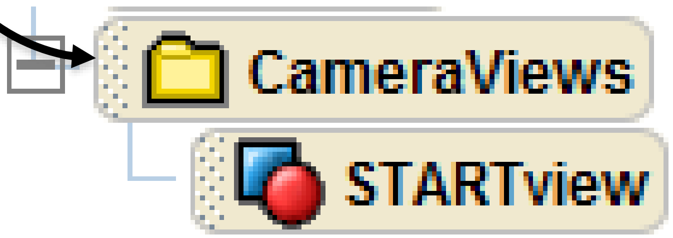




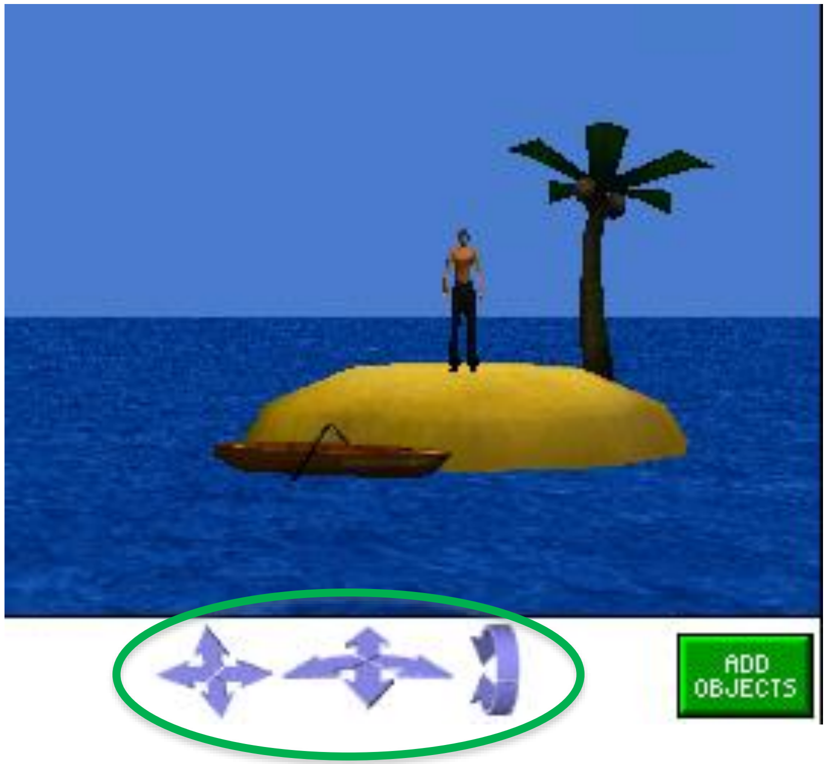
The Dummy Camera

- Whenever you add a dummy camera position, you should rename it so that you know which position it is.
- Right click on **dummy** in the object tree, and then choose **rename**. Type in **STARTview**.
- Similarly, change the folder name **Dummy Objects** to **CameraViews**
- You should add a dummy at your starting camera position is whenever you start a new Alice world.



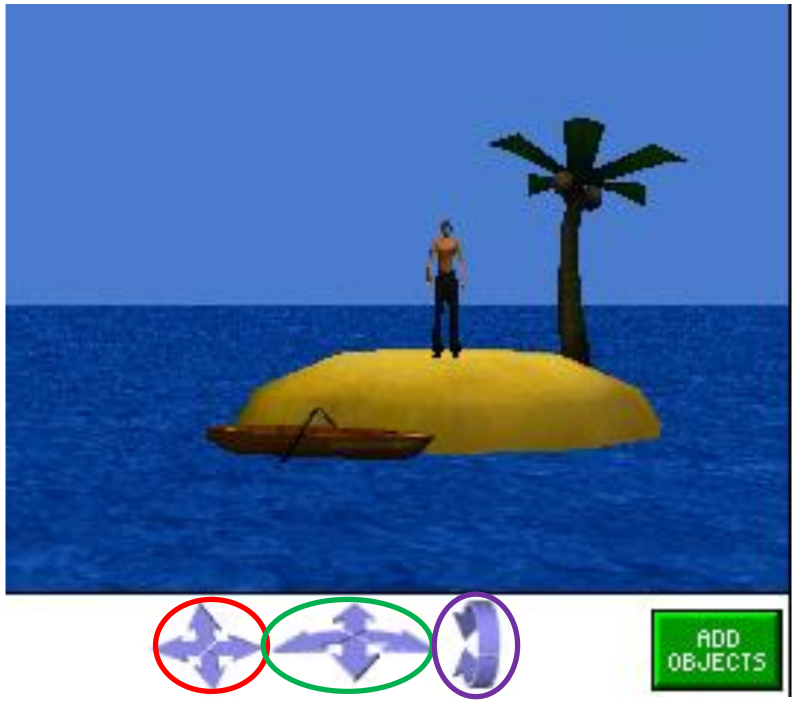


Moving the Camera



- Now that we have a dummy camera set up, we can move the camera freely without losing our place.
- There are three sets of arrows beneath the scene that **move the camera.**

Moving the Camera

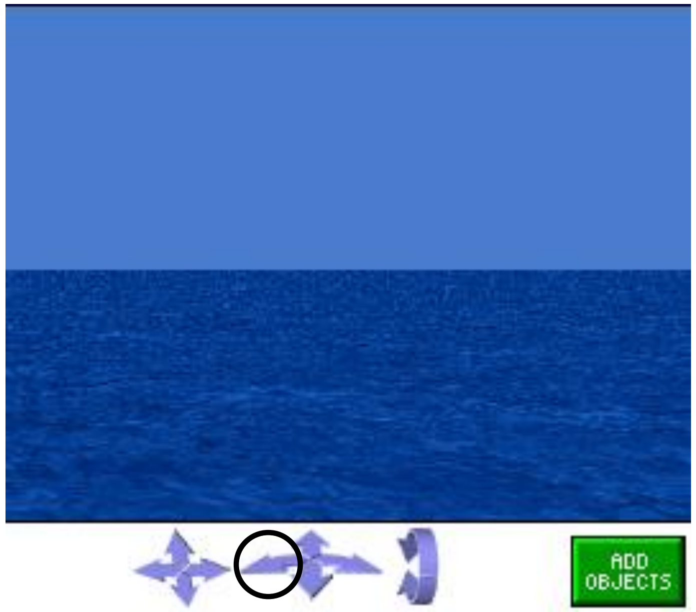


The first set *moves* the camera up, down, left, and right.

The second set moves it forward and backward and *pans* it from left to right.

The last set *rotates* the camera up and down.

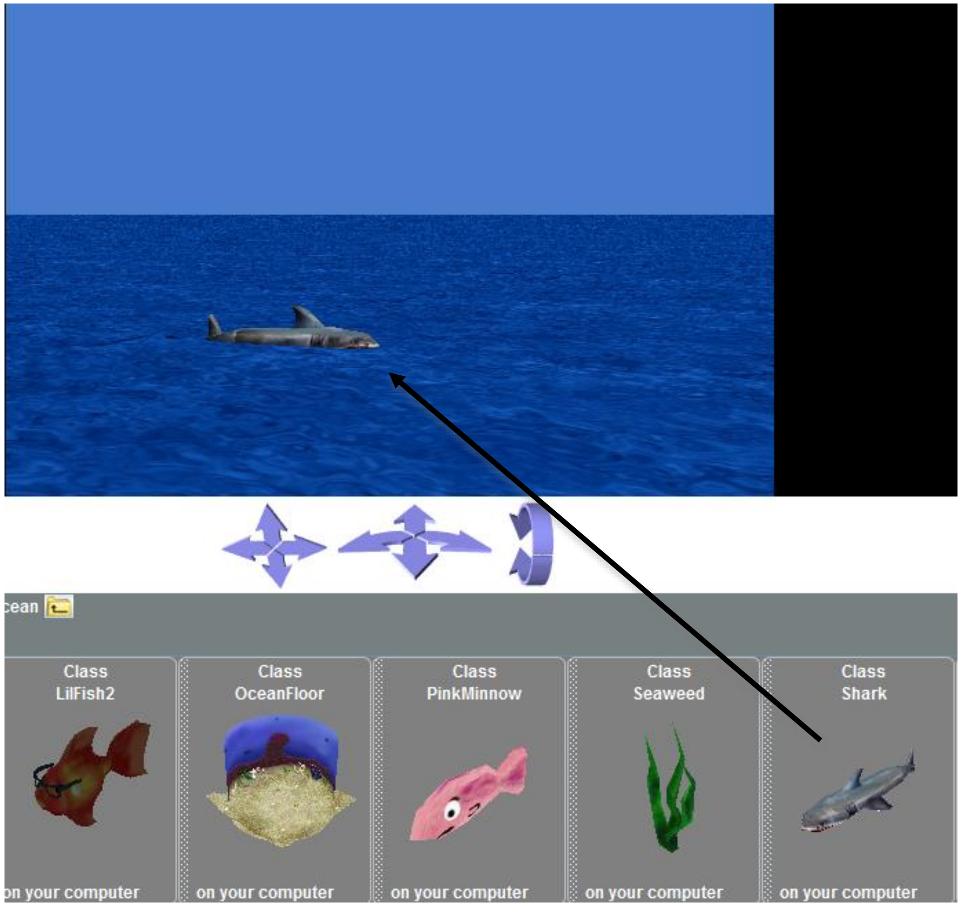
Moving the Camera



- Click and hold the **left arrow in the second group** to pan the camera left until the island is out of the picture
- Dragging your mouse farther from the arrows moves the camera faster
- Be sure not to move the camera too far up or down

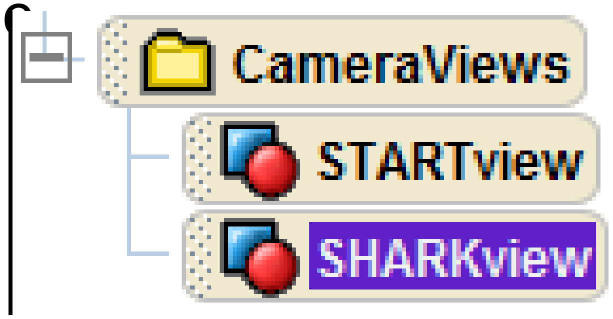
The plot thickens…

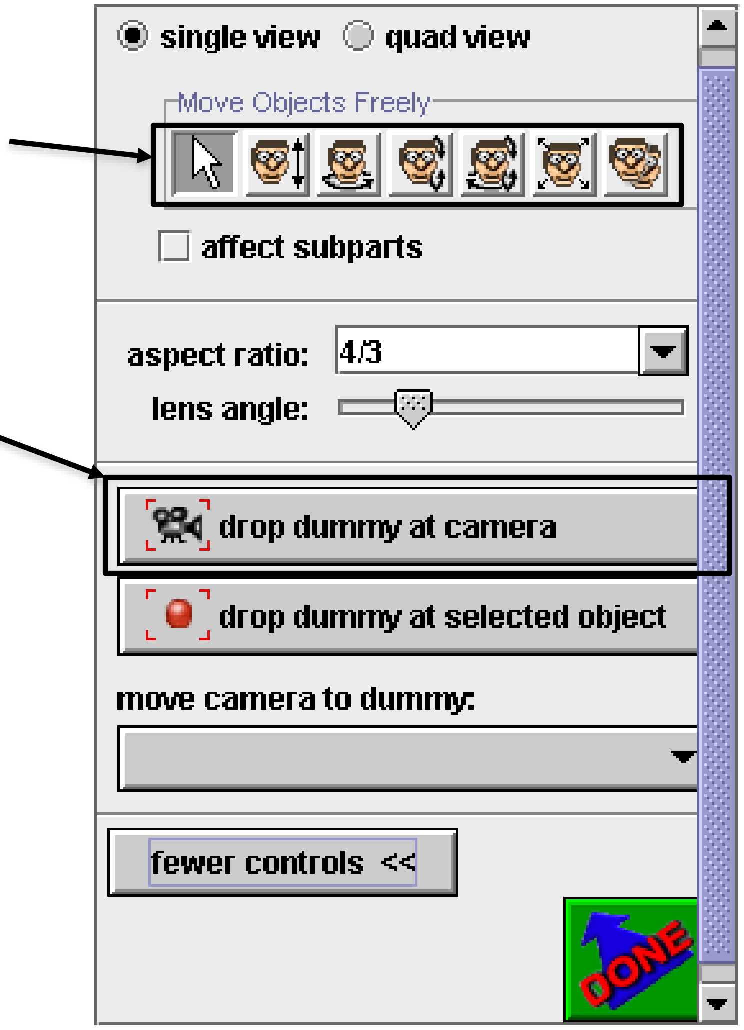
- Click **Add Objects**, and navigate to the **“Ocean”** gallery
- Click and **drag a shark** up to the window to add it to this part of the world



The plot thickens…

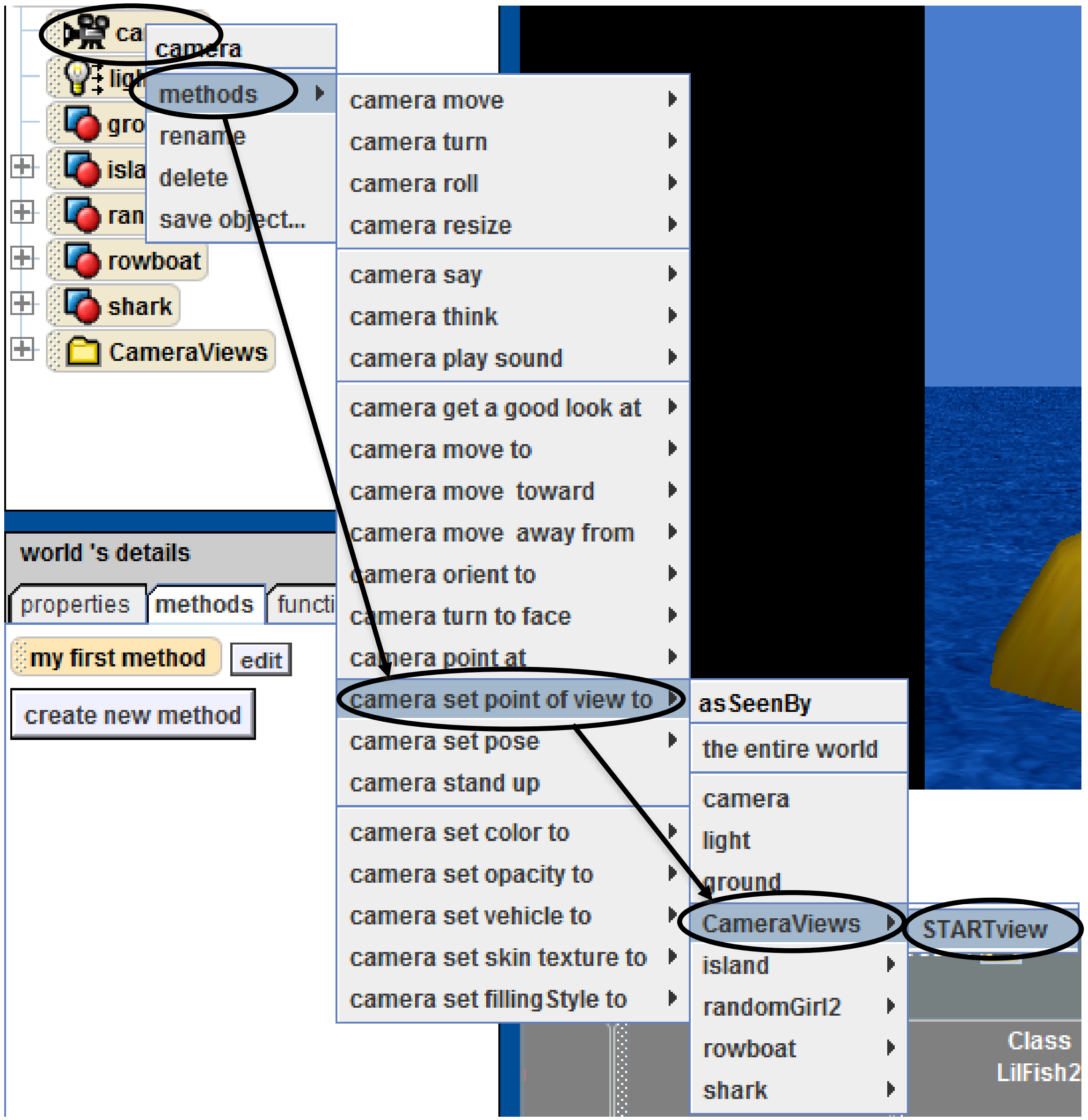
- Move the shark using the positional buttons so that it's half in the water and roughly facing the island
- Click **more controls**, then **drop dummy at camera** so that we have this view saved
- **Rename** this dummy camera **"SHARKview"** in the object tree





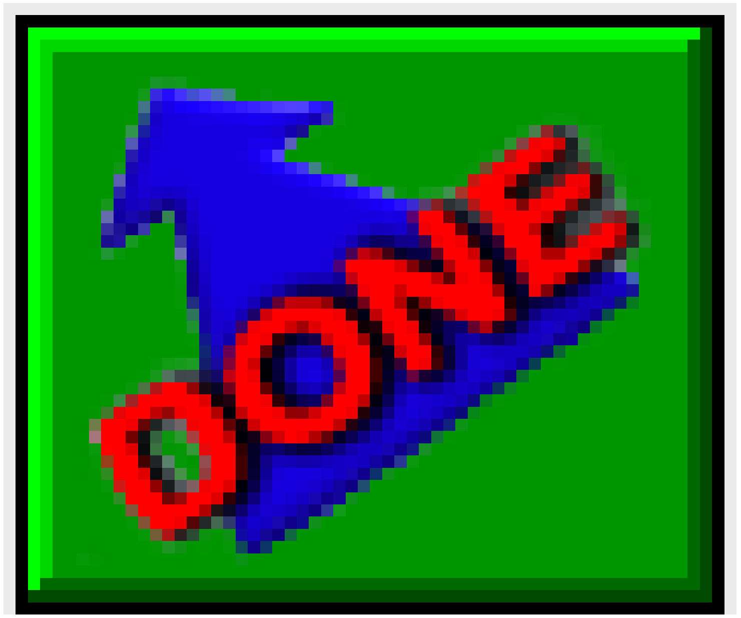
Moving the Camera

- To restore the camera, right click on **camera** in the object tree
- On the menu that pops up, choose **methods**, then **camera set point of view to**, then **CameraViews**, then **STARTview**.



