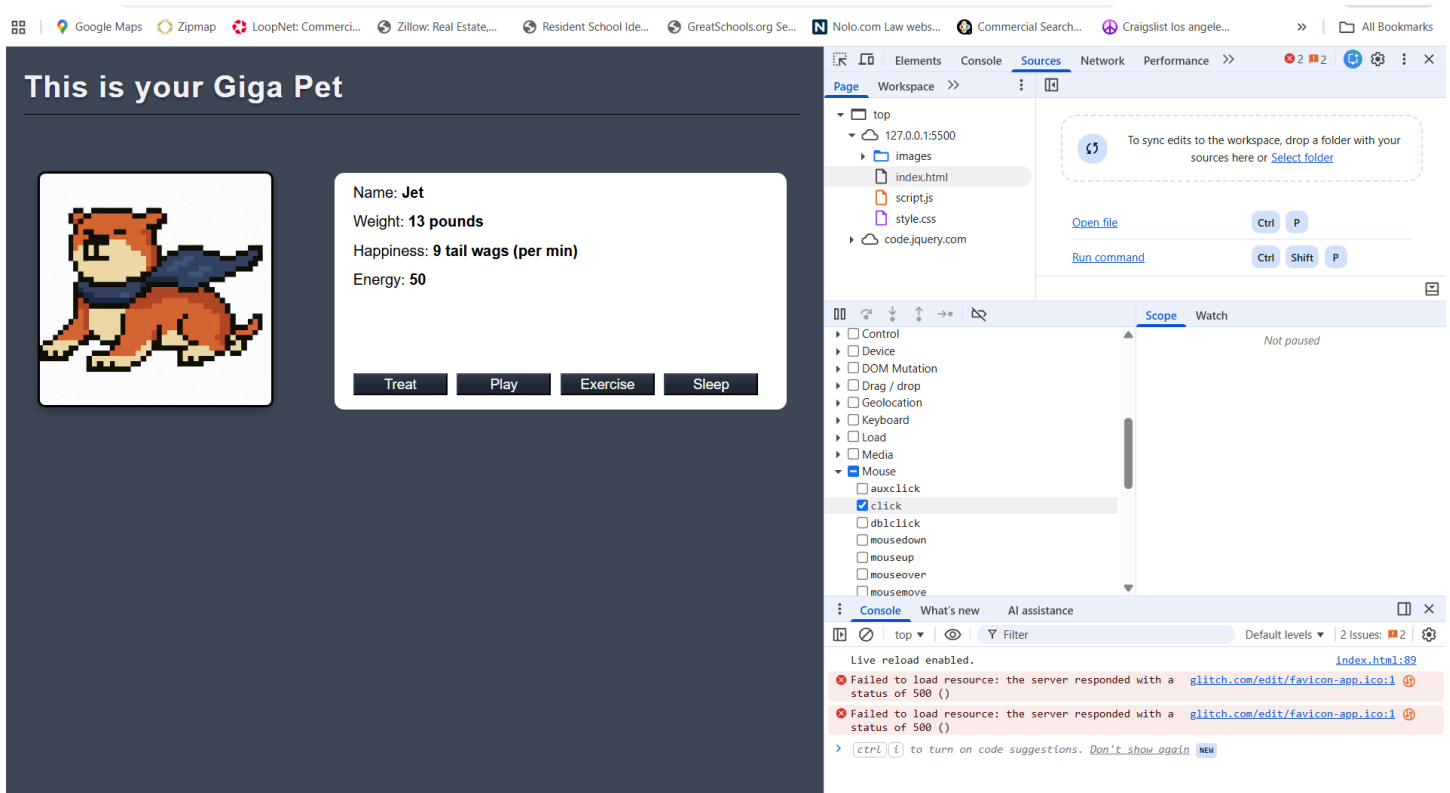
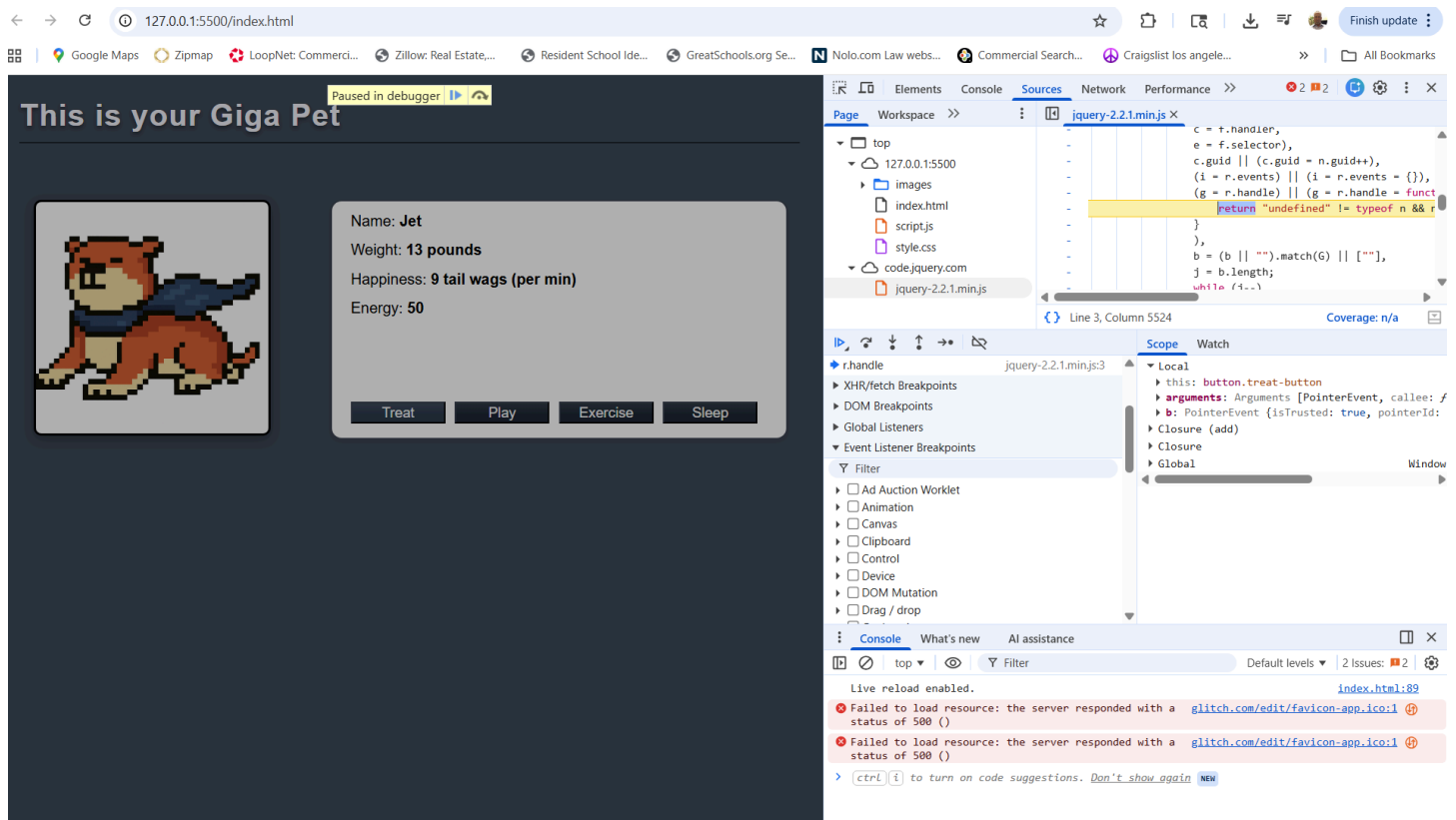