Finishing Setup

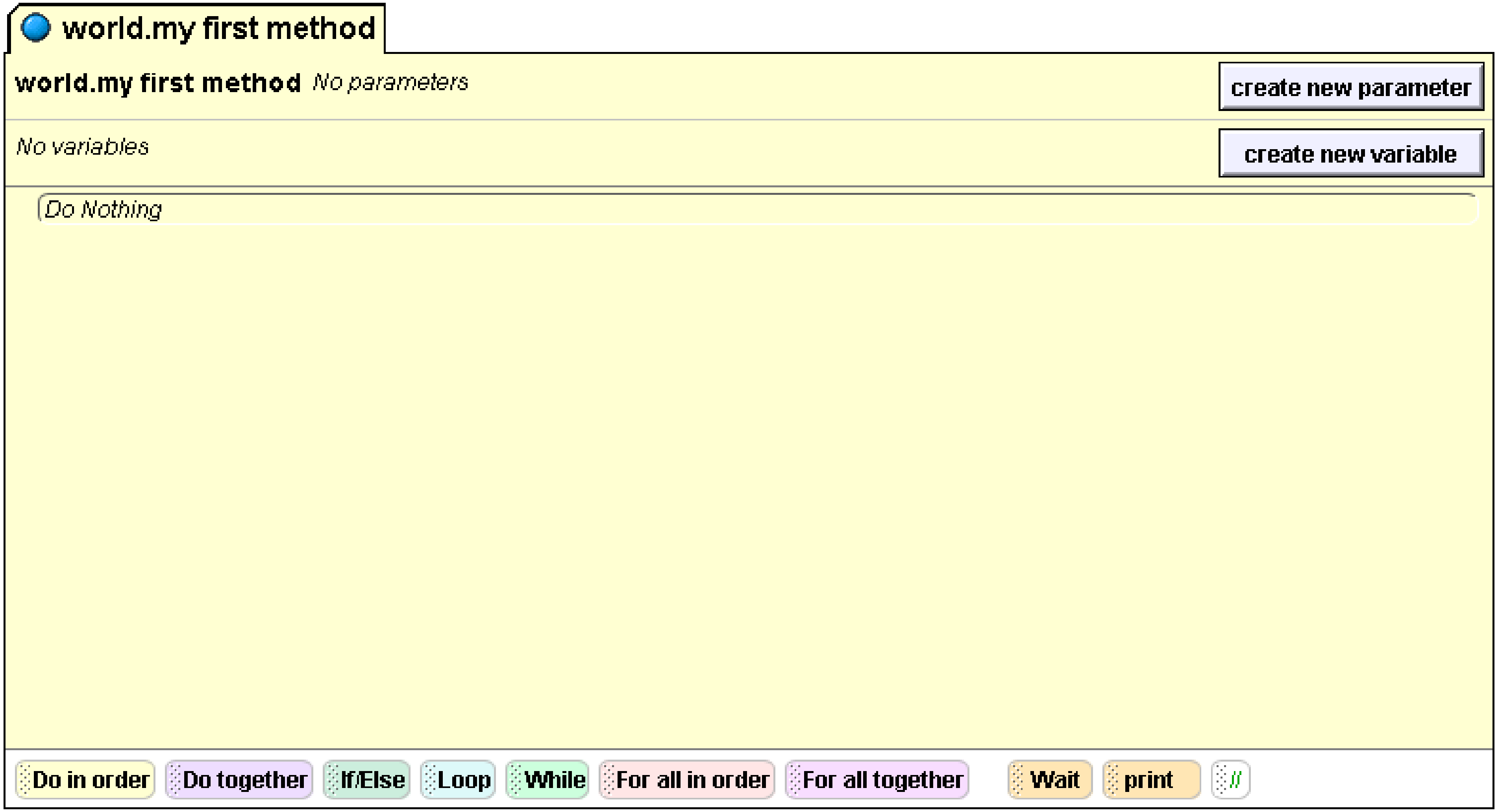
- Now just click **Done** (in green) towards the bottom right!



Now that we are done setting up our camera, we can start to animate the characters in the world!

Part 3: Methods

- The large tan rectangle in the center of your screen is called the **Method Editor**. Right now, it is blank.



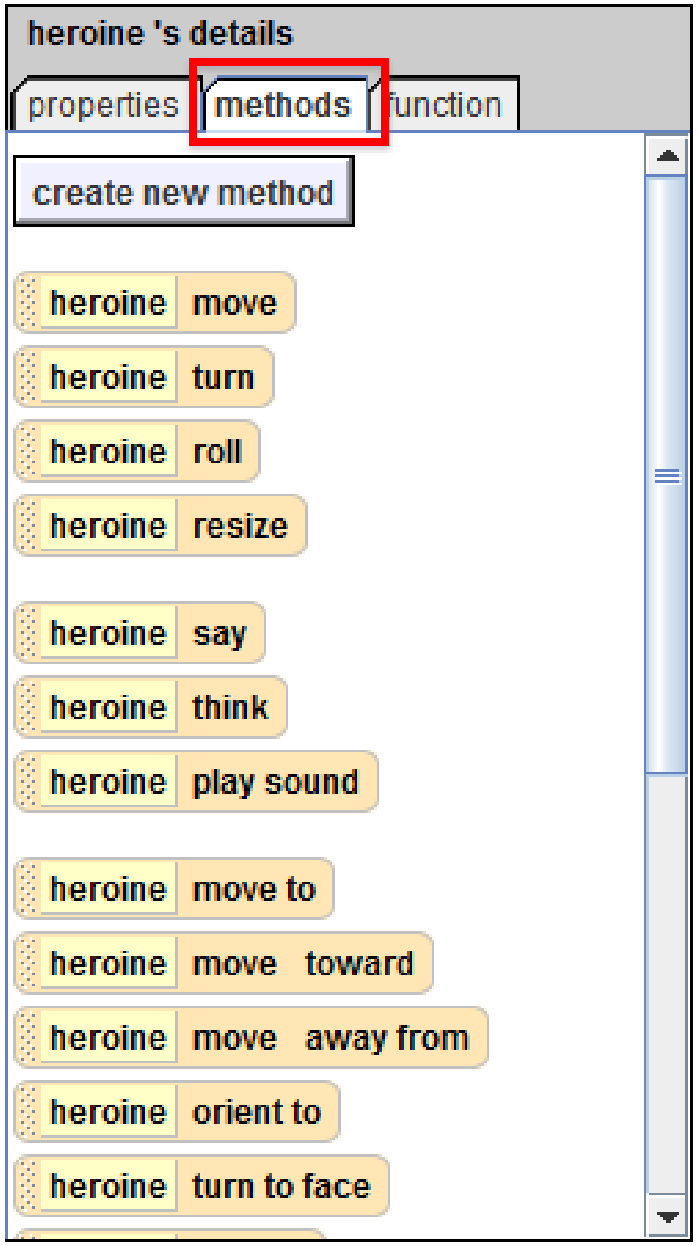
world.my first method *No parameters*

No variables

Do Nothing

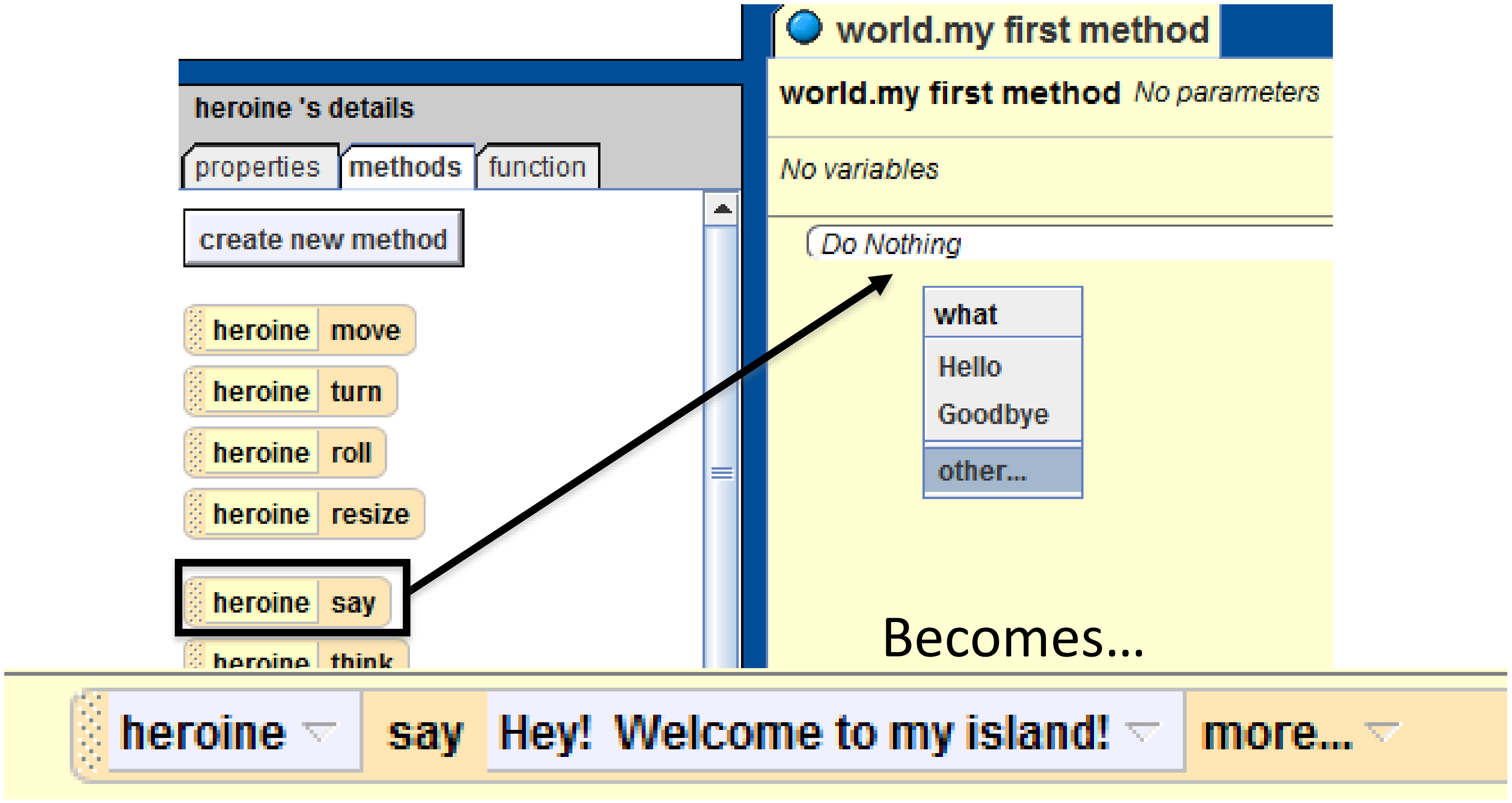
Methods

- The method editor is where you can make your characters do things.
- Your characters already know how to do certain things.
- These are some of the things that your character already knows how to do. To find this list, click on **your character' s name** in the object tree. Then look below the object tree at the box that says **details**, and click on the **methods** tab. This list will appear.



Methods

- To program your character to do something, click on one of these methods, hold down your mouse, and drag and drop it into your method editor. Let' s try dragging in **say** to start. Select **other…** to be able to choose what we want he/she says freely. Then type something like "Hey! Welcome to my island!" and press **okay**.

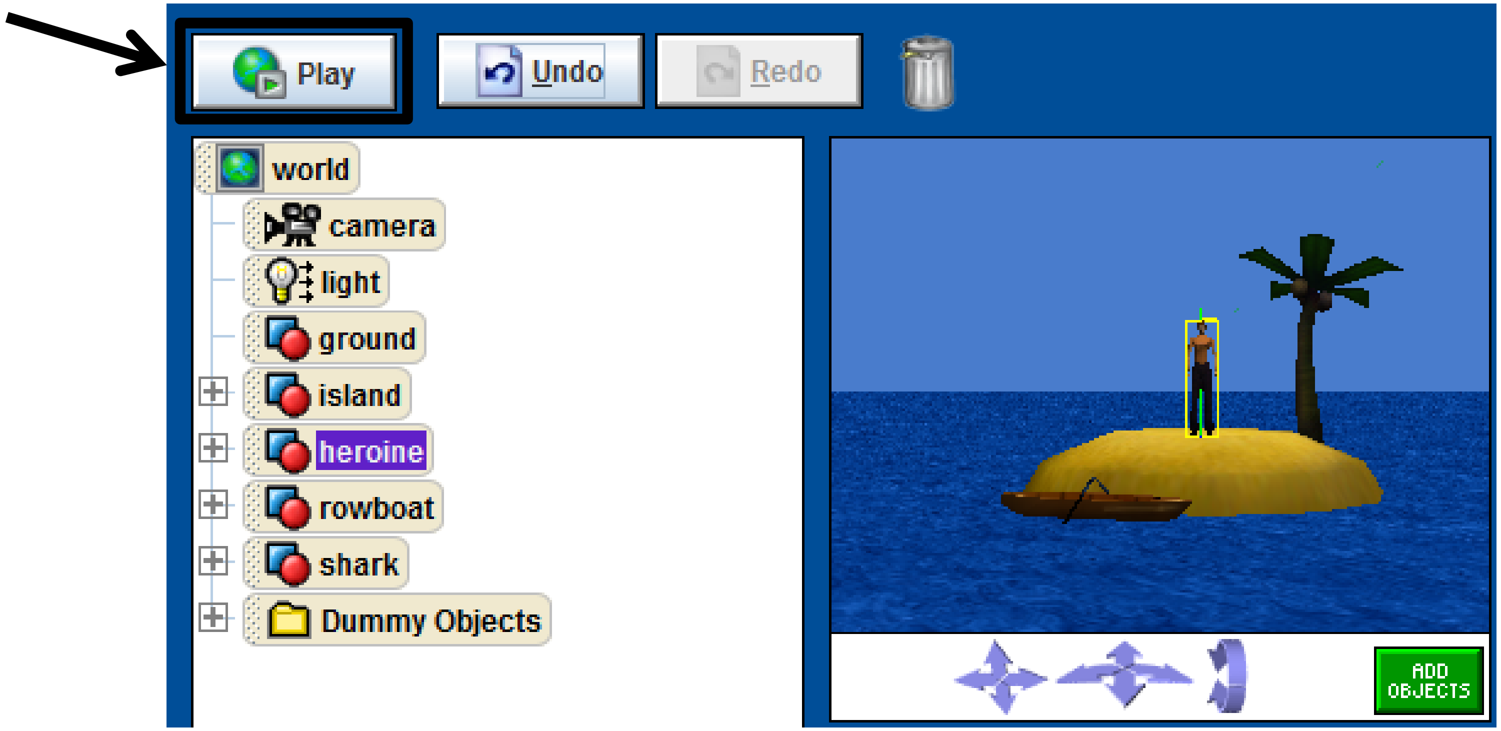


Becomes…

heroine say Hey! Welcome to my island! more…

Methods

- Now press the **Play** button in the upper left-hand corner of the screen to watch your AMAZING program in action!!!!!

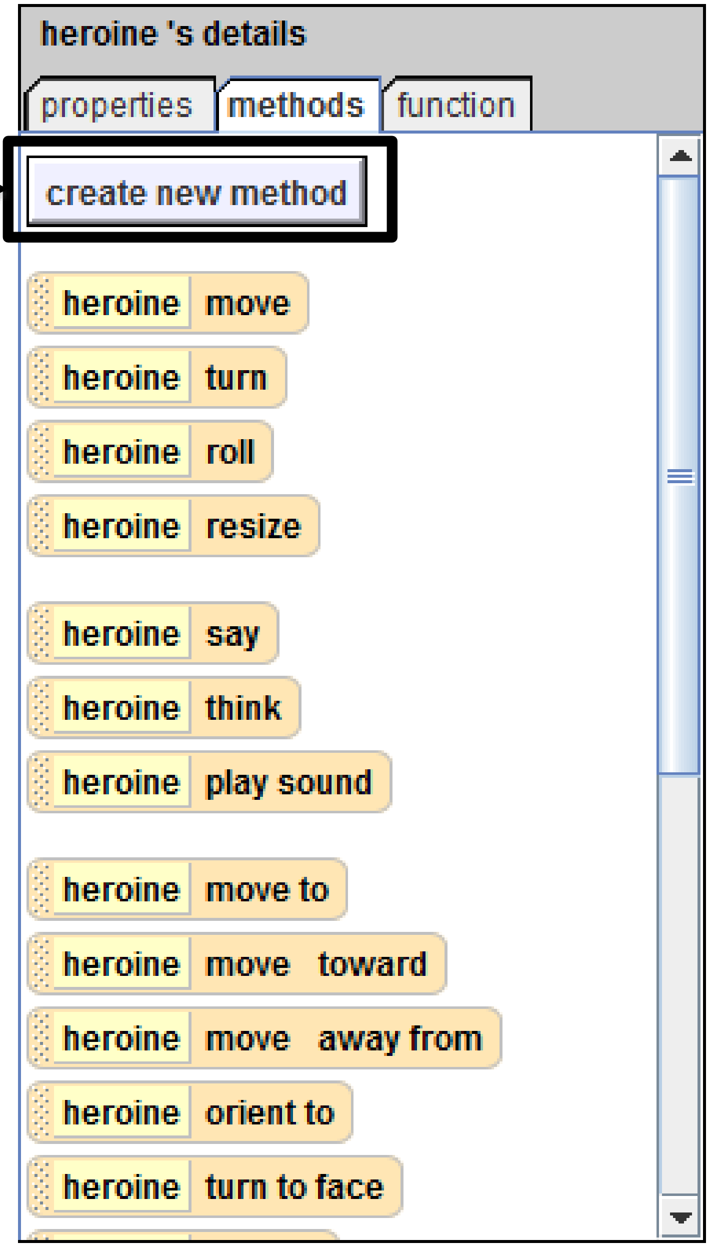


- Okay. That was pretty boring. Let' s spice things up by teaching our character to do a backflip

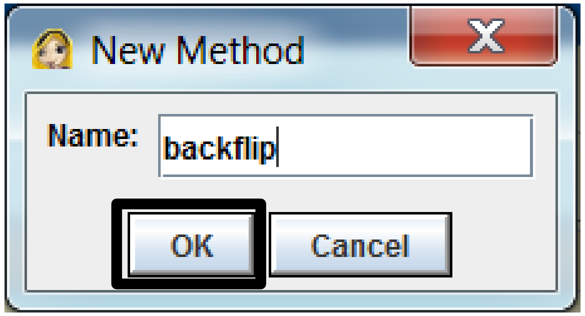
Methods

- To teach your character new things, you can combine methods that he/she already knows into new methods.

- Make sure you have clicked on your character in the object tree. Then, go to the methods for your character and click **create new method**.

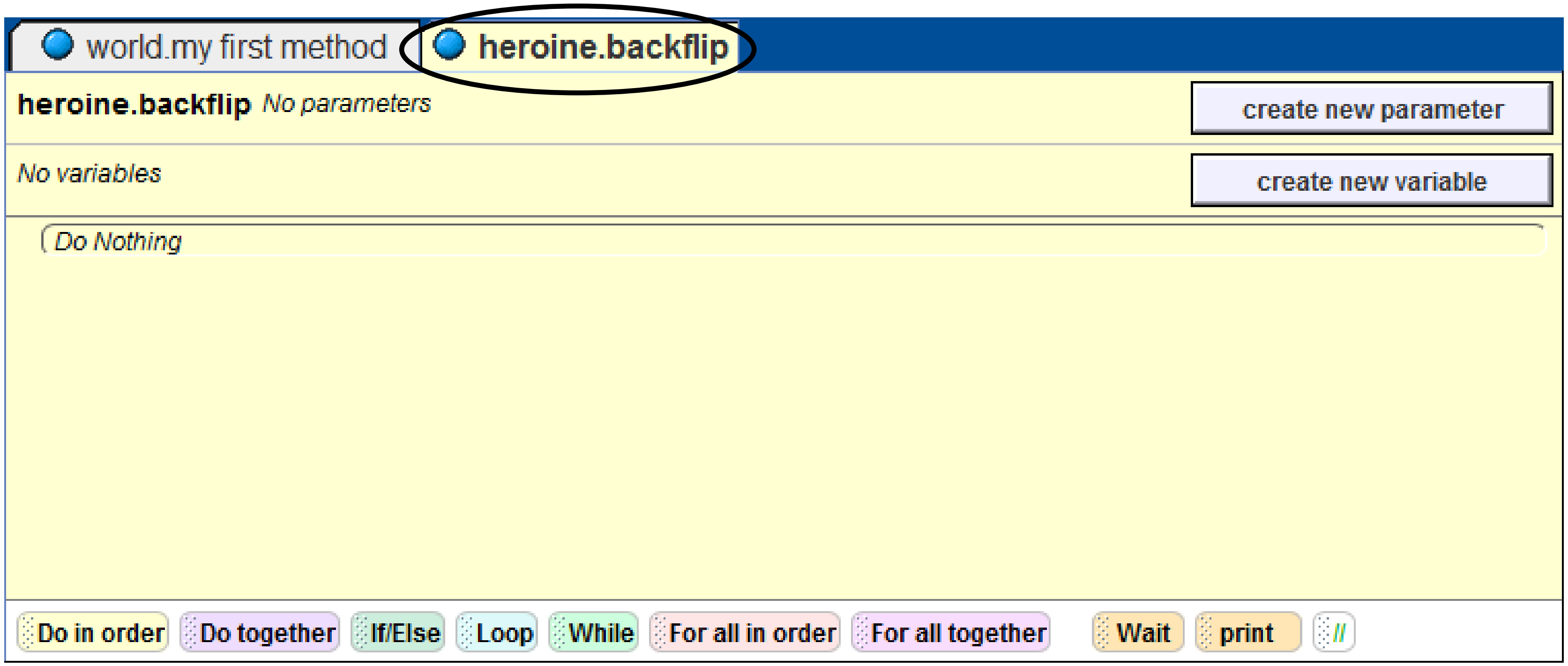


Backflip



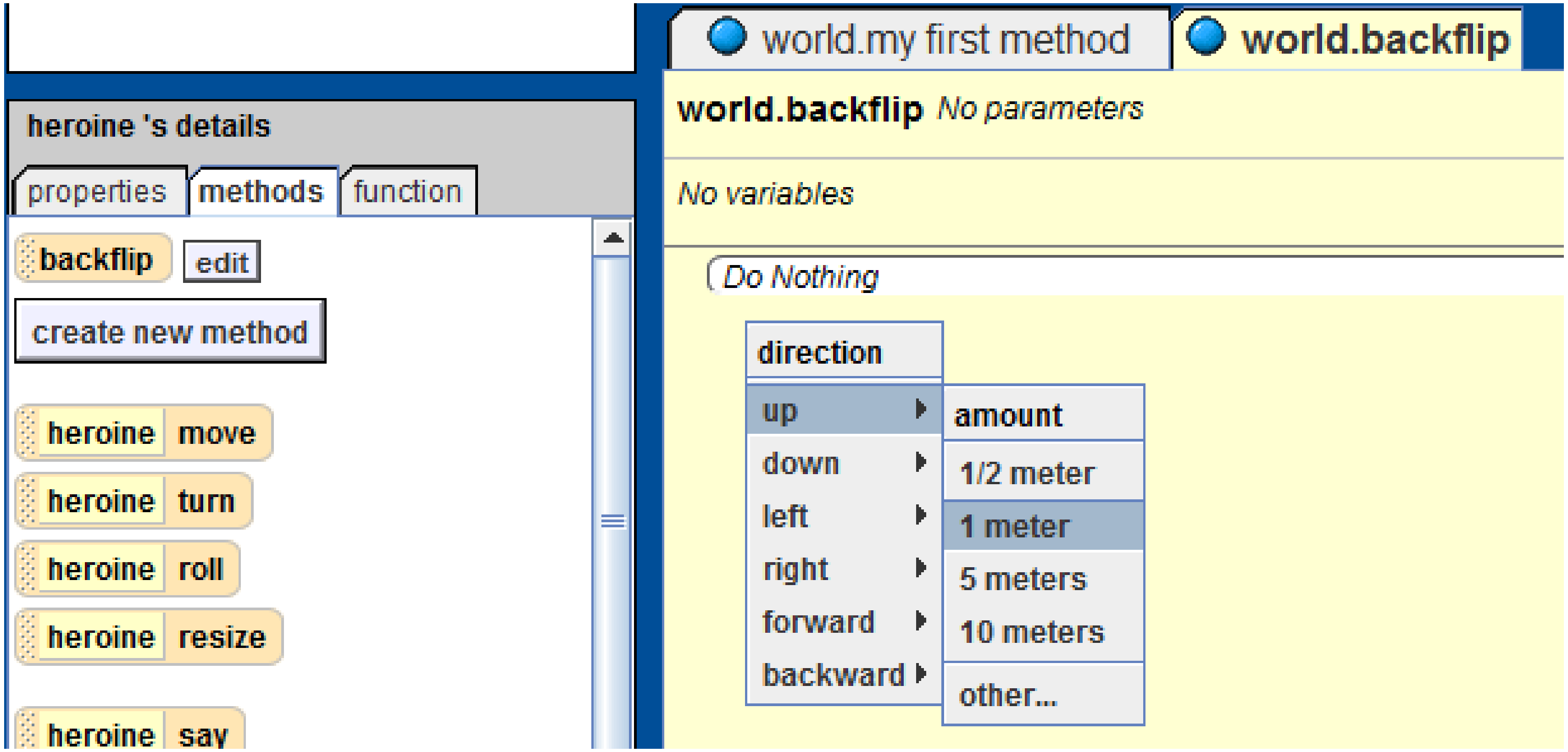
- In the box that pops up, type **backflip**, then click **OK**.

- You should see a new tab appear in your method editor called **heroine.backflip** (heroine will be replaced by your character's name). This is the space where you will program the backflip.



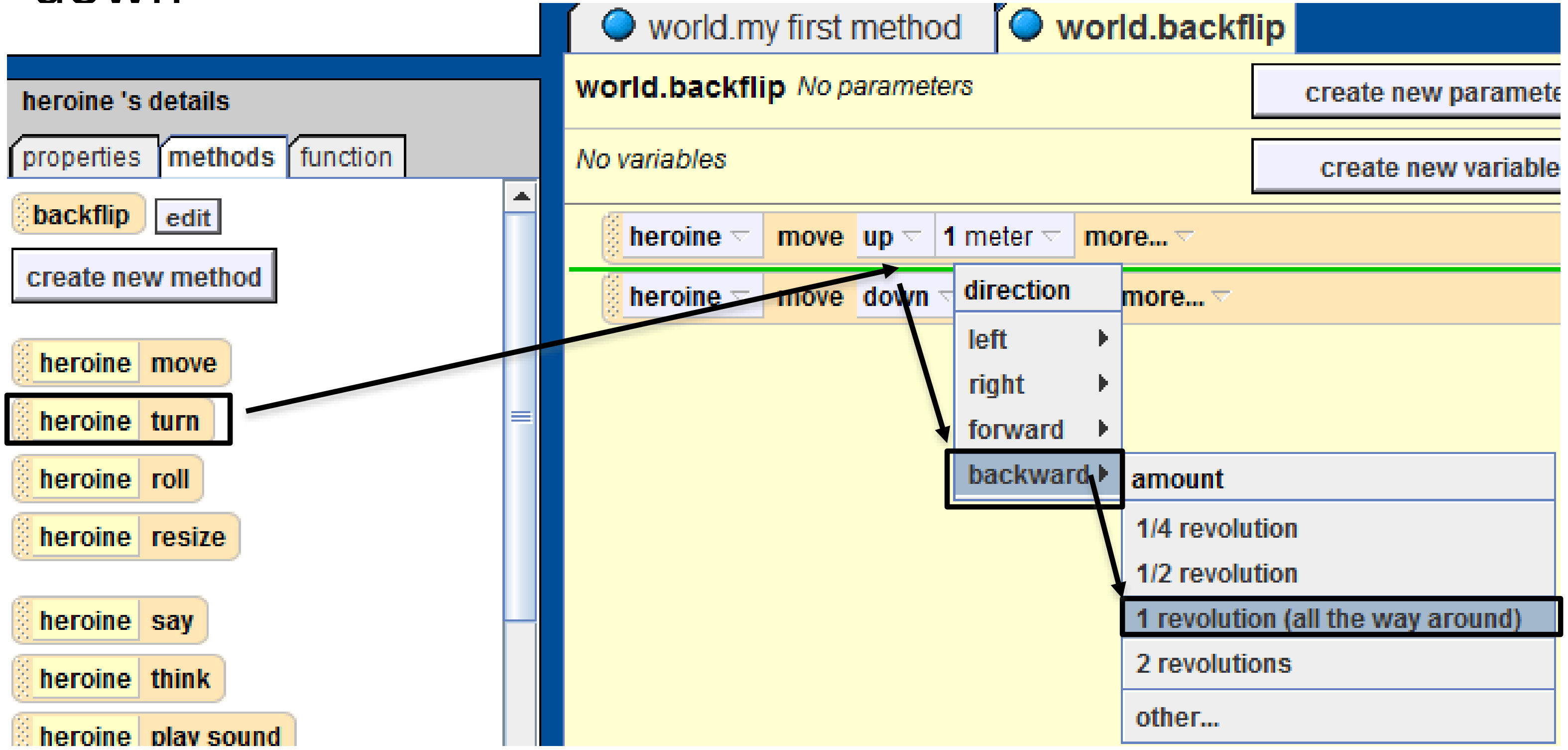
Backflip

- Drag **heroine move** into the method editor
- Select **up**, then **1 meter**
- Drag another **move** below this, but this time select **down > 1 meter.**



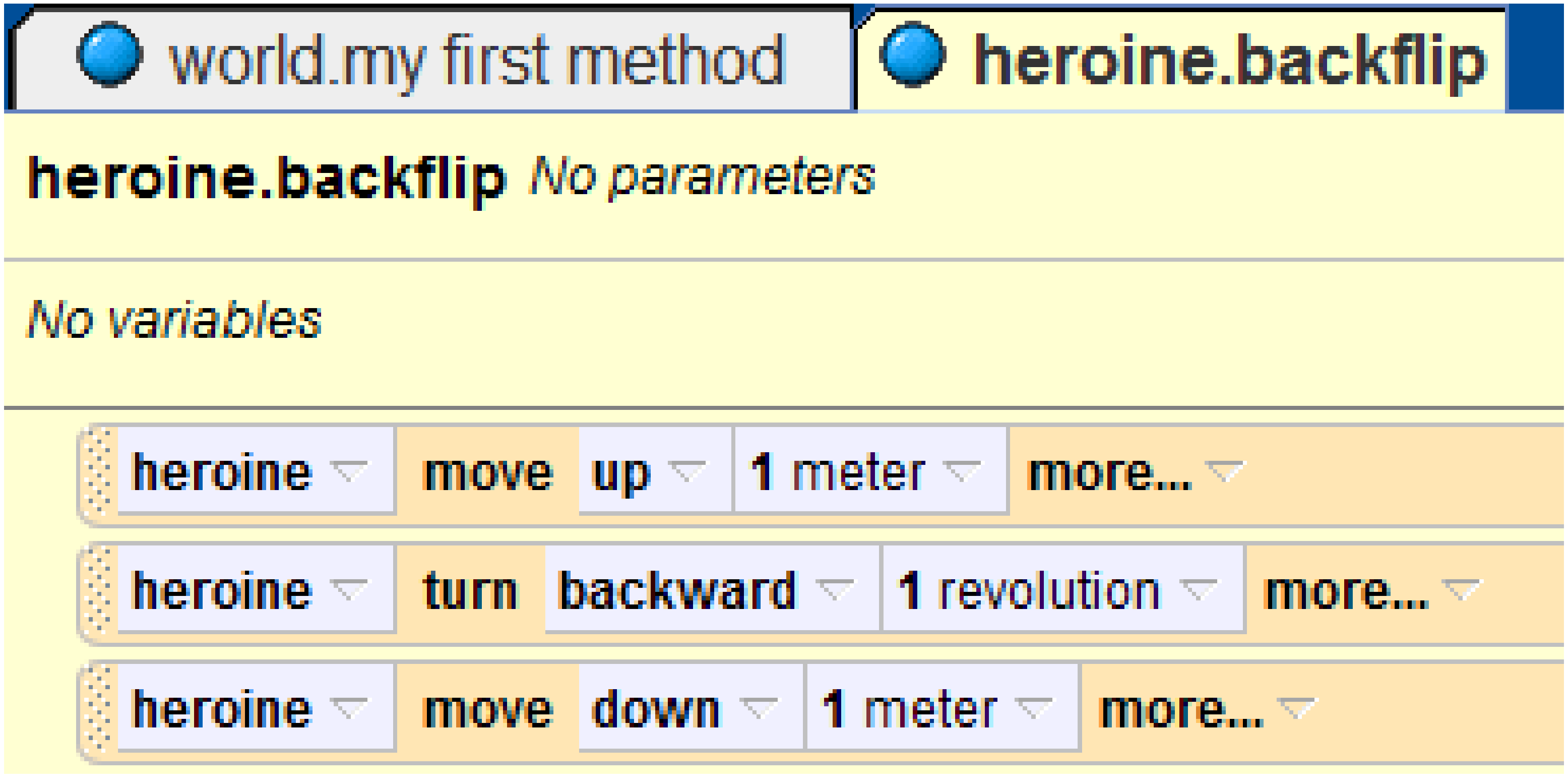
Backflip

- To finish the flip, drag in **turn** between the two movements (a green line should appear when you' re between them)
- Choose backward, then 1 revolution (all the way around)
- Now your character will move up, flip, and then move down



Backflip

- Your code should look like this:



world.my first method | heroine.backflip

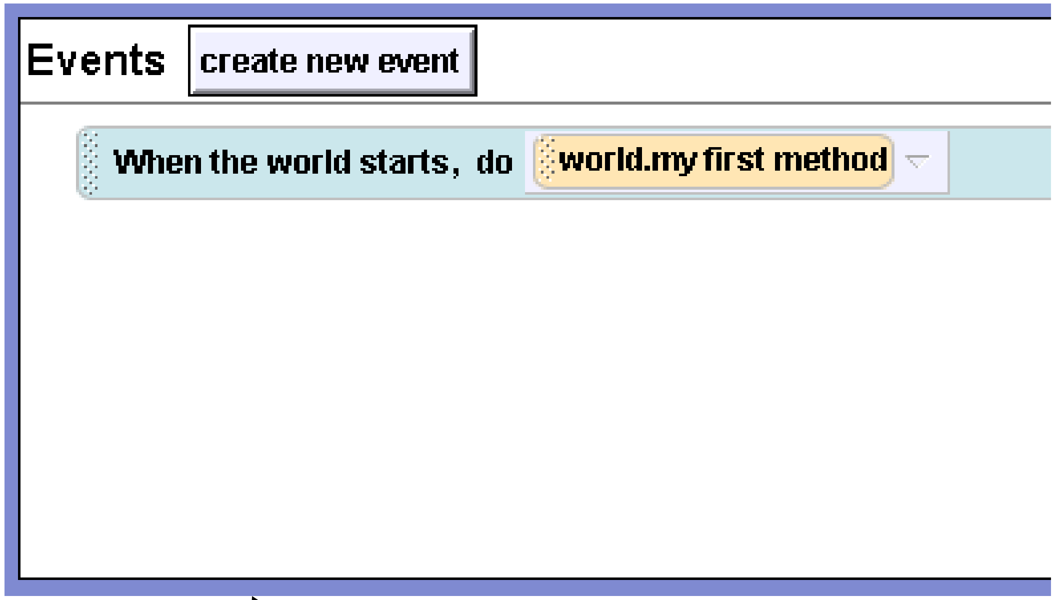
heroine.backflip *No parameters*

No variables

```
heroine move up 1 meter more...
heroine turn backward 1 revolution more...
heroine move down 1 meter more...
```

Events

- Now that we have written a method, we' ll use an **event** to see it in action.
- The **event editor** is found in the top right-hand corner of your screen.
- Events are used to tell our program when it should call our methods.

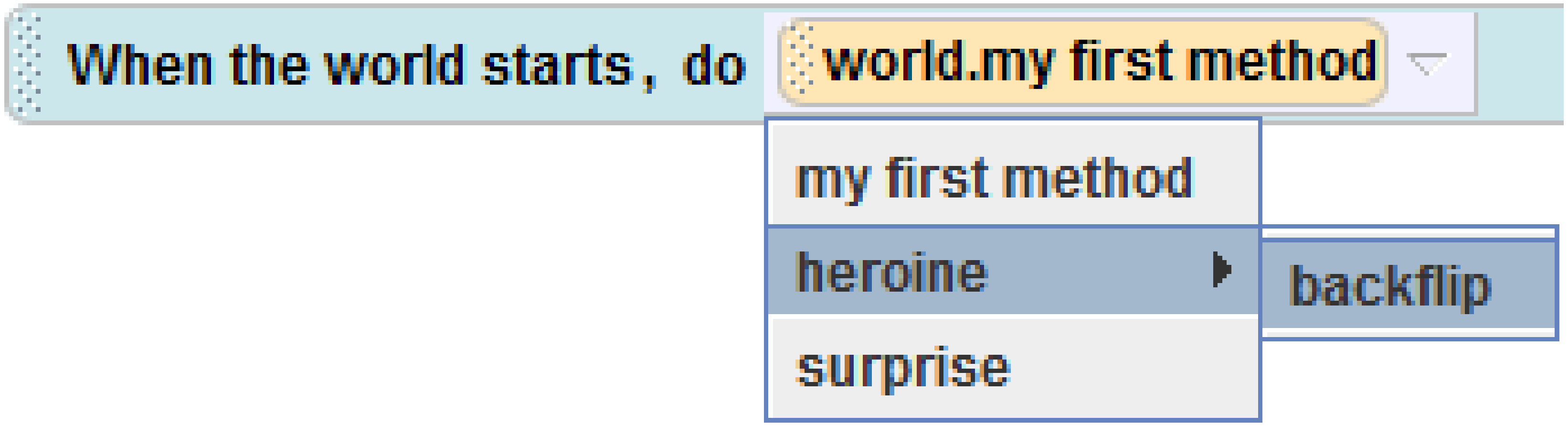


When the world starts, do world.my first method

This is the event editor

Events

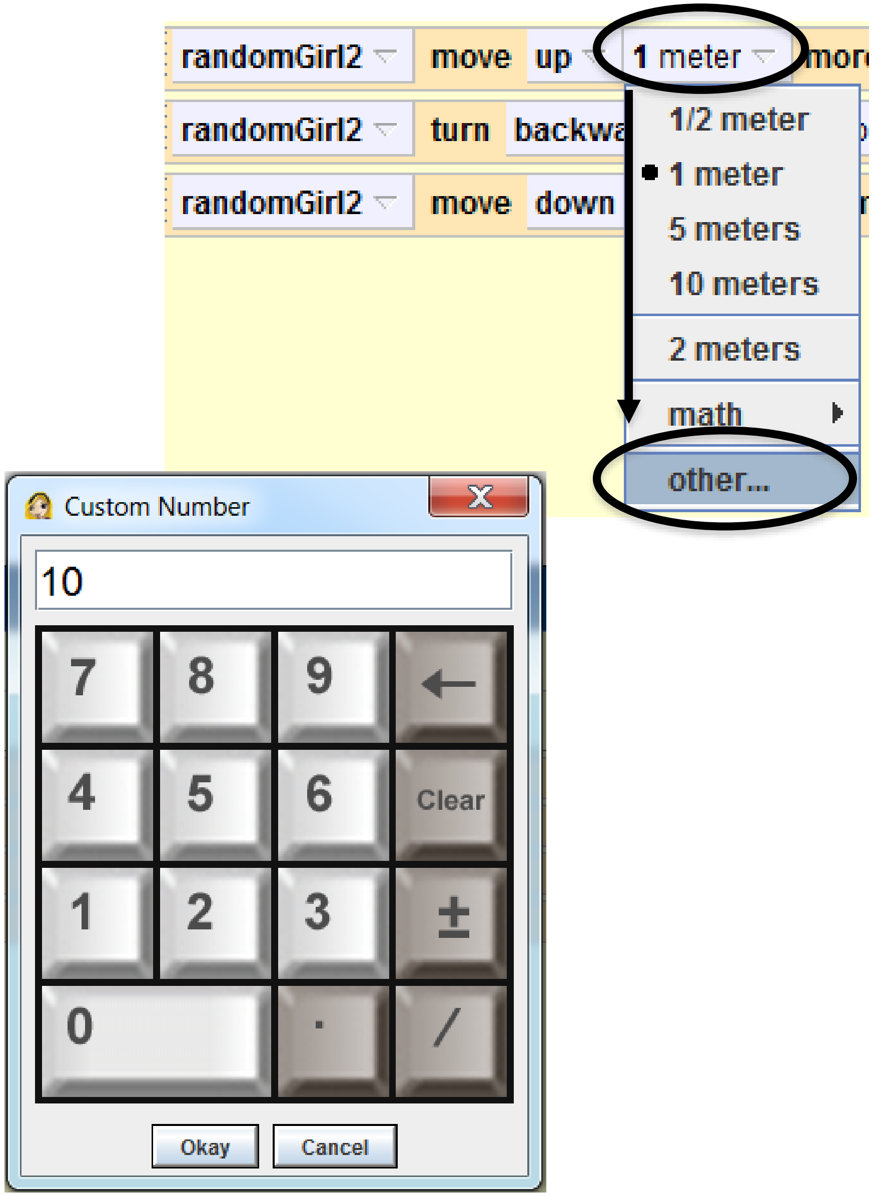
- You' ll see that when the world starts (when you press Play), your world does world.my first method.
- Click where it says world.my first method, and change it to **your character > backfilp**.