COMP 484 - HW10 Dev Tools
Spencer Levine
11/30/25



Event Listener Breakpoints > Mouse > Click




Click and program pauses at line of code. Blue highlight indicates line of code paused on.

127.0.0.1:5500/index.html

This is your Giga Pet

Paused in debugger



Name: Jet
Weight: 15 pounds
Happiness: 8 tail wags (per min)
Energy: 50

Treat Play Exercise Sleep

```
16 // Set this equal to variable pe
17 // 4.) add the energy attribute
18 // 5.) energy attribute
19 // Add a variable "pet_info" equal to
20 var pet_info = {name:"Jet", weight:
21
22 // 2.) Add a behavior to button int
23 // When your pet exercises, rec
24 function clickedTreatButton() {
25   pet_info.happiness = pet_info.hap
26   pet_info.weight = pet_info.weight
27   showPetMessage("Yum! Thanks for t
28   //-----
29   // FIRST METHOD .animate()
30   //-----
31   animatePetImage(); // step 7.) me
32
33   //-----
34   // SECOND METHOD .fadeToggle()
35   //-----
36   $(".pet-image").fadeToggle(150);
```

Line 25, Column 7 Coverage: n/a

Paused on breakpoint

Breakpoints

- ☐ Pause on uncaught exceptions
- ☐ Pause on caught exceptions
- ☒ script.js

Call Stack

- clickedTreatButton script.js:25
- dispatch jquery-2.2.1.min.js:3
- r.handle jquery-2.2.1.min.js:3

Scope

pet_info

- energy: 50
- happiness: 8
- name: "Jet"
- weight: 15

[[Prototype]]: Object

postMessage: f postMessage()

print: f print()

prompt: f prompt()

queryLocalFonts: f queryLocalFonts()

queueMicrotask: f queueMicrotask()

Set a breakpoint.

The screenshot displays the Chrome DevTools interface with a breakpoint set in the `script.js` file at line 25. The breakpoint is on the line `pet_info.happiness = pet_info.happiness + 1`. The console shows the current state of the `pet_info` object: `{energy: 50, happiness: 8, name: 'Jet', weight: 15}`. The call stack shows the function `clickedTreatButton` from `script.js:25`.

Breakpoints:

- ☒ `pet_info.happiness = pet_info.happiness + 1` 25

Call Stack:

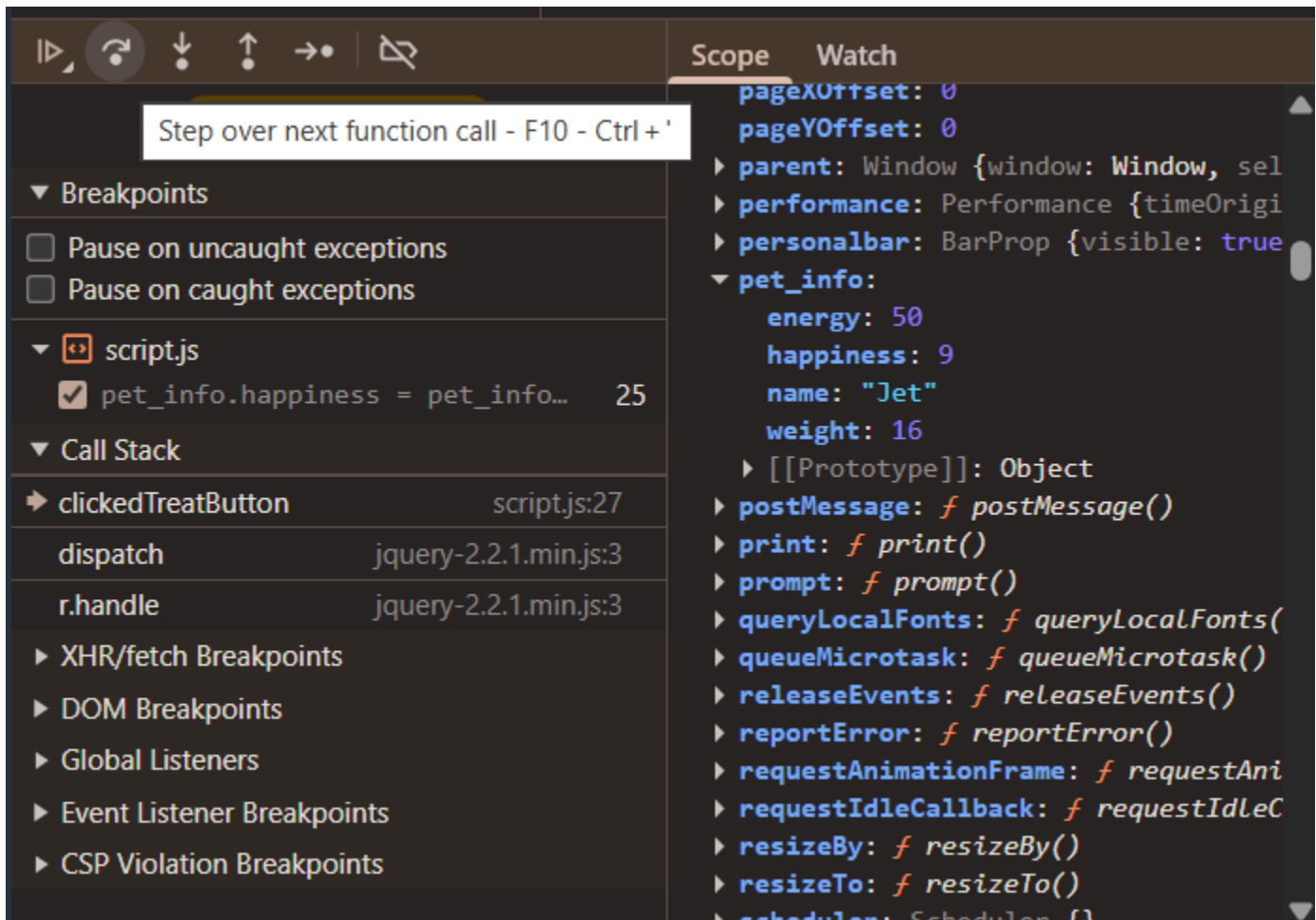
- `clickedTreatButton` script.js:25
- `dispatch` jquery-2.2.1.min.js:3
- `r.handle` jquery-2.2.1.min.js:3