- Now when you press in the upper left, your character will do a backflip!

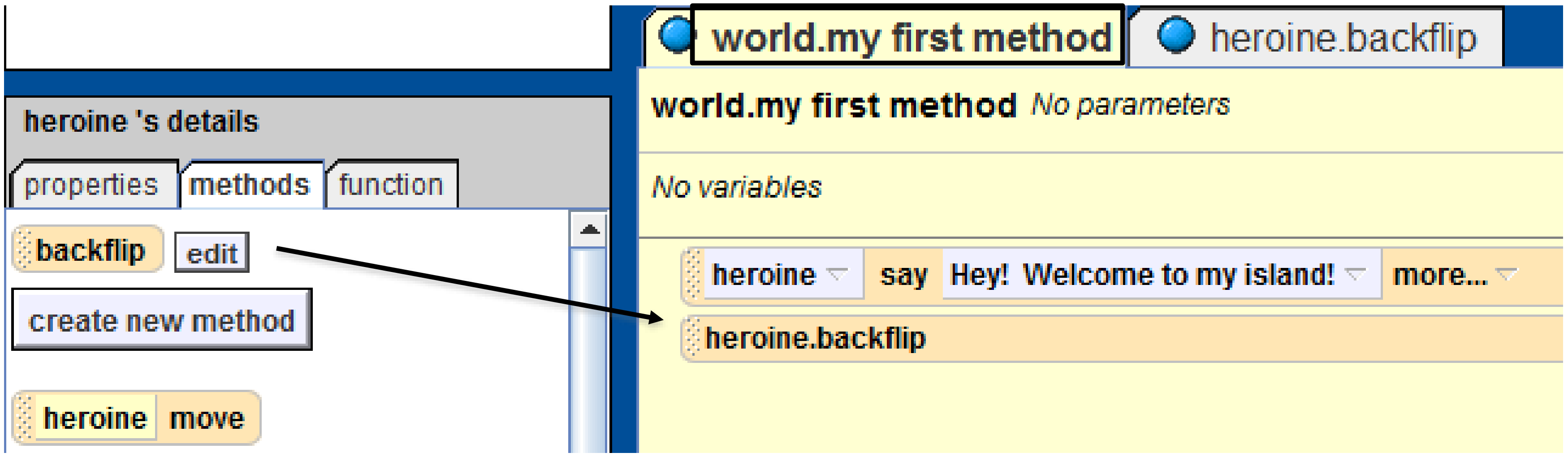
Backflip

- Depending on how tall your character is, he/she might have hit his/her head on the ground. To fix this, click **1 meter** next in the **move up** command, and choose **other…** Try typing **2** in the calculator that comes up to start.
- Be sure to adjust the **move down** command, too.



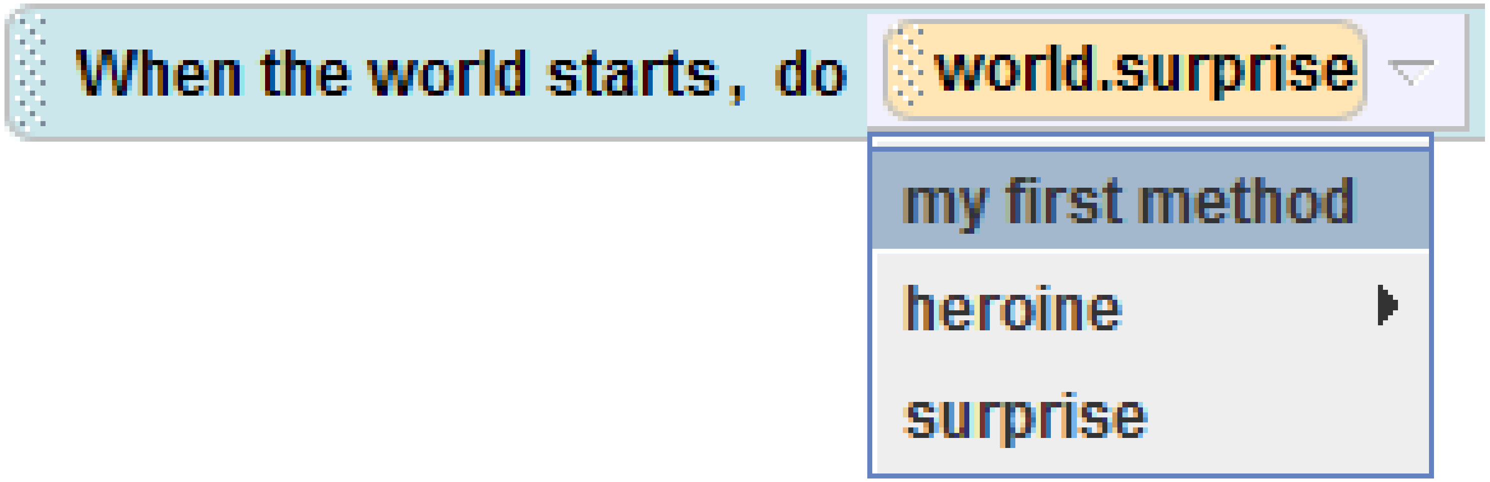
Backflip

- Finally, to make have our character say “hey,” and then do the backflip, select the **world.my first method** tab again
- Drag in **backflip** from your character’s list of methods.



Testing!

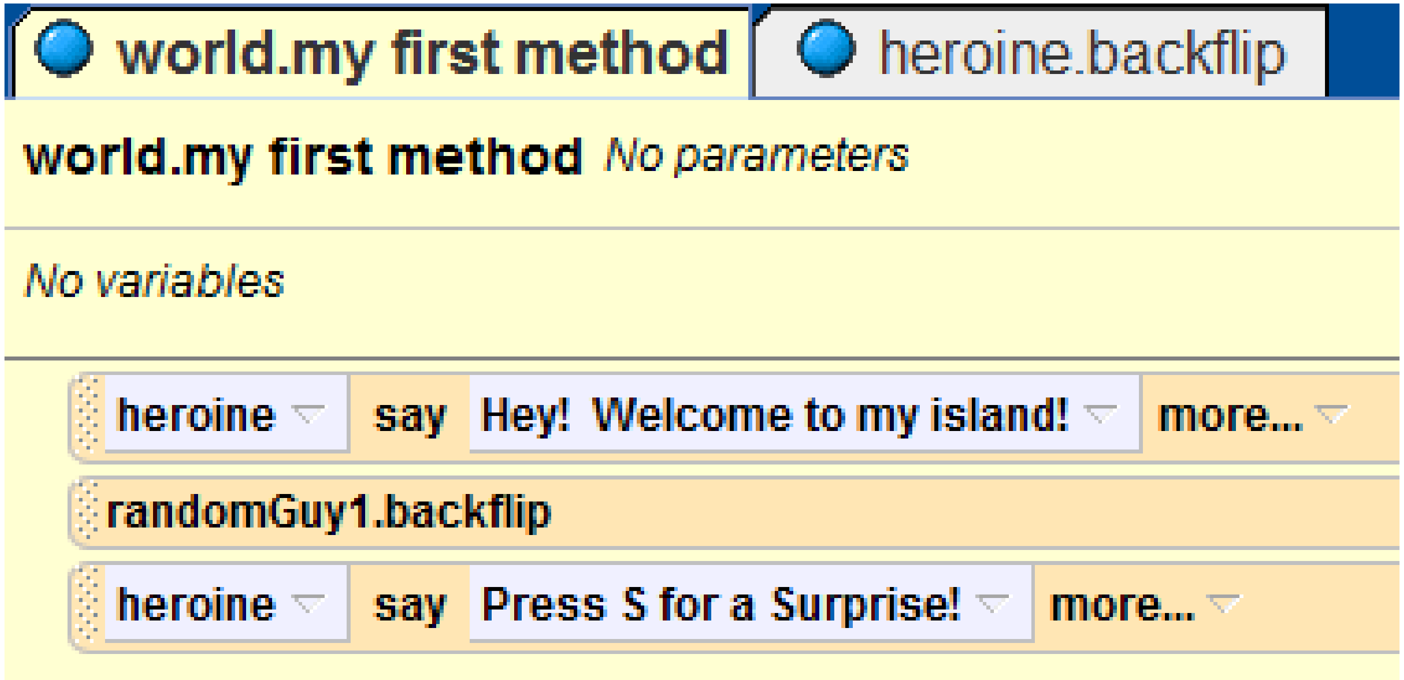
- Now change your “When the world starts” event in the event editor *back* to world.my first method.



- We do all this because testing one method at a time will be a really good time-saving habit later.
- Now just press to run the whole thing!

Part 4: A Surprise Method

- Now we' re going to write a more complex method that will activate when we press a button
- First, drag in another **heroine say** to the bottom of World.my first method. Select other, then type **"Press S for a Surprise"** in the box that comes up
- Your method will look like this:



world.my first method | heroine.backflip

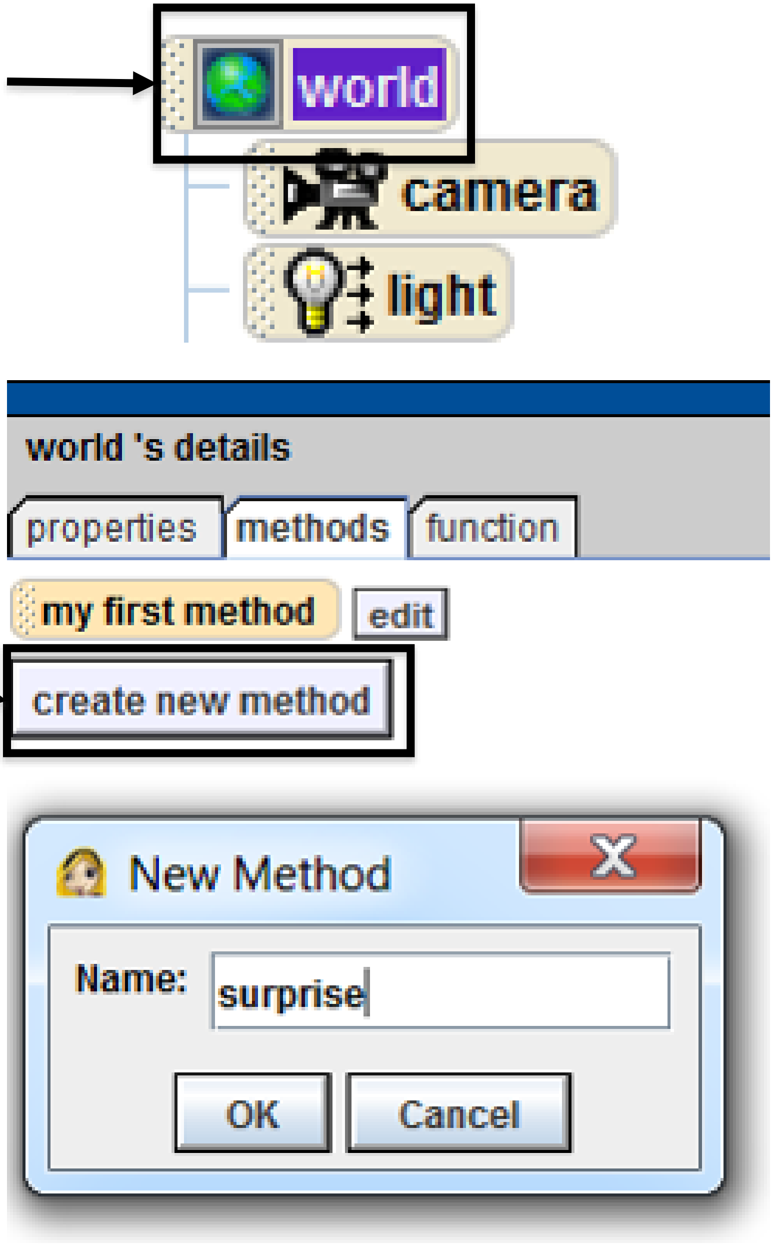
world.my first method *No parameters*

No variables

```
heroine say Hey! Welcome to my island! more...
randomGuy1.backflip
heroine say Press S for a Surprise! more...
```

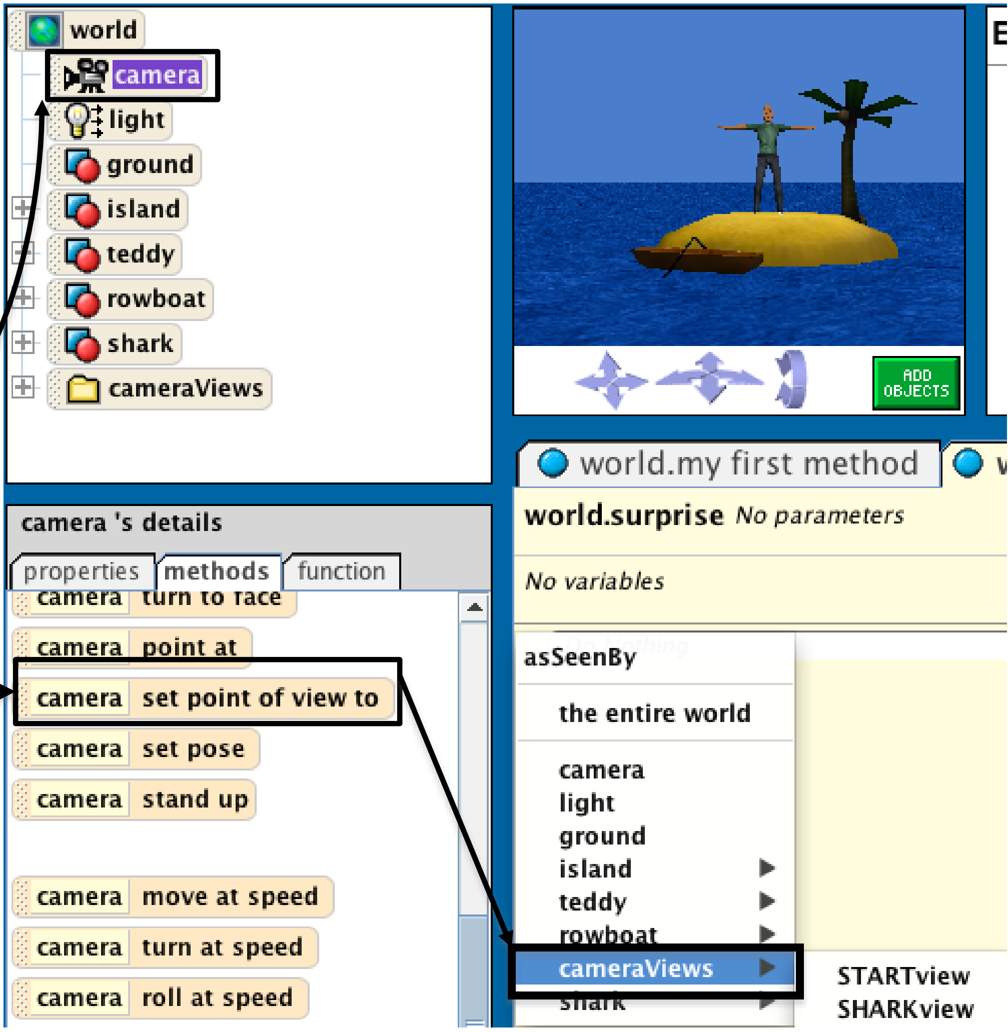
Surprise

- Select **world** at the top of the object tree, then hit **create new method** in the details pane, and type **surprise** in the box
- We're creating our surprise method in world because we're going to have several different objects (your character, the shark, the camera) do things in one method!



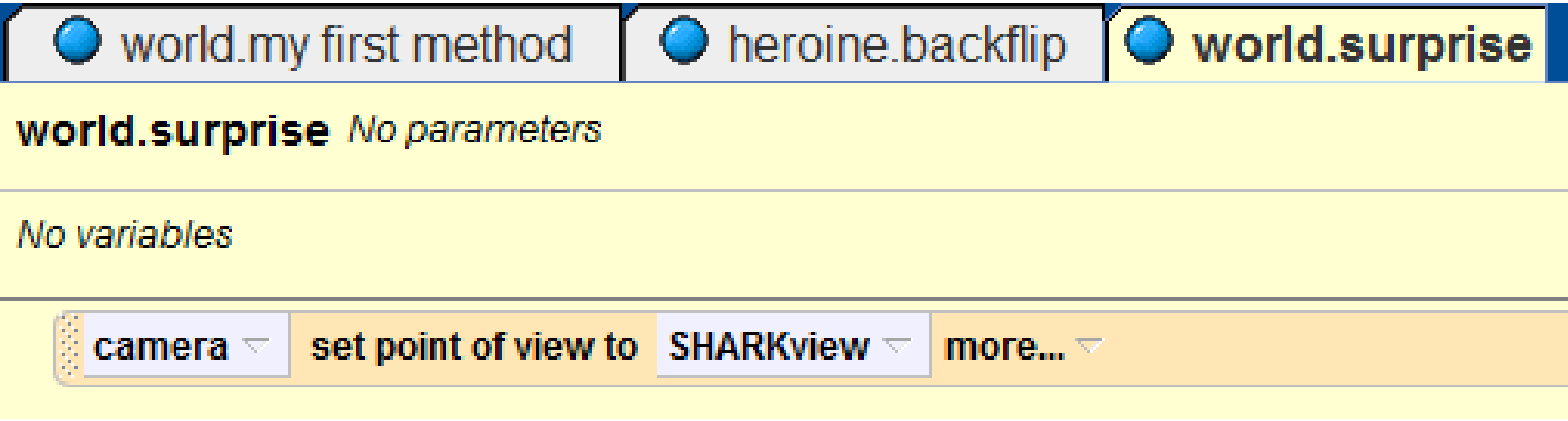
Surprise

- S also stands for "Shark," so we'll have the camera get a look at the shark.
- To get the camera to change position *while your program runs*, we have to use its methods.
- Select **camera** in the object tree, then drag in its **set point of view to** method.
- Select **CameraViews > SHARKview** on the menu that comes up.



Surprise

- Your method editor should look like this:


world.my first method
heroine.backflip
world.surprise

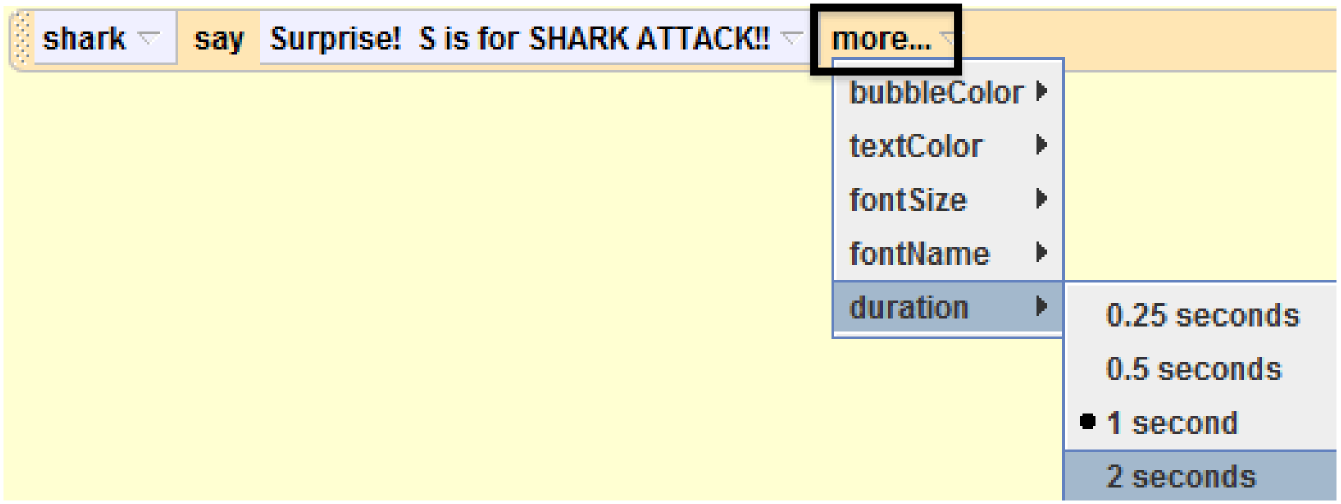
world.surprise *No parameters*

No variables

camera set point of view to SHARKview more...

Surprise

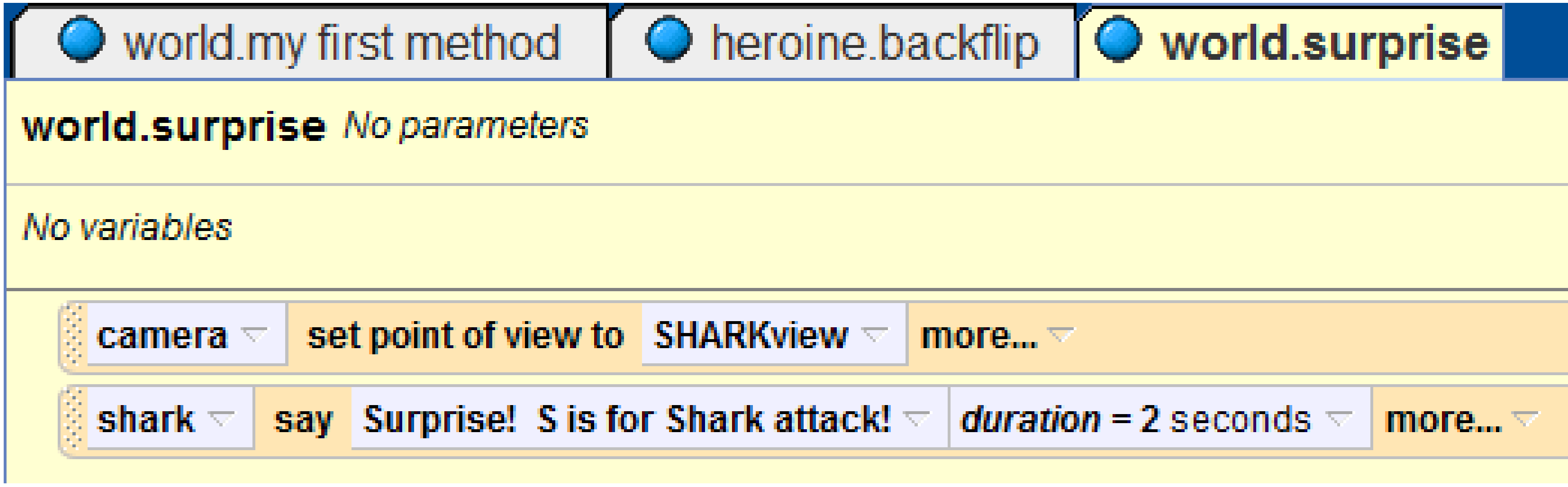
- Now select **shark** in the object tree, and have it **say** "Surprise! 'S' is for SHARK ATTACK!!" or something similar (use a method)
- Click **more…** next to this in your method editor, and a menu of properties will appear. Select **duration**, and change it to **2 seconds** so people have more time to read the message
- **Play around** with the other properties if you have time, but **don't use fontName** (or your program will break).



shark say Surprise! S is for SHARK ATTACK!! more...

Surprise

- Your method editor should look like this:



world.surprise *No parameters*

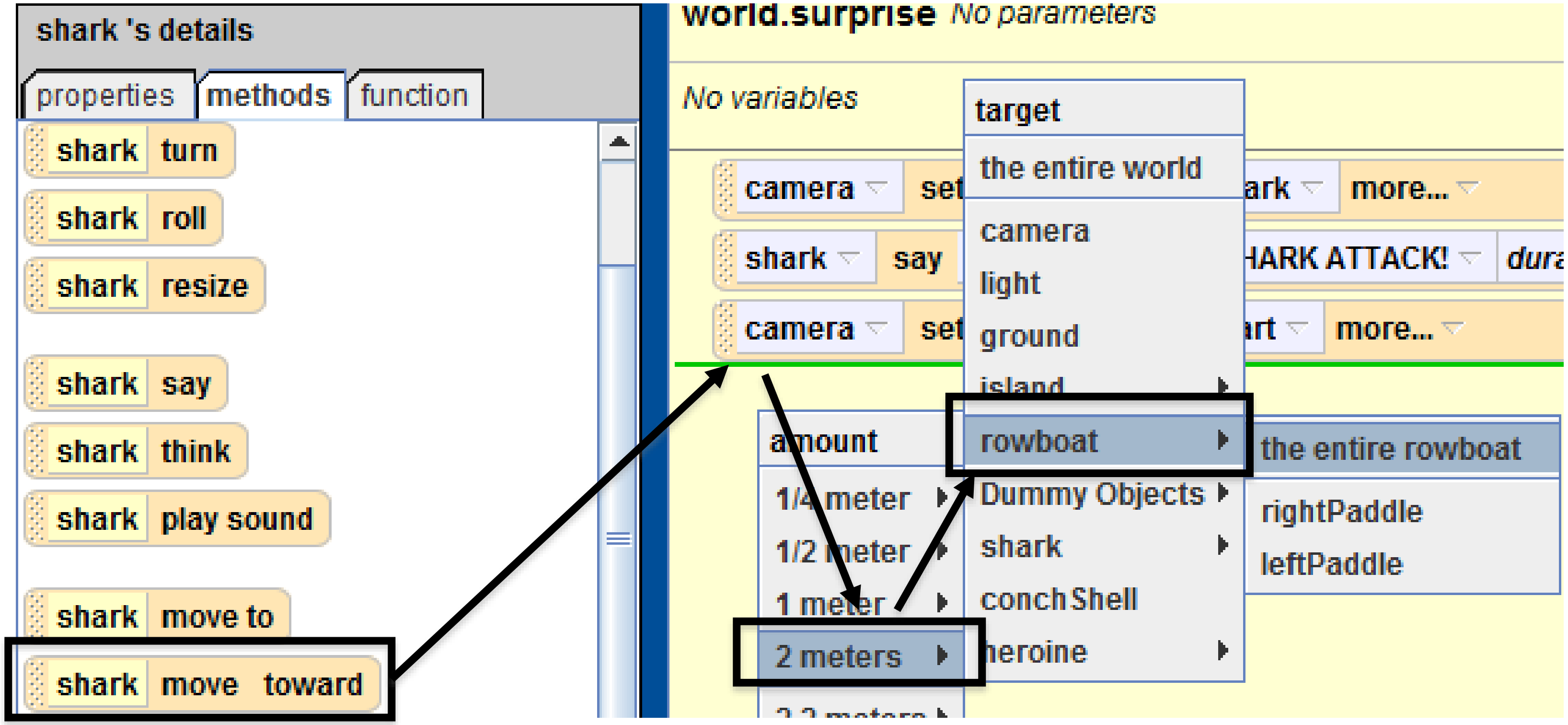
No variables

camera set point of view to SHARKview more...

shark say Surprise! S is for Shark attack! *duration* = 2 seconds more...

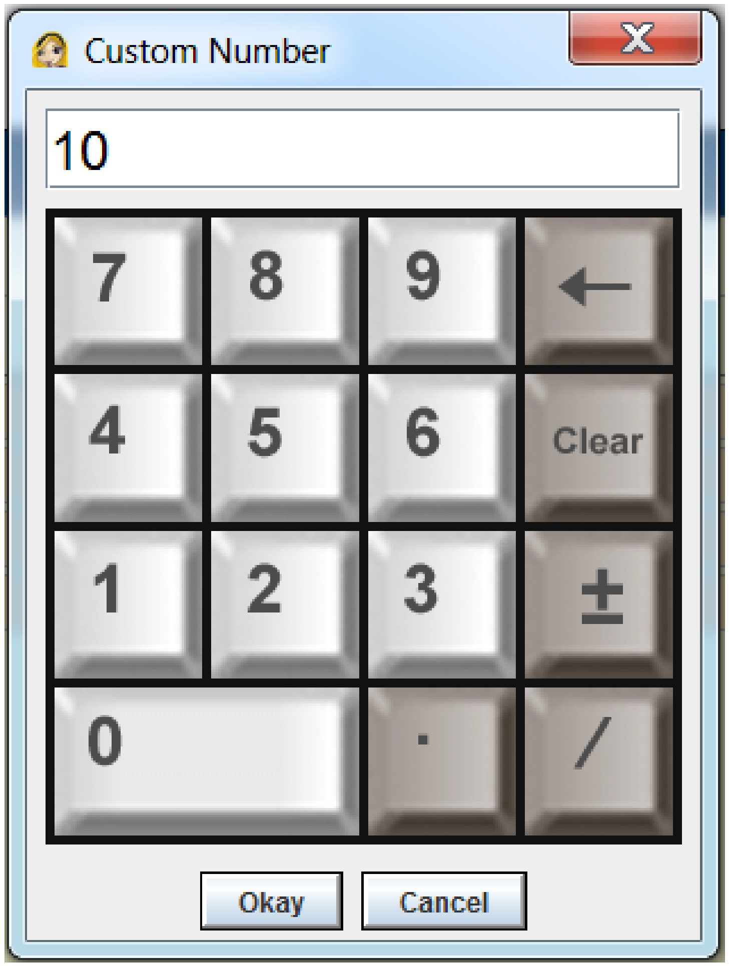
Surprise

- Now drag in a method to have the **camera set point of view to** the start position
- Then select **shark** in the object tree, drag in a **move towards** method, and choose **2 meters > rowboat > the entire rowboat**
- This will have the shark move 2 meters towards your boat.



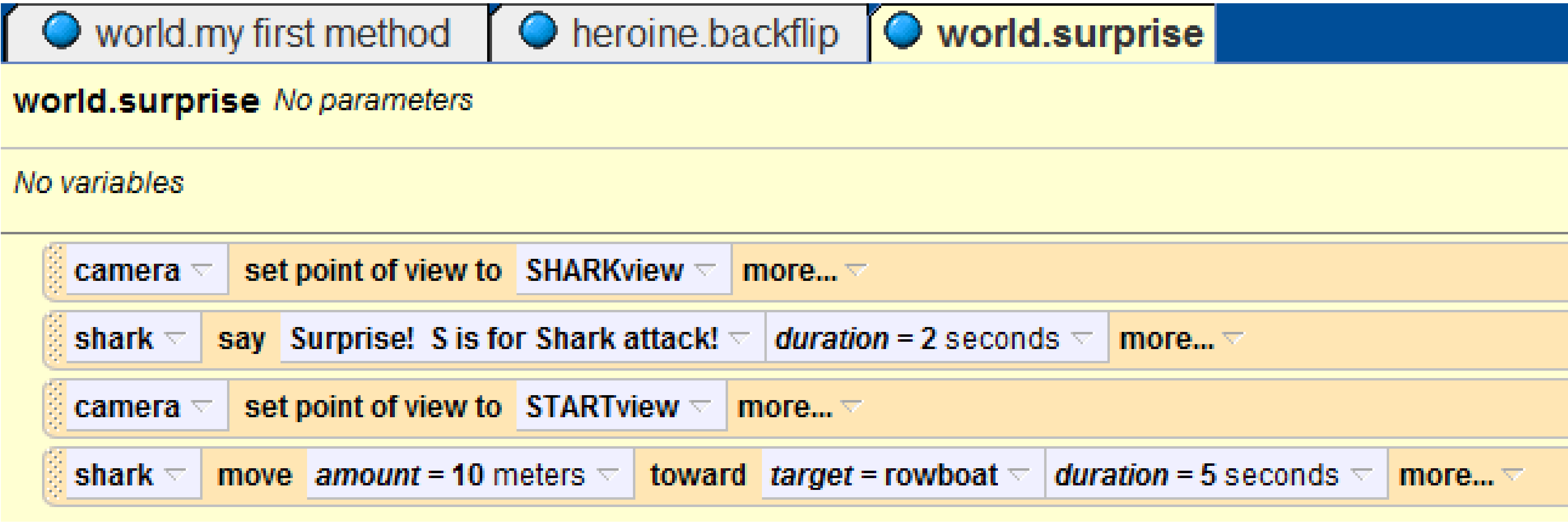
Surprise

- Change the distance of your move towards method to how far away you think you estimate your shark is from the rowboat.
- To do so, click **amount=2 meters**, **other**, then type in **your guess** on the calculator
- Set the **duration** (under more…) of your **move towards** method to **5 seconds** so the user has time to react to the shark



Surprise

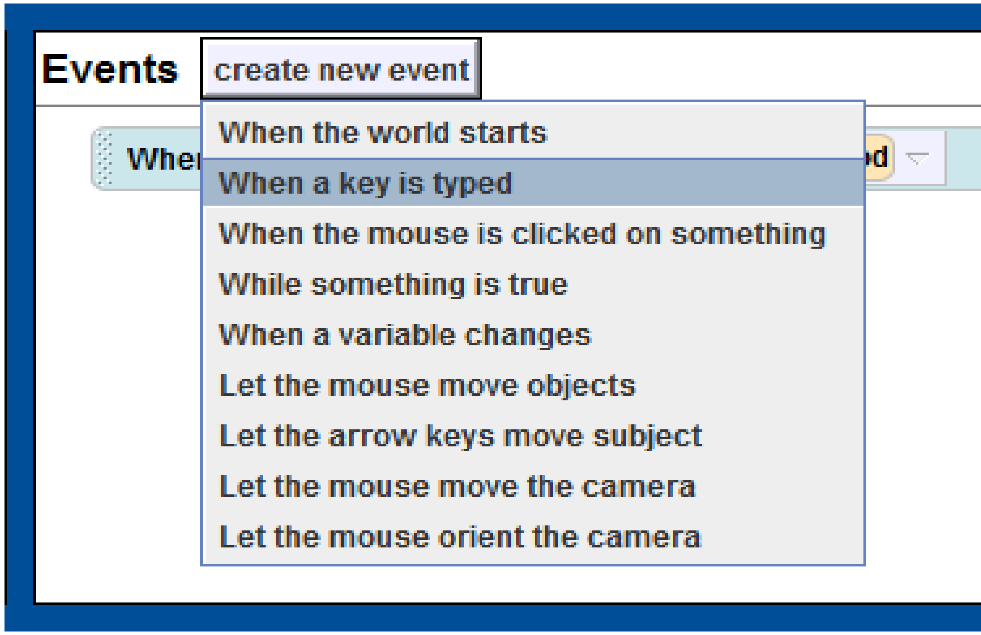
- Your method editor should look like this:

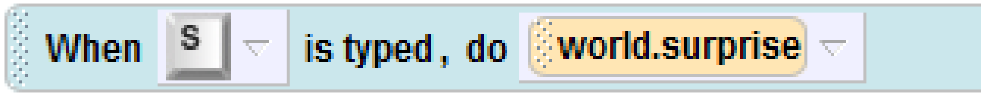


```
world.surprise  No parameters

No variables

camera  set point of view to  SHARKview  more...
shark  say  Surprise!  S is for Shark attack!  duration = 2 seconds  more...
camera  set point of view to  STARTview  more...
shark  move  amount = 10 meters  toward  target = rowboat  duration = 5 seconds  more...
```

Events

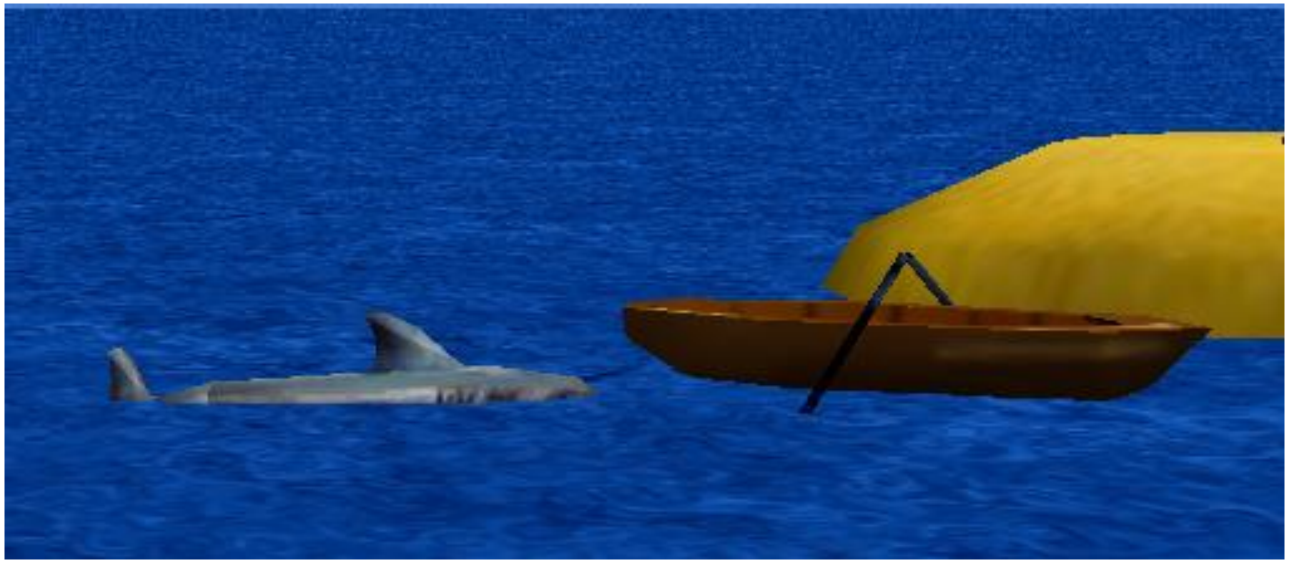
- We want to make S actually prompt the surprise method.
- Select **create new event** in the event editor (top right), then choose **When a key is typed.**
- A new event will appear!
- Change **any key** to **letters > S** and **Nothing** to **surprise.**
- Note that this call surprise ANYTIME you press S, but your users will only know to do so when you instruct them.