Scope:

- `open`: `f open()`
- `opener`: `null`
- `origin`: `"http://127.0.0.1:5500"`
- `originAgentCluster`: `true`
- `outerHeight`: `912`
- `outerWidth`: `1536`
- `pageXOffset`: `0`
- `pageYOffset`: `0`
- `parent`: `Window {window: Window, sel...`
- `performance`: `Performance {timeOrigi...`
- `personalbar`: `BarProp {visible: true}`
- `pet_info`:
 - `energy`: `50`
 - `happiness`: `8`
 - `name`: `"Jet"`
 - `weight`: `15`
 - `[[Prototype]]`: `Object`
 - `postMessage`: `f postMessage()`
 - `print`: `f print()`
 - `prompt`: `f prompt()`
 - `queryLocalFonts`: `f queryLocalFonts()`
 - `queueMicrotask`: `f queueMicrotask()`

Enlarged screenshot.

I used the DevTools Sources panel to set a breakpoint inside my clickedTreatButton() function in script.js. When I clicked the “Treat” button on my Giga Pet page, execution paused on that line. This screenshot shows the breakpoint (blue marker), the code paused on the yellow line, and the Scope panel with the local variables. I am able to see the values of pet_info.happiness and pet_info.weight at the moment of the button click. pet_info.happiness = 8 and pet_info.weight = 15.



I clicked on the “Step over” button and the values of happiness and weight changed.

Page >>

127.0.0.1:5500

images

index.html

script.js

style.css

code.jquery.co...

jquery-2.2.1....

16

// Set this equal to variable "pet_info"

17

// 4.) add the energy attribute

18

// 5.) energy attribute

19

// Add a variable "pet_info" equal to a object wit

20

var pet_info = {name:"Jet", weight: 12, happines

21

22

// 2.) Add a behavior to button interaction. Whe

23

// When your pet exercises, reduce its happi

24

function clickedTreatButton() {

25

pet_info.happiness = pet_info.happiness + 10;

26

pet_info.weight = pet_info.weight + 1;

27

showPetMessage("Yum! Thanks for the treat!");

28

//-----

29

// FIRST METHOD .animate()

30

//-----

31

animatePetImage(); // step 7.) method 1 on the

32

33

//-----

34

// SECOND METHOD .fadeToggle()

35

//-----

36

\$(".pet-image").fadeToggle(150).fadeToggle(150

{ }

Line 25, Column 39

Coverage: n/a

Debugger paused

Breakpoints

Pause on uncaught exceptions

Pause on caught exceptions

script.js

pet_info.happiness = pet_info...

25

Call Stack

clickedTreatButton

script.js:26

dispatch

jquery-2.2.1.min.js:3

r.handle

jquery-2.2.1.min.js:3

XHR/fetch Breakpoints

Scope

Watch

pageXOffset: 0

pageYOffset: 0

parent: Window {window: Window, sel

performance: Performance {timeOrigi

personalbar: BarProp {visible: true

pet_info:

energy: 50

happiness: 29

name: "Jet"

weight: 17

[[Prototype]]: Object

postMessage: f postMessage()

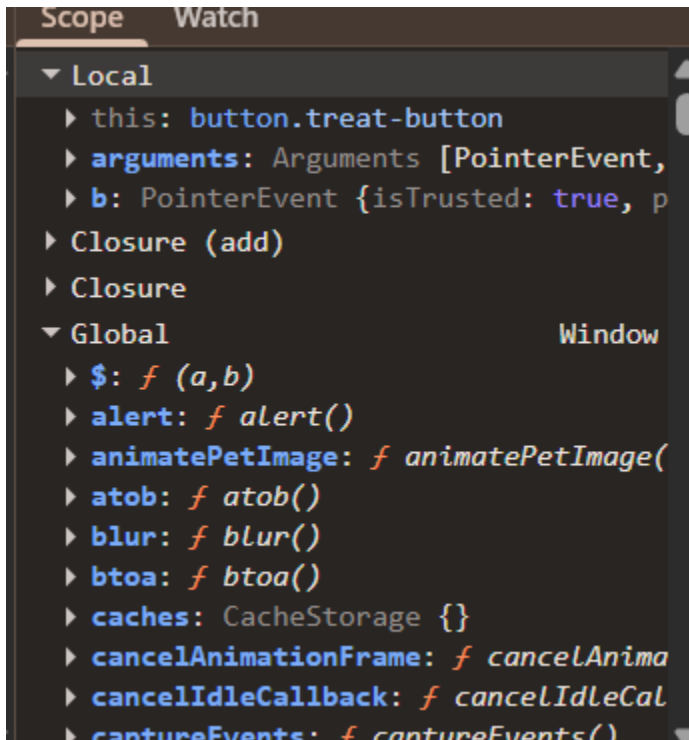
print: f print()

prompt: f prompt()

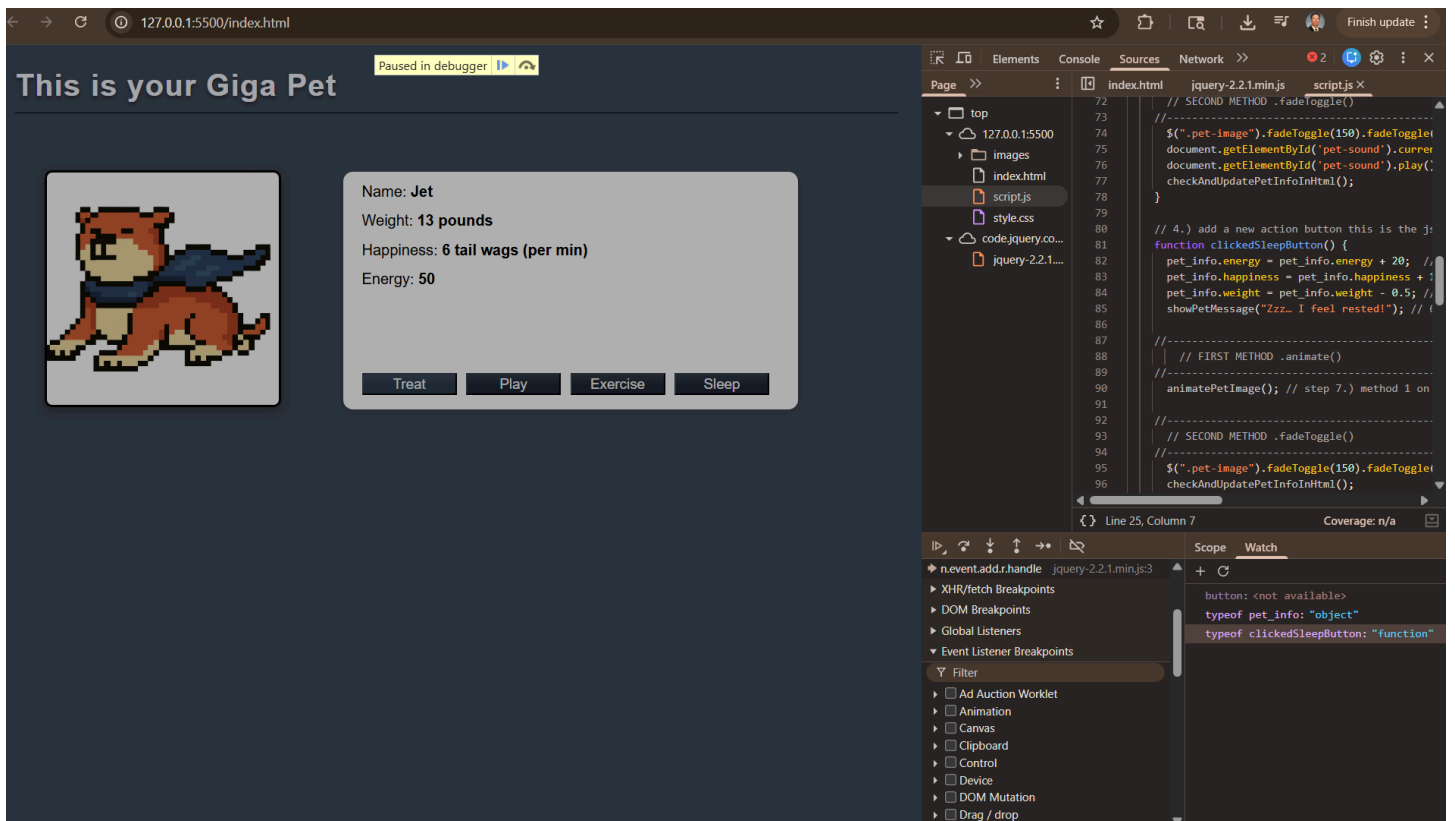
queryLocalFonts: f queryLocalFonts(

queueMicrotask: f queueMicrotask()

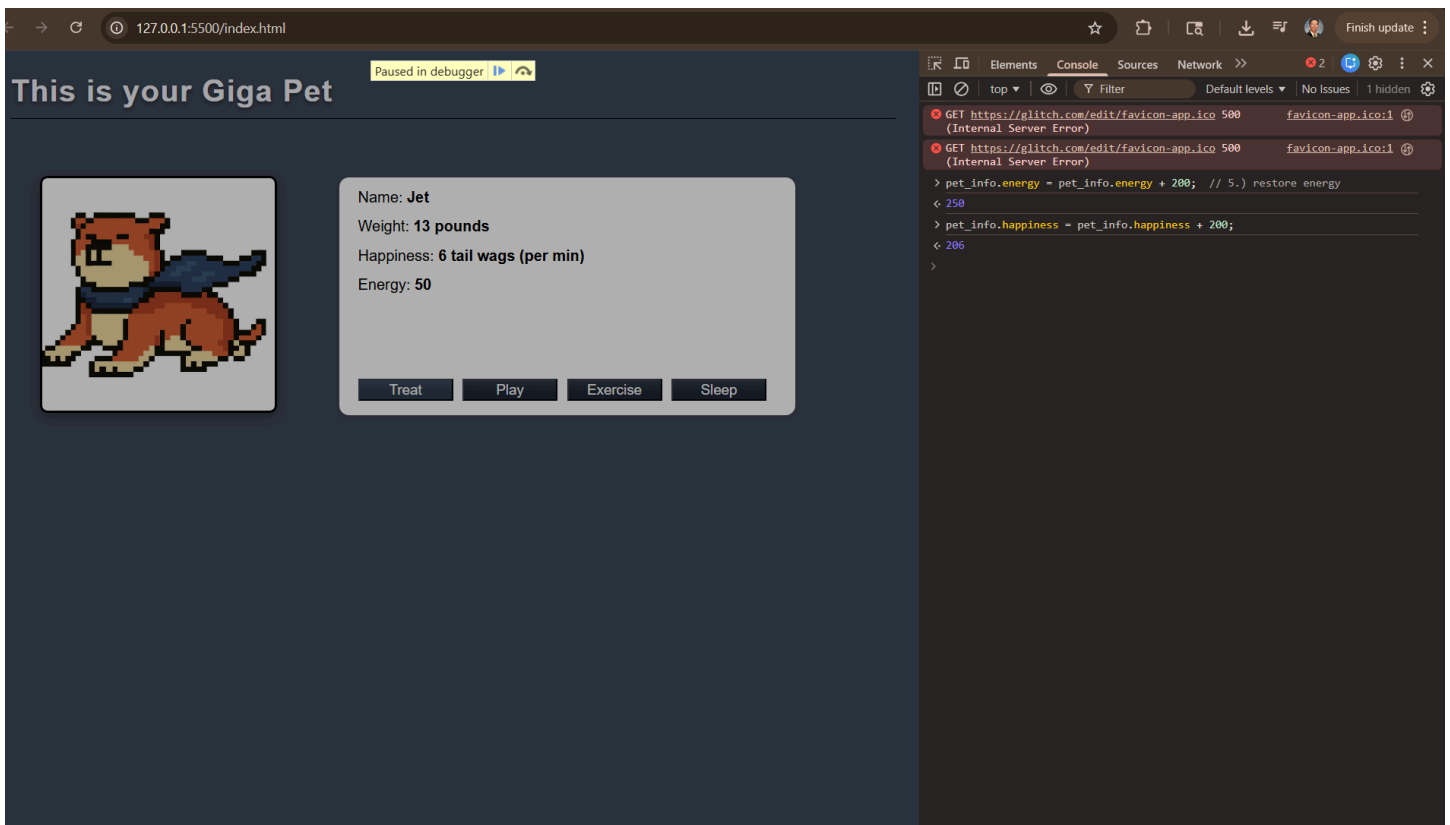
Next I made changes to the JavaScript code in Sources [script.js](#). I changed the line “pet_info.happiness = pet_info.happiness + 1” to “pet_info.happiness = pet_info.happiness + 10”. I then saved the changes to the script in DevTools with “Ctrl-S”. Now with each step through, the line adds 10 to the variable. You can see “pet_info = 29” in the screenshot above.