Events
create new event
When the world starts
When a key is typed
When the mouse is clicked on something
While something is true
When a variable changes
Let the mouse move objects
Let the arrow keys move subject
Let the mouse move the camera
Let the mouse orient the camera


When S is typed , do world.surprise

Test

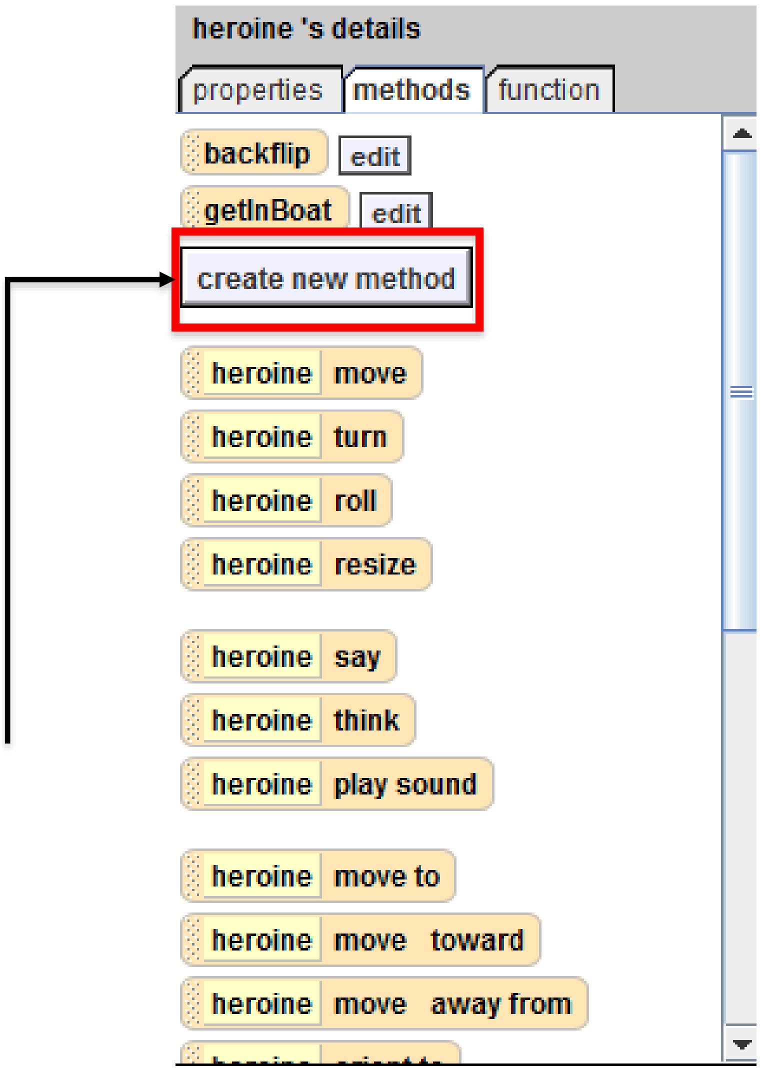
- Now press **Play** to test your world!
- Your shark should stop just in front of the boat, but because we just guessed his distance to the boat, he probably won't. Play with the **distance** in your **move toward** call until your shark ends up like this:



- For me, the distance was 4 meters.
- *Those seeking a challenge can try to figure out how to use the distanceTo **function** (and it's **math** parameter) here to get it exact*

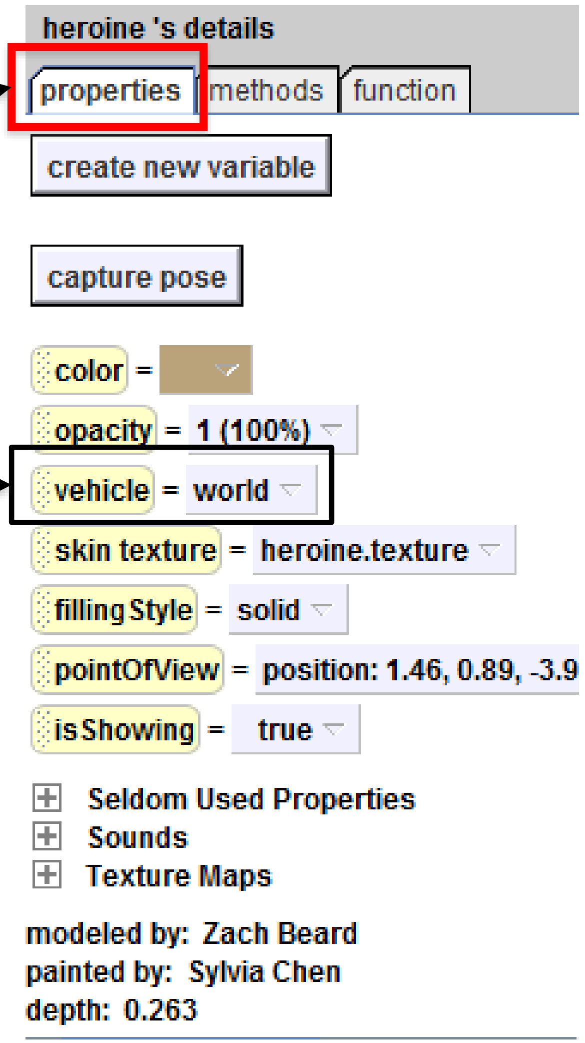
Part 5: Vehicles

- While the shark can't exactly walk on land and attack our character, we're going to have him/her escape in the rowboat anyway
- Click on your **character** in the object tree, then create a new method. Call it getInBoat



Vehicles

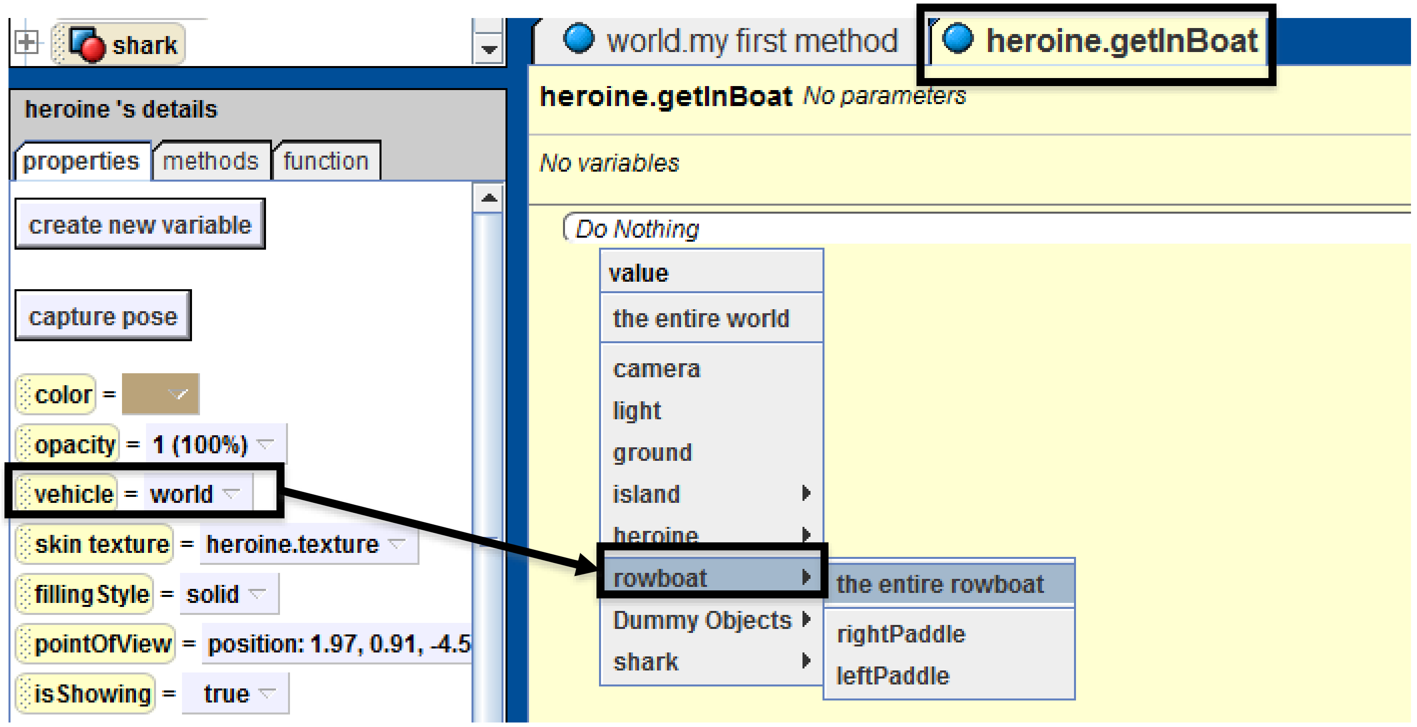
- Now click on the **properties** tab in the details pane (where the methods are)
- The properties pane lets you change various things about your object.
- Later, you' ll be able to make your character red, radioactive, or invisible
- For now, look at the **vehicle** property



color =
opacity = 1 (100%)
vehicle = world
skin texture = heroine.texture
filling Style = solid
pointOfView = position: 1.46, 0.89, -3.9
is Showing = true

modeled by: Zach Beard
painted by: Sylvia Chen
depth: 0.263

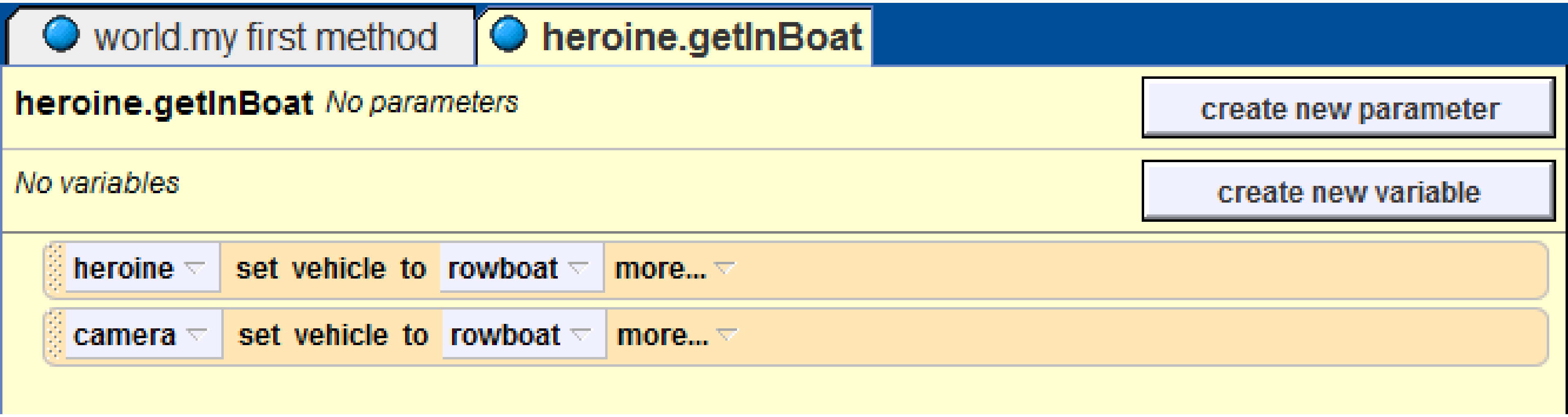
Vehicles



- Drag the **vehicle** property into the method editor (make sure the new **getInBoat** tab is selected) and select **rowboat > the entire rowboat.**
- Now when the rowboat moves, your character will move with it; your character is riding the boat.

Vehicles

- Repeat the steps from the last two slides but this time set your **camera's** vehicle to the rowboat
- Now your *camera* will follow the boat when you ride around
- Your method should look like this:



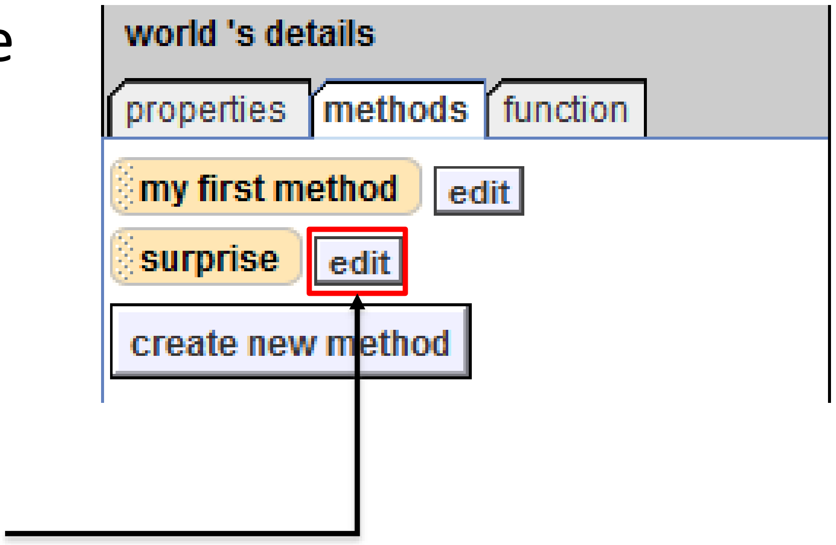
heroine.getInBoat *No parameters*

No variables

```
heroine set vehicle to rowboat more...
camera set vehicle to rowboat more...
```

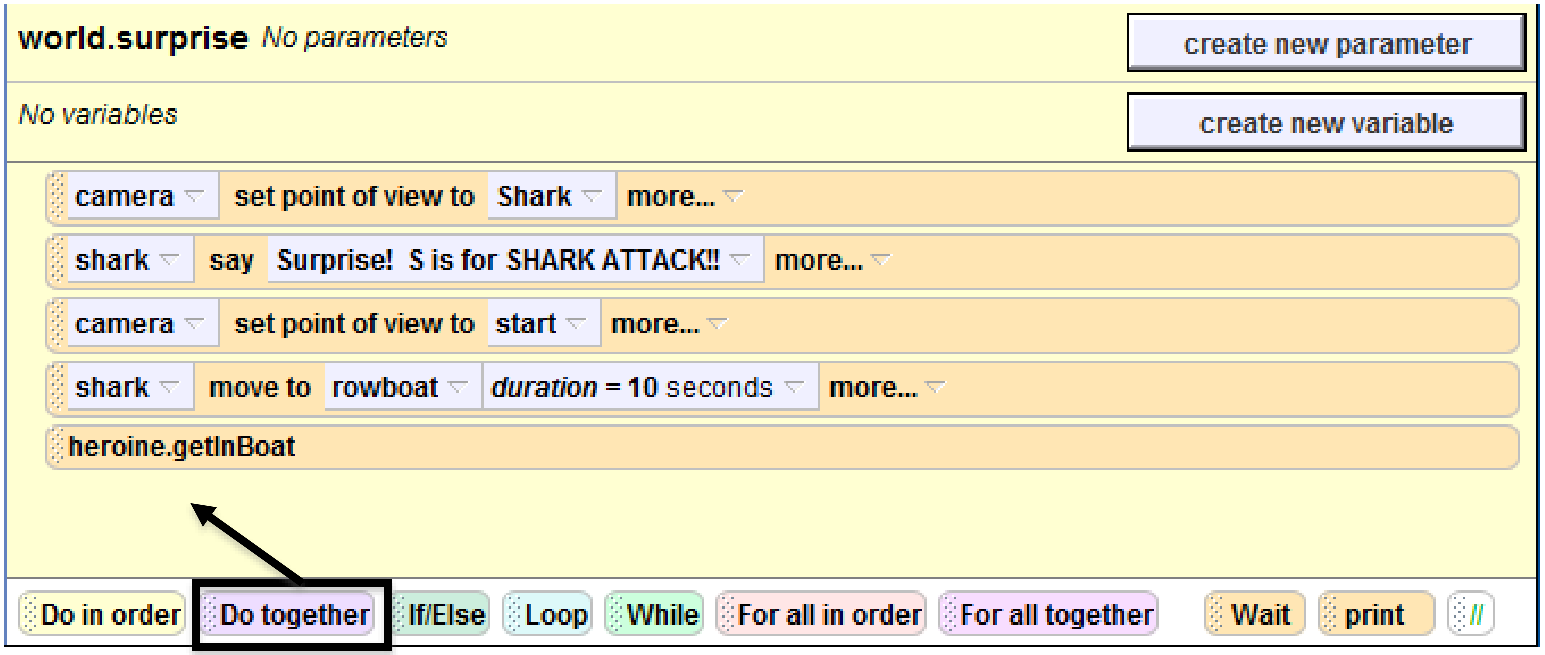
Vehicles

- We need to do two more things for this method to work
- First, we need to *call* (use) the method that we just made
- Go to your **world.surprise** method. If there isn't a tab above the method editor, then click on **world** in the object tree, then click **edit** next to **surprise**.



Vehicles

- Select your character in the object tree, and drag your new method, **getInBoat** *into* your **surprise** method.



world.surprise *No parameters*

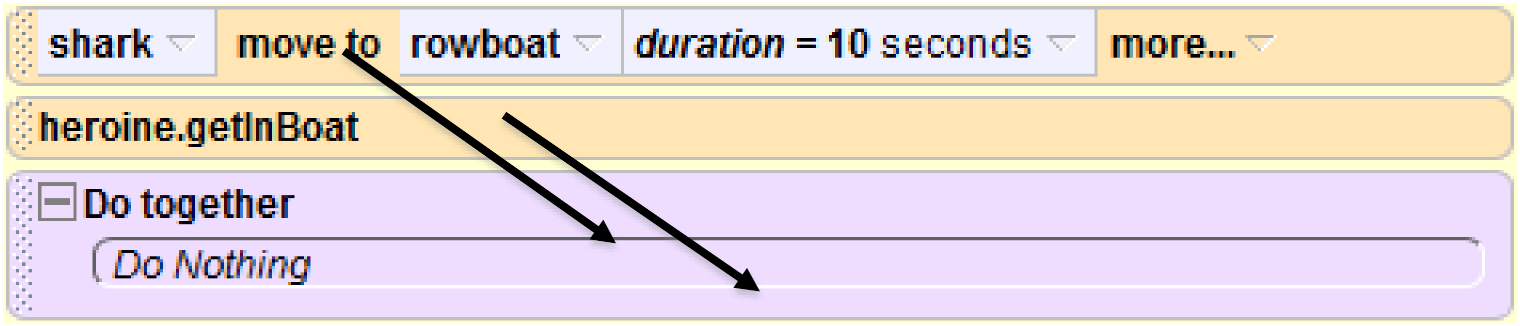
No variables

```
camera set point of view to Shark more...
shark say Surprise!  S is for SHARK ATTACK!! more...
camera set point of view to start more...
shark move to rowboat duration = 10 seconds more...
heroine.getInBoat
```

- Now, from the bottom of the screen, where there are several advanced (but common) coding constructs, drag in a ***do together.***

Do Together

- Normally, actions in Alice take place *in order.* One line of code will run, then the next one.
- By putting multiple methods inside of a *do together*, those methods can happen at the same time
- Drag our last two lines into the do together

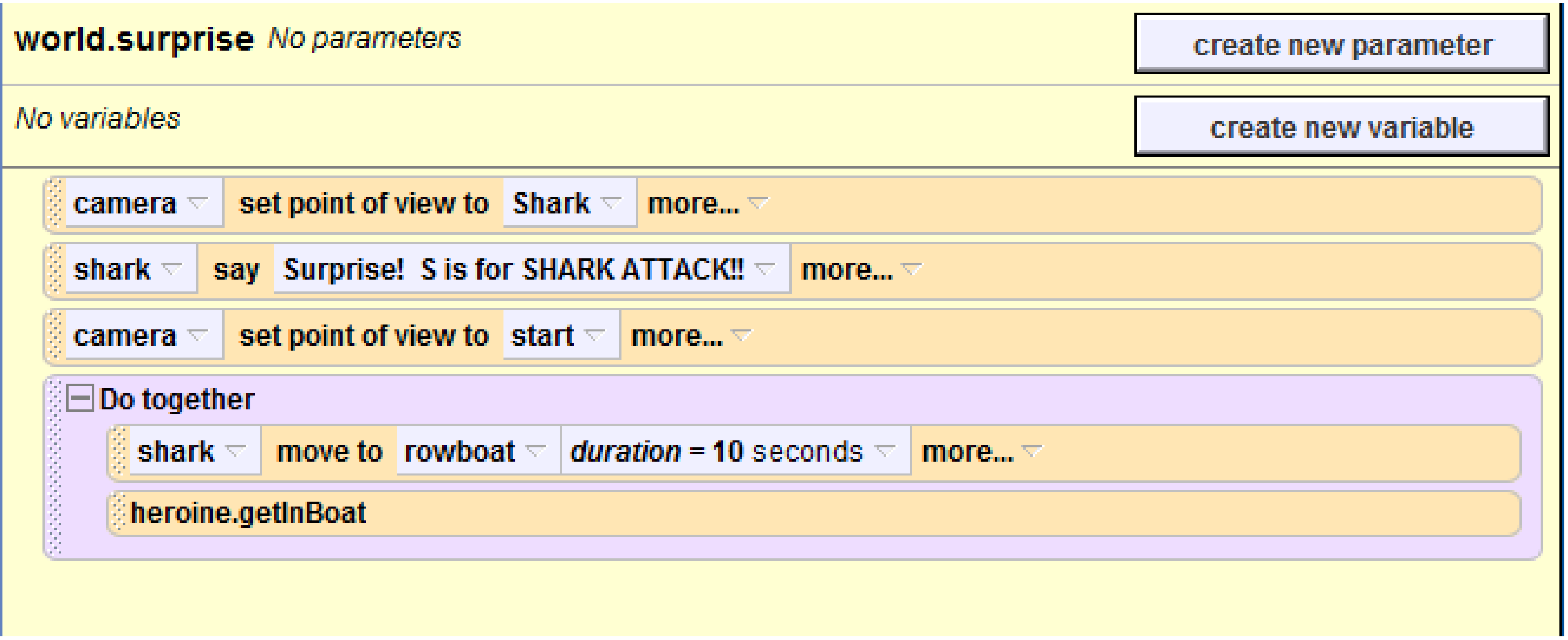


```
shark  move to  rowboat  duration = 10 seconds  more...
heroine.getInBoat
Do together
    Do Nothing
```