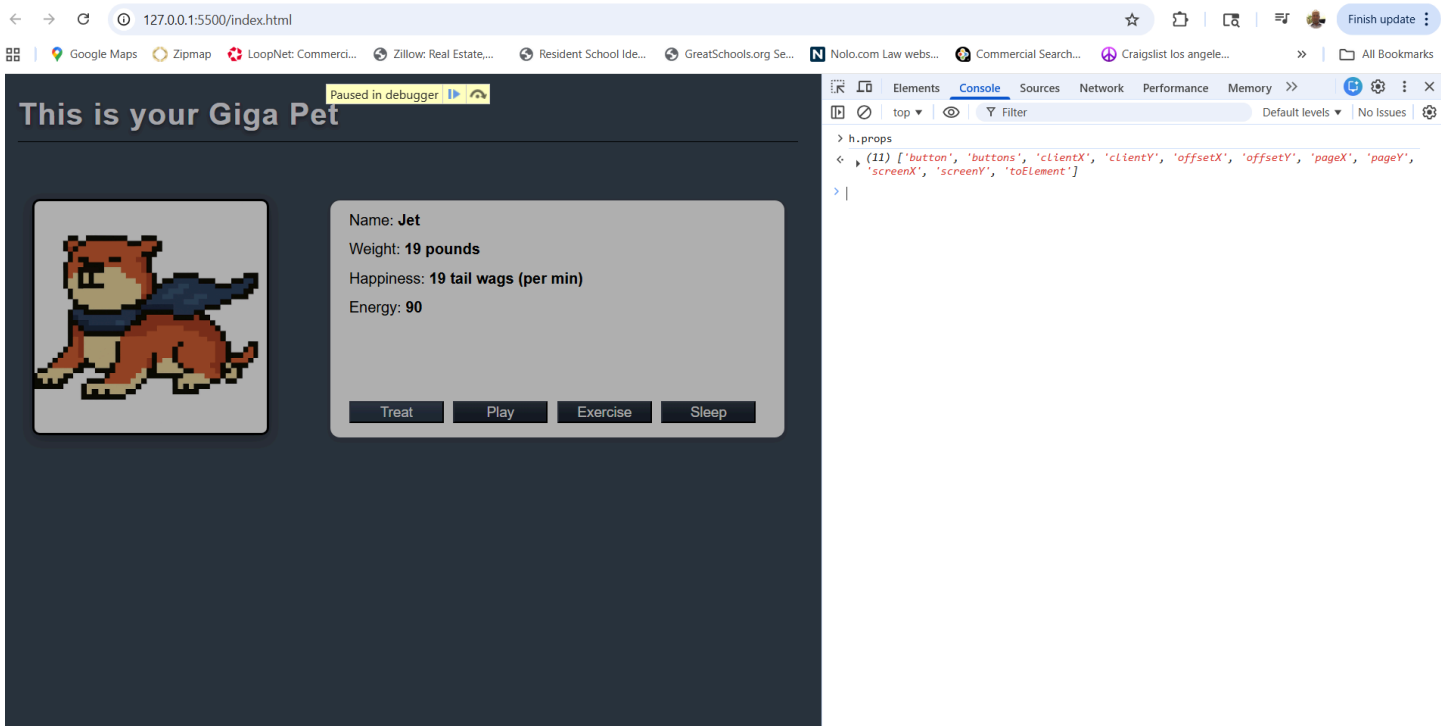
Scope panel shows all local and global variables



Watch panel shows `typeof pet_info` returns "object"