- Otherwise, our character would wait until AFTER the shark attacked to get in the boat

Vehicles

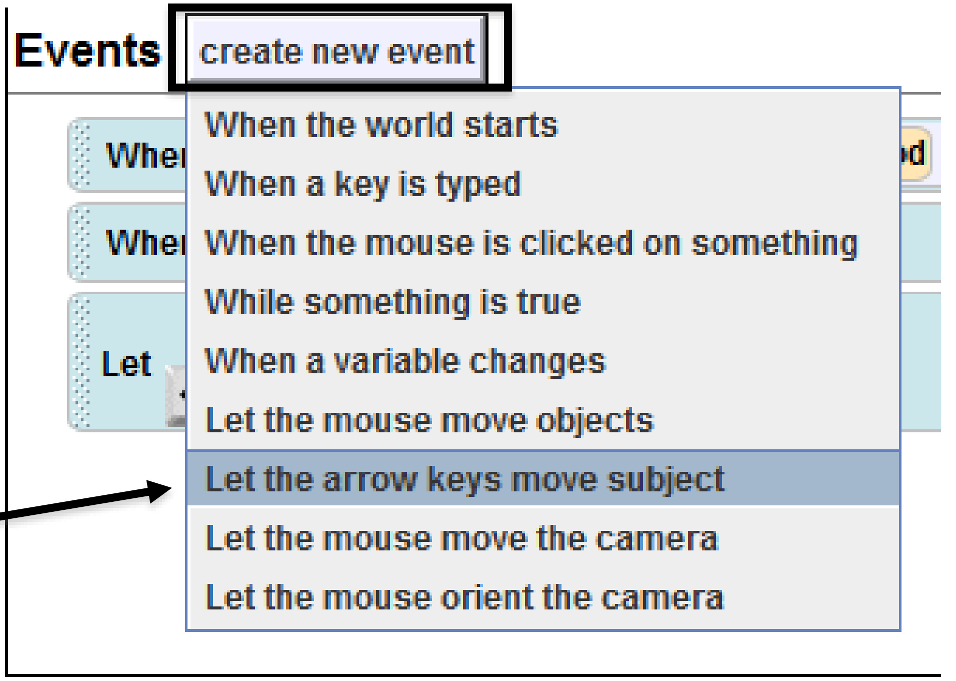
Your surprise method should look like this:

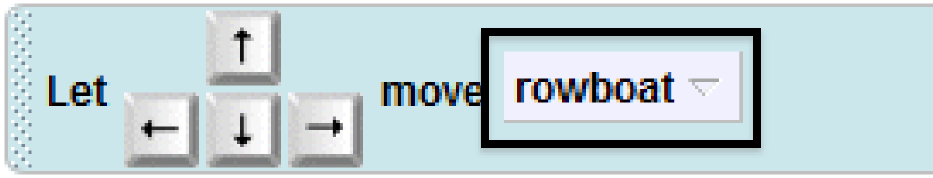


```
world.surprise No parameters
No variables
camera set point of view to Shark more...
shark say Surprise!  S is for SHARK ATTACK!! more...
camera set point of view to start more...
Do together
    shark move to rowboat duration = 10 seconds more...
    heroine.getInBoat
```

Vehicles

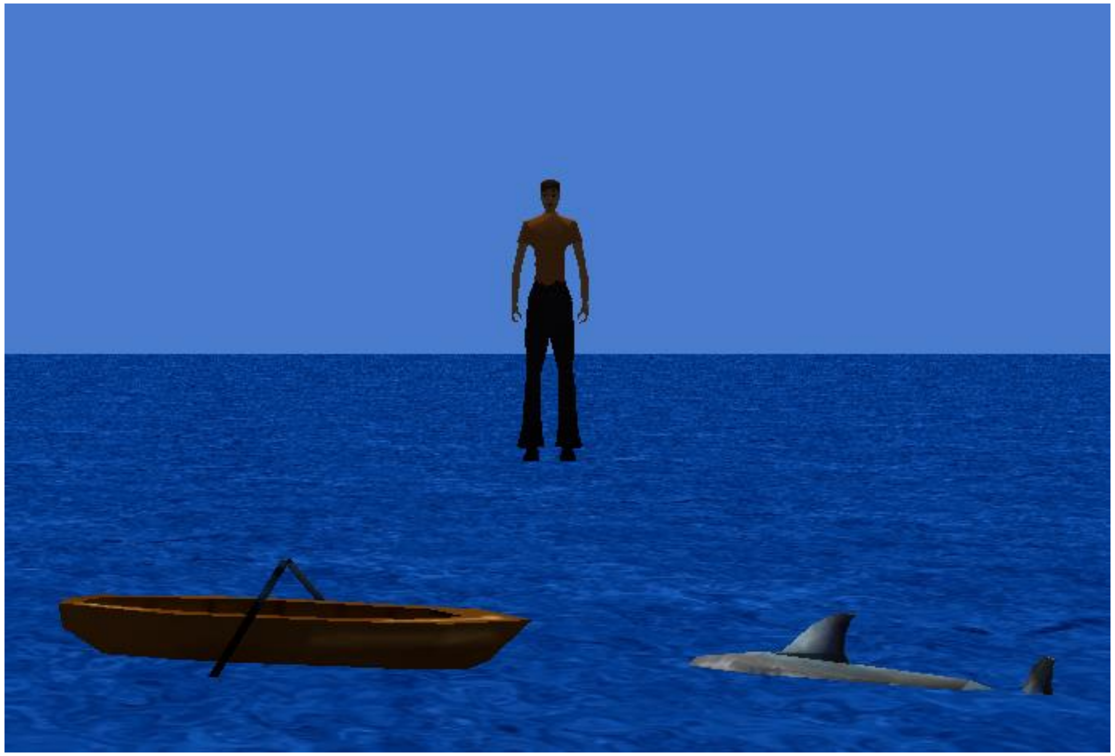
- Finally, lets make the arrow keys move the rowboat
- Click **create new event** in the event editor (top right)
- Choose **Let the arrow keys move subject**
- Change **camera** to **rowboat > the entire rowboat**


Events
create new event
When the world starts
When a key is typed
When the mouse is clicked on something
While something is true
When a variable changes
Let the mouse move objects
Let the arrow keys move subject
Let the mouse move the camera
Let the mouse orient the camera
Let



Vehicles

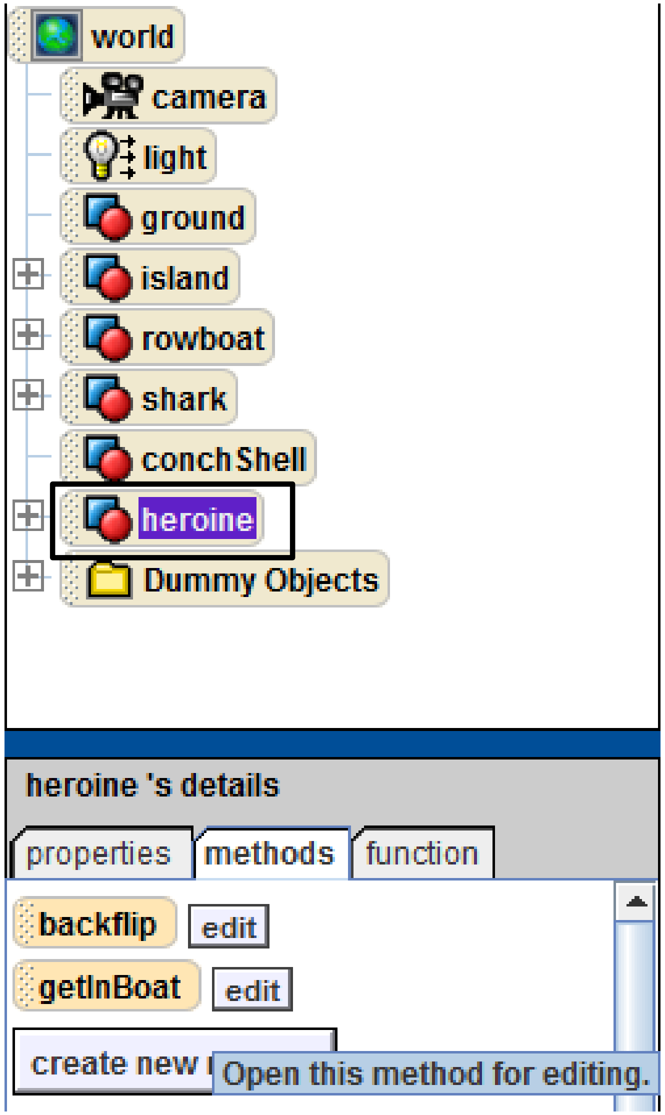
- **Play** your world! You should notice a problem:



- Your character *moves with* the boat, but he/she isn’t *in* the boat

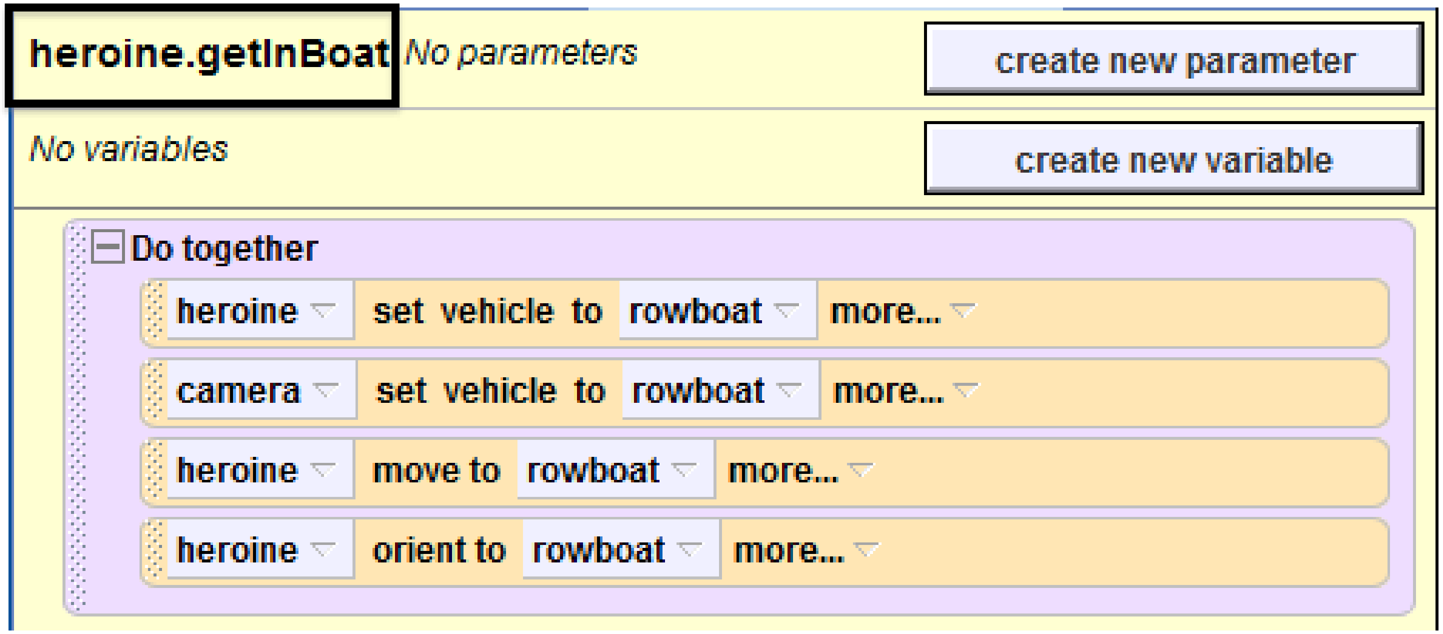
Vehicles

- We' ll fix this problem in the character.getInBoat method.
- Open this method by selecting your **character** from the object tree and clicking **edit** next to **getInBoat**.
- A tab will come up as selected in your method editor for the **getInBoat** method



Vehicles

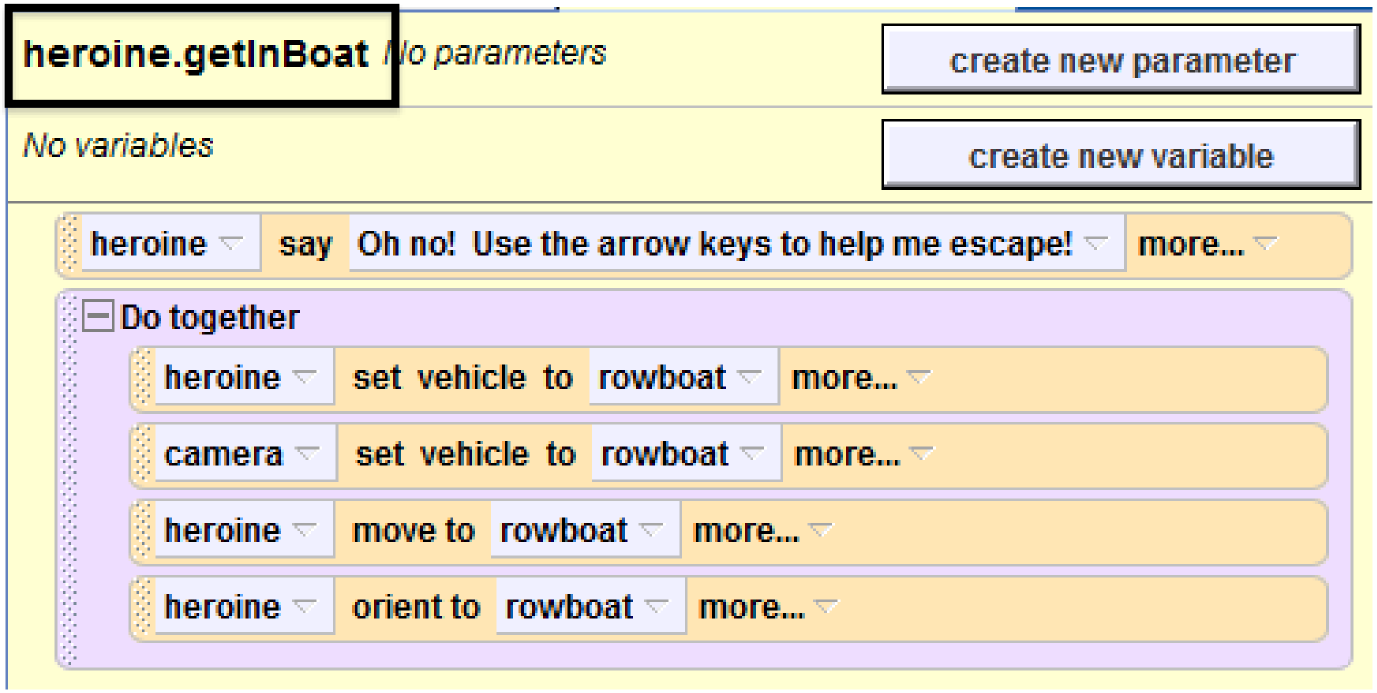
- Drag in a **move *to***, and select **rowboat > the entire rowboat** (to move your character to the boat)
- Drag in an **orient to** (scroll down), and select **rowboat > the entire rowboat** (to face the front of the boat)
- Now drag in a **do together**, and move everything inside



```
heroine.getInBoat  No parameters                  create new parameter
No variables                                      create new variable
Do together
    heroine  set vehicle to  rowboat  more...
    camera   set vehicle to  rowboat  more...
    heroine  move to  rowboat  more...
    heroine  orient to  rowboat  more...
```

Vehicles

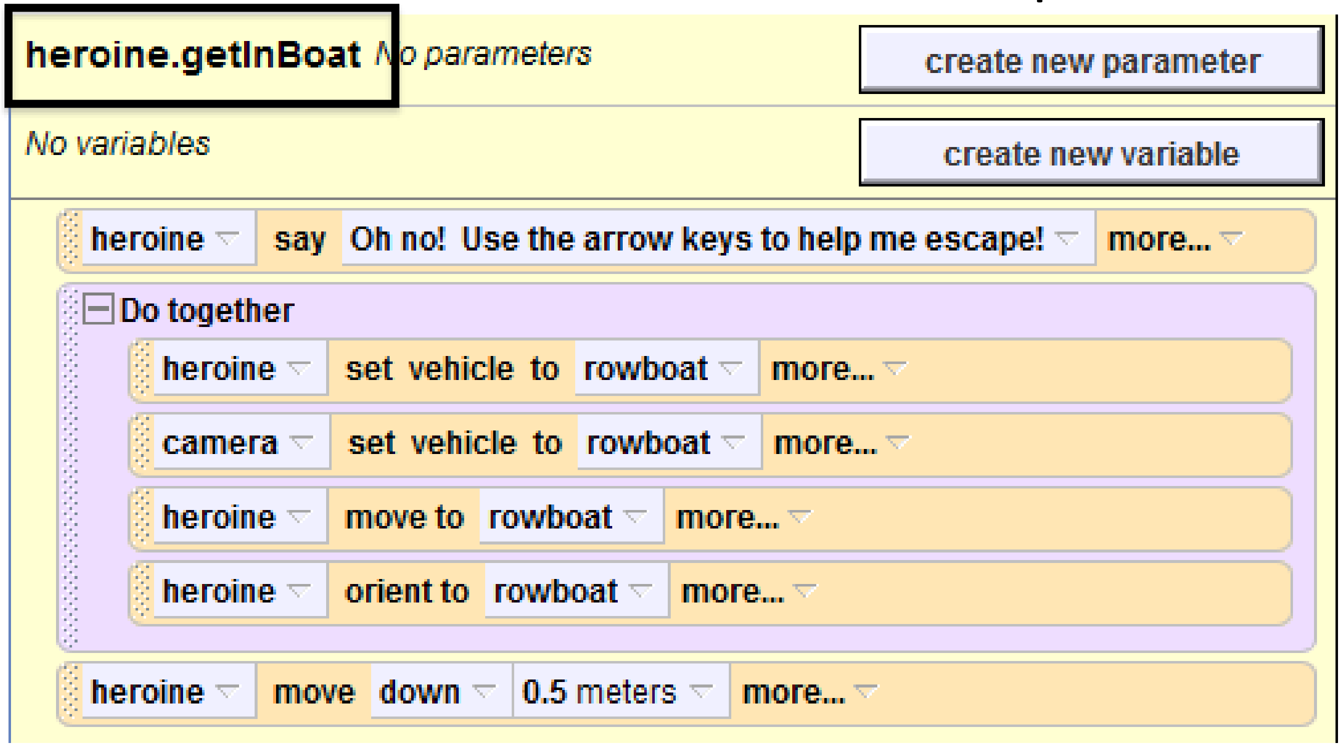
- Drag in a **say** *above* the do together, and have your character say something like "Oh no! Use the arrow keys to help me escape!" so that the person using your world knows what to do.



```
heroine.getInBoat No parameters                          create new parameter
No variables                                             create new variable
  heroine  say  Oh no!  Use the arrow keys to help me escape!  more...
  Do together
    heroine  set vehicle to  rowboat  more...
    camera   set vehicle to  rowboat  more...
    heroine  move to  rowboat  more...
    heroine  orient to  rowboat  more...
```

Vehicles

- Finally, drag in a **move** *below* the do together, select **down > ½ meter**.
- This will make your character sit more realistically in the boat. The exact distance (or even direction!) may be different for different characters – experiment!