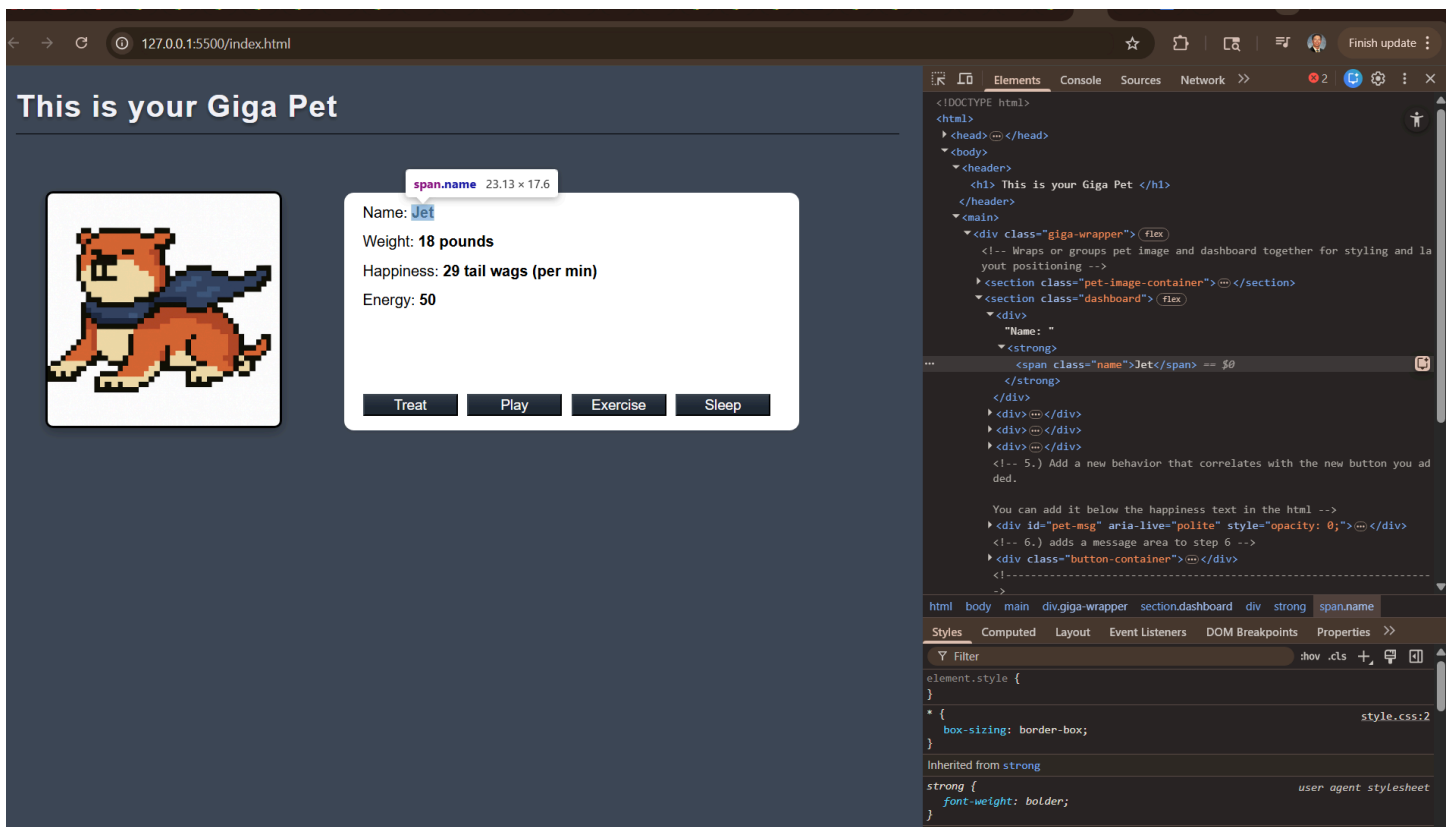
In Console panel I entered the line of code “pet_info.energy = pet_info.energy + 200;”. It returned the result 250.



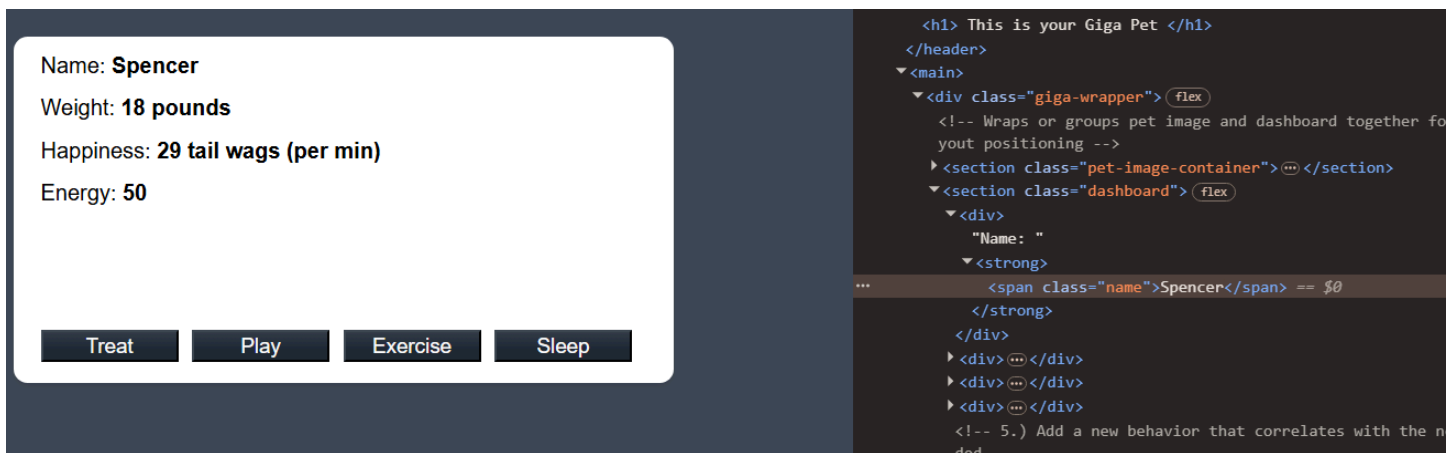
In console window, h.props returned property values



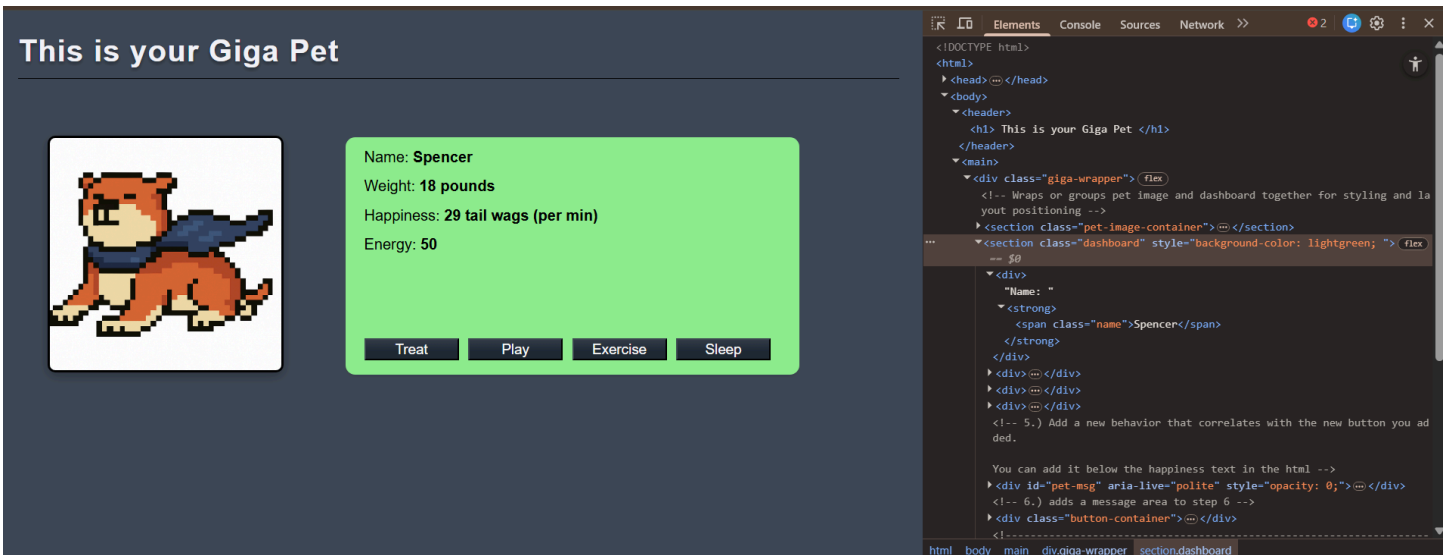
In the console I entered the code `h.props.push('testProperty')`. It added that string to the end of the array.



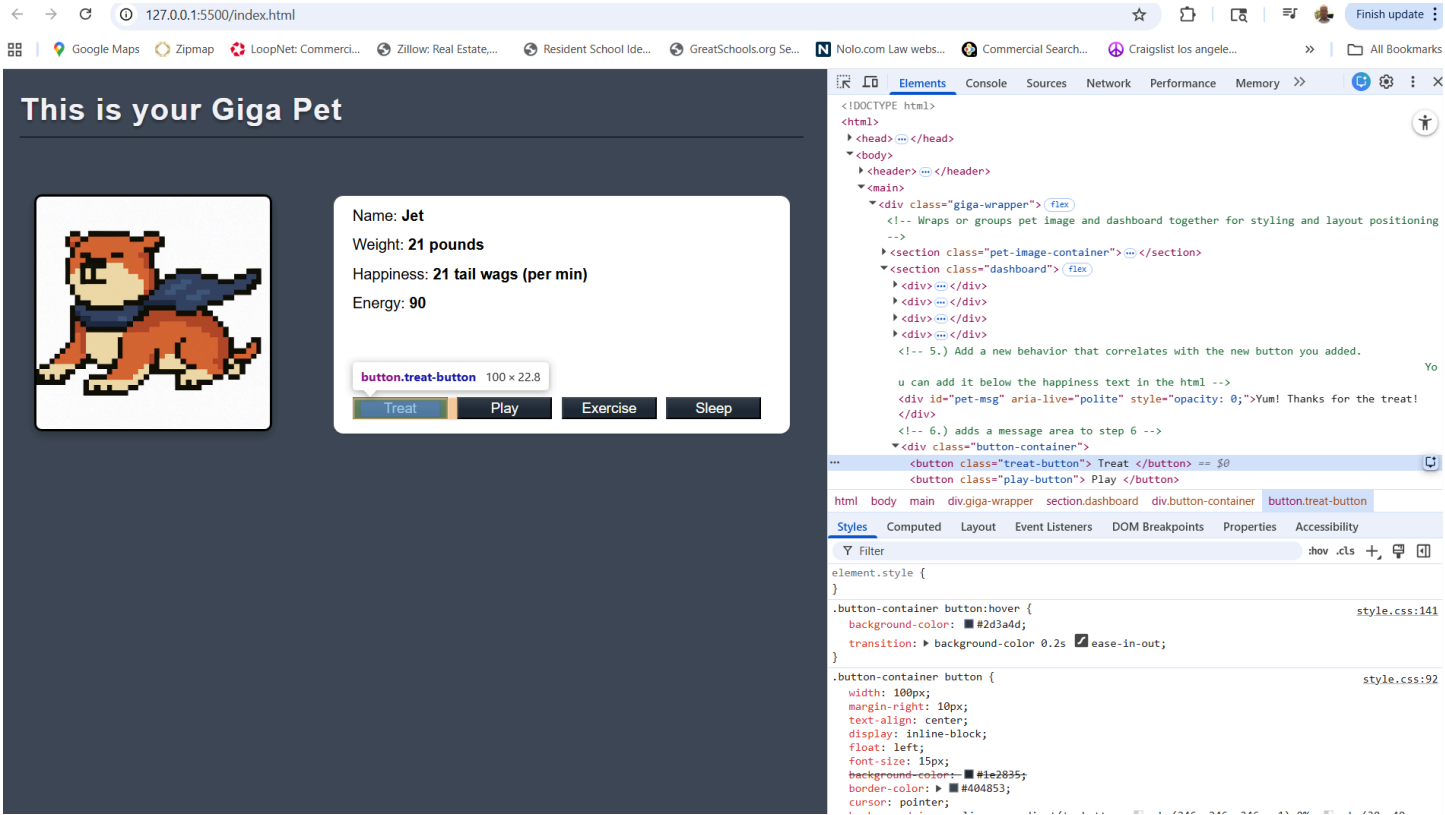
Inspect the text “Jet” in the HTML `Jet`. I then changed the name to “Spencer”.



Now the Giga Pet's name is Spencer.