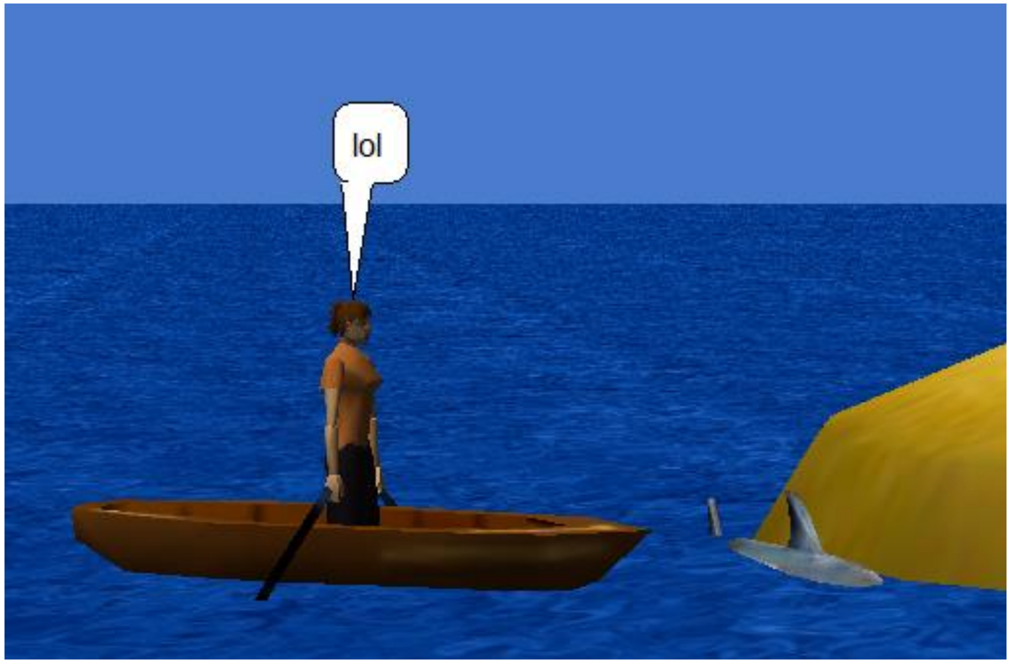
```
heroine.getInBoat No parameters                create new parameter
No variables                                   create new variable
heroine say Oh no! Use the arrow keys to help me escape! more...
Do together
    heroine set vehicle to rowboat more...
    camera set vehicle to rowboat more...
    heroine move to rowboat more...
    heroine orient to rowboat more...
heroine move down 0.5 meters more...
```

Test

Play your world! The problem should be fixed.

Circling

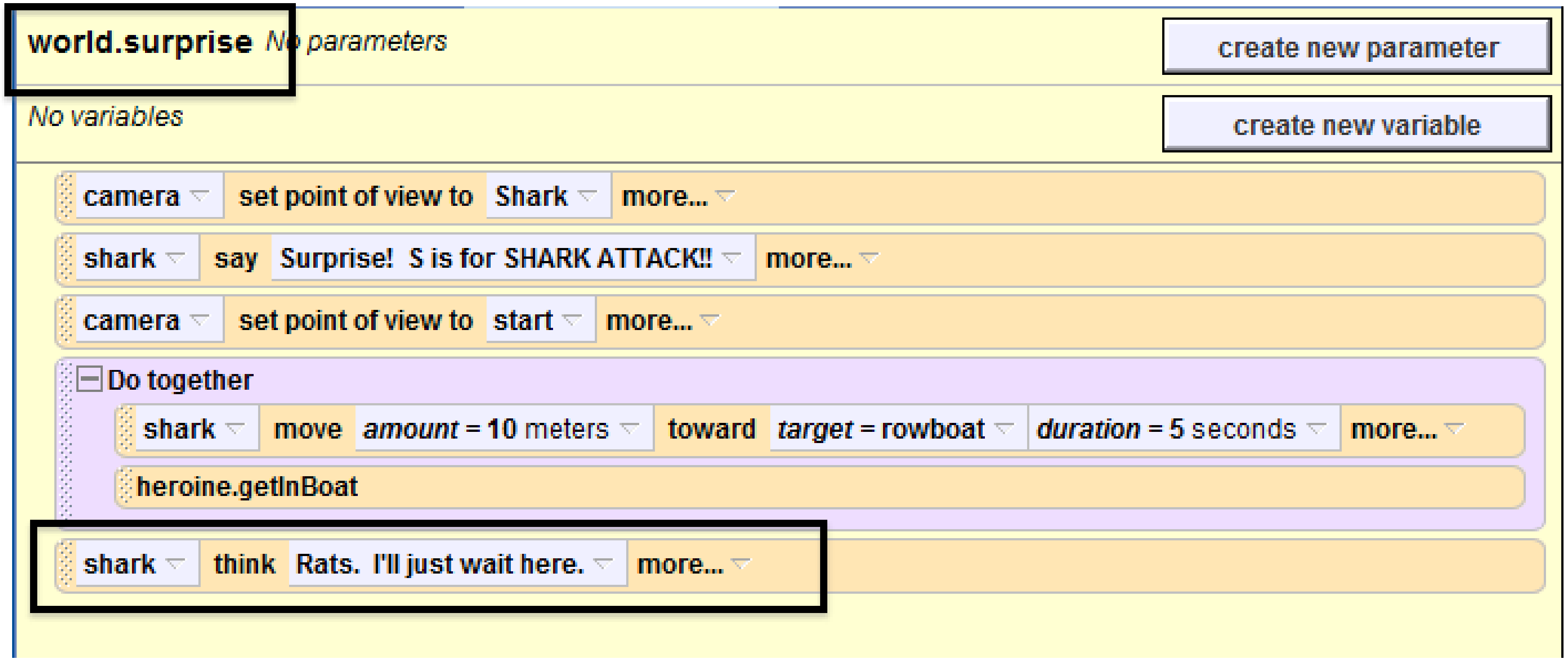
- Right now, the shark just sits by the beach like a dork after you ride your boat away



- We’ll have it swim circles around the island instead to keep things exciting

Circling

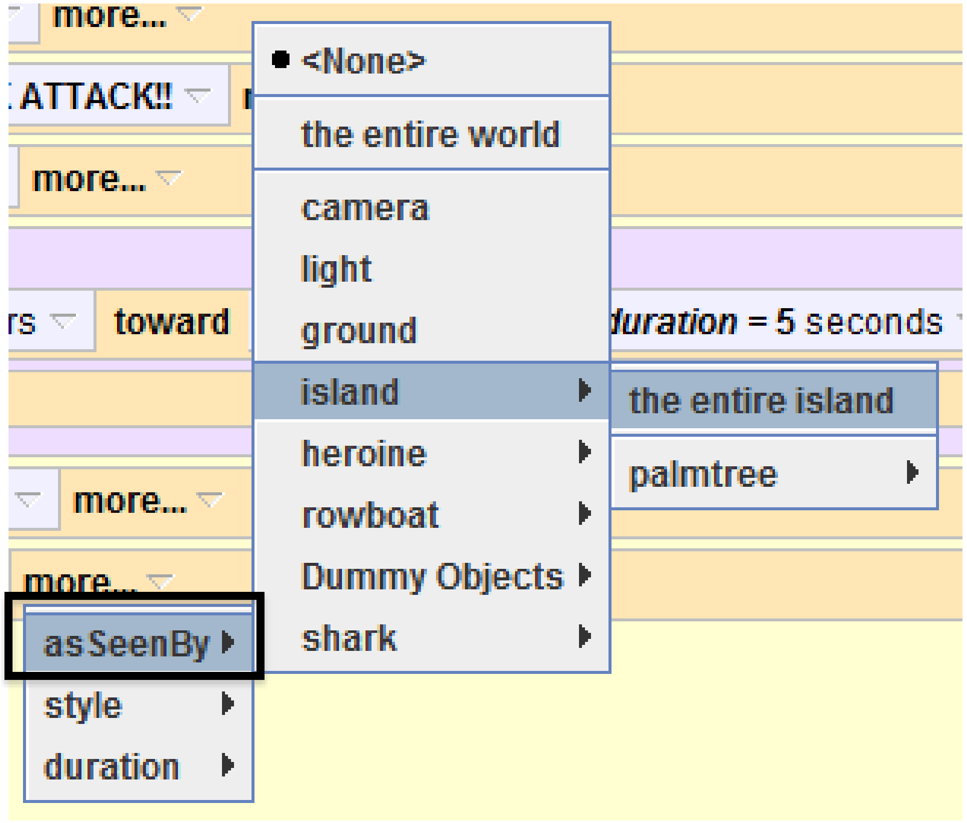
- Open up the **world.surprise** method via the object tree.
- Click on **shark** in the object tree, and drag **shark think** into the method editor. Select **other**, and type in something like "Rats. I' ll just have to wait here."



```
world.surprise No parameters                         create new parameter
No variables                                         create new variable
  camera  set point of view to  Shark  more...
  shark  say  Surprise!  S is for SHARK ATTACK!!  more...
  camera  set point of view to  start  more...
  Do together
    shark  move  amount = 10 meters  toward  target = rowboat  duration = 5 seconds  more...
    heroine.getInBoat
  shark  think  Rats.  I'll just wait here.  more...
```

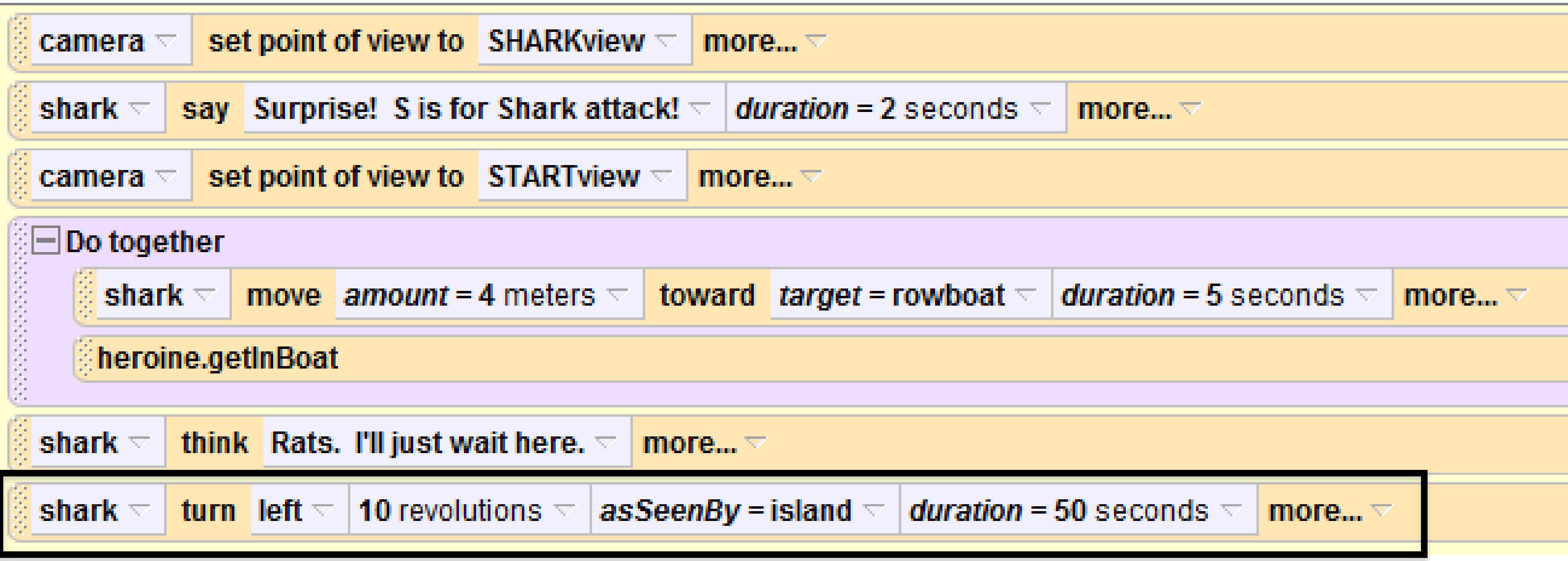
Circling

- Drag in **shark turn**, then select **left > other > 10 revolutions**.
- Under **more…** choose **asSeenBy > island > the entire island**.
- This will make the shark turn around the island instead of just spinning in circles
- Change the **duration** to **50 seconds**



Circling

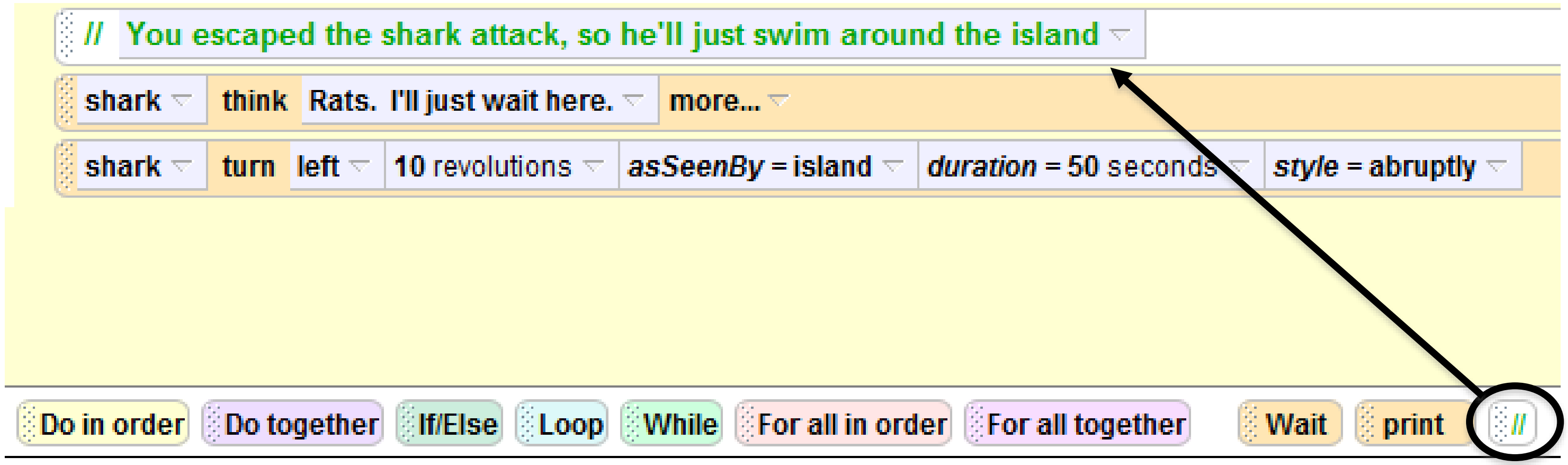
- Play your world.
- If the shark circles very close to the island, move your boat offshore a bit in the viewer (why?)
- If the shark doesn't circle the island, copy the code below (note your mistakes, though!)



```
camera   set point of view to   SHARKview   more...
shark   say   Surprise!  S is for Shark attack!   duration = 2 seconds   more...
camera   set point of view to   STARTview   more...
Do together
    shark   move   amount = 4 meters   toward   target = rowboat   duration = 5 seconds   more...
    heroine.getInBoat
shark   think   Rats.  I'll just wait here.   more...
shark   turn   left   10 revolutions   asSeenBy = island   duration = 50 seconds   more...
```

Comments

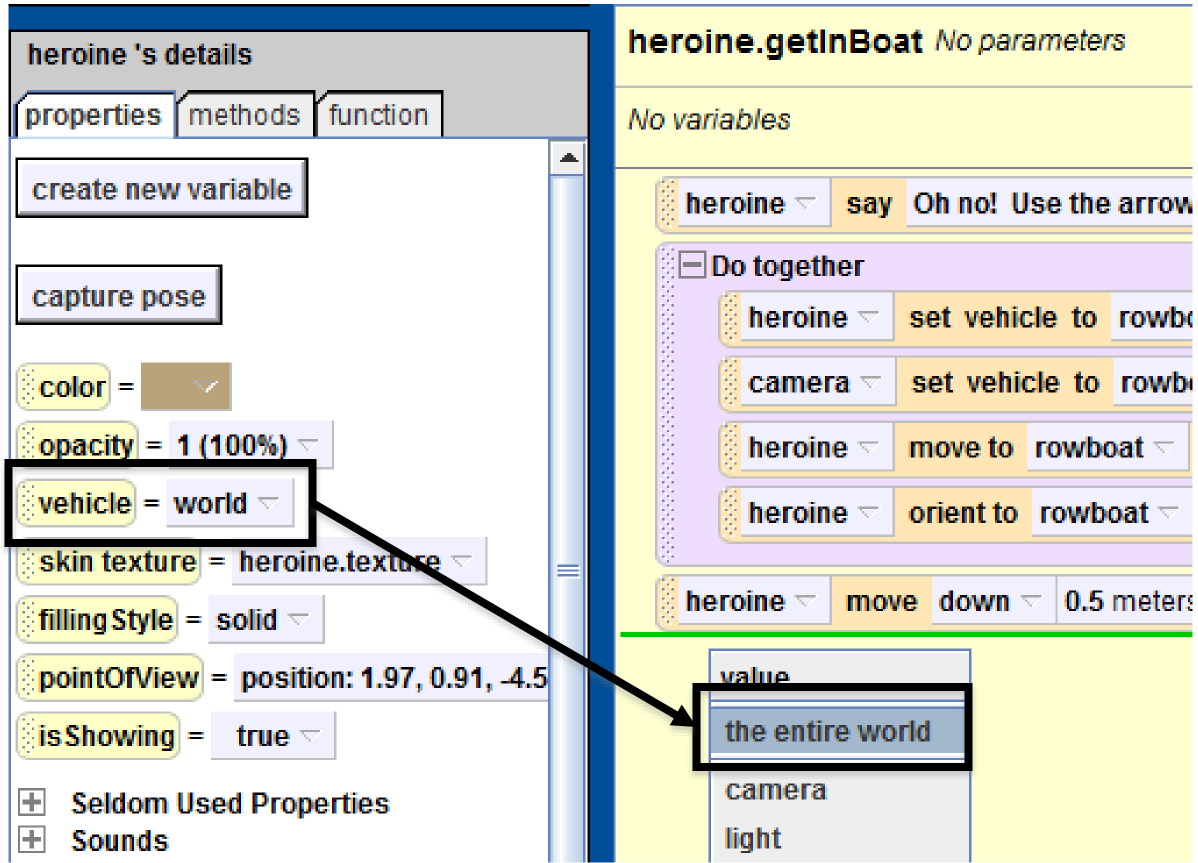
- Now note the **double slash** on the far right side of the line of coding constructs at the bottom of your editor.
- This icon lets you add *comments* to your code that won't affect the program when it actually runs.
- Drag and drop one anywhere in your code and write an explanation for the line below it. An example:



```
// You escaped the shark attack, so he'll just swim around the island
shark think Rats. I'll just wait here. more...
shark turn left 10 revolutions asSeenBy = island duration = 50 seconds style = abruptly
```

Notes for later

- If you later want to unglue your character from the rowboat, set the **vehicle** property of your character from rowboat back to **world** (be sure to do the same thing for **camera**!)



heroine 's details

properties | methods | function

create new variable

capture pose

color =

opacity = 1 (100%)

vehicle = world

skin texture = heroine.texture

filling Style = solid

pointOfView = position: 1.97, 0.91, -4.5

is Showing = true

Seldom Used Properties

Sounds

heroine.getInBoat *No parameters*

No variables

```
heroine say Oh no! Use the arrow
Do together
    heroine set vehicle to rowbo
    camera set vehicle to rowbo
    heroine move to rowboat
    heroine orient to rowboat
heroine move down 0.5 meters
```

Congratulations! You have just made your first Alice world. There are many more things that you can do with Alice, so keep exploring it!

Extensions (in order of awesomeness)

- Add more scenery.
- Make the coconuts fall from the tree when you press spacebar.
- Make your boat your favorite color (hint: you'll have to change the color AND texture).
- Figure out how to change the weather; make a foggy sunset.
- Check out the "functions" tab (next to "methods" and "properties") and do something interesting with them.
- Download Alice **Version 2.3** for free from alice.org
- Dream up many more worlds, where magical, impossible things happen. If you ever need help, try out some more try out some more tutorials on Duke's Alice webpage.

"Its important to have specific dreams. Dream Big. Dream without fear."

- Randy Pausch, creator of Alice