I inspected the `<section class="dashboard" style="background-color: lightgreen; ">` and changed the `background-color: lightgreen.`



Inspect Treat button

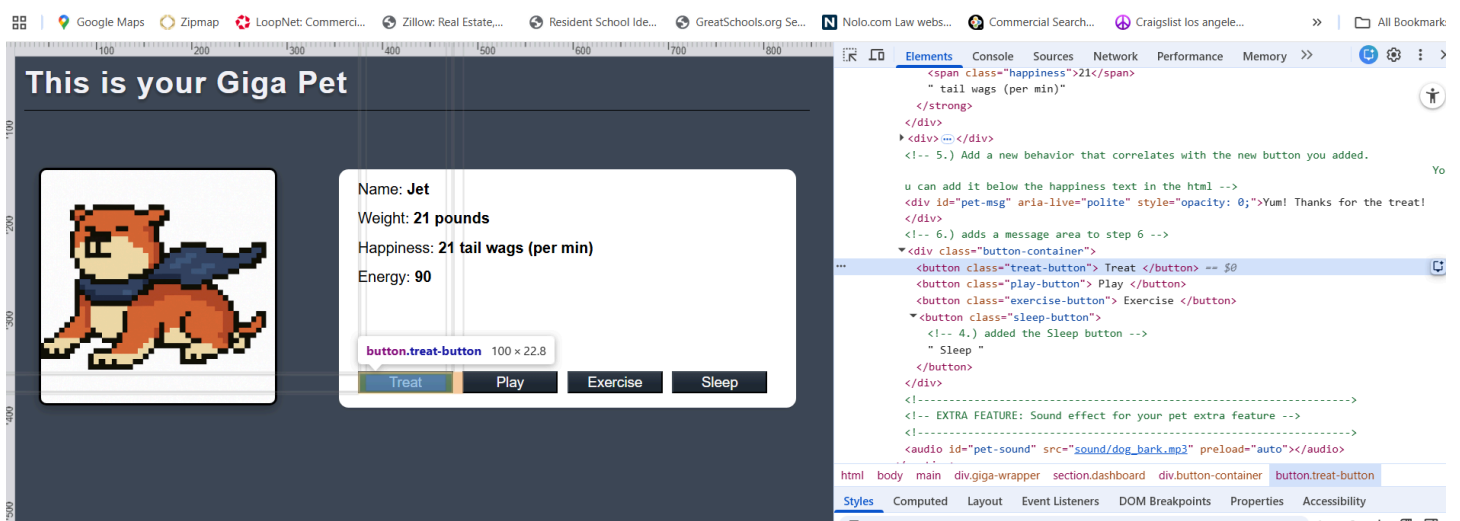
```

Elements Console Sources Network Performance Memory >>
<div> ... </div>
<div> ... </div>
<!-- 5.) Add a new behavior that correlates with the new button you added.

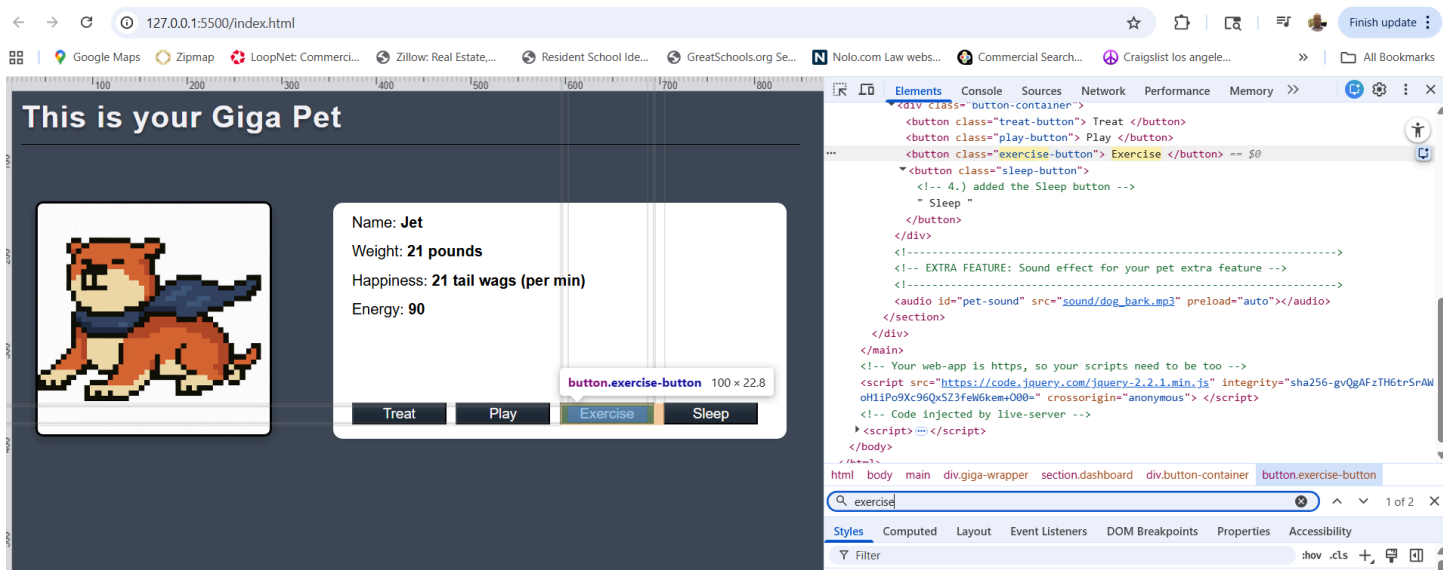
u can add it below the happiness text in the html -->
<div id="pet-msg" aria-live="polite" style="opacity: 0;">Yum! Thanks for the treat!
</div>
<!-- 6.) adds a message area to step 6 -->
<div class="button-container">
  <button class="treat-button"> Treat </button>
  <button class="play-button"> Play </button>
  <button class="exercise-button"> Exercise </button>
  ...
  <button class="sleep-button"> == $0
    <!-- 4.) added the Sleep button -->
    " Sleep "
  </button>
</div>
<!------->
<!-- EXTRA FEATURE: Sound effect for your pet extra feature -->
<!------->
<audio id="pet-sound" src="sound/dog_bark.mp3" preload="auto"></audio>
</section>
</div>
</main>
<!-- Your web app is https so your scripts need to be too -->
html body main div.giga-wrapper section.dashboard div.button-container button.sleep-button

```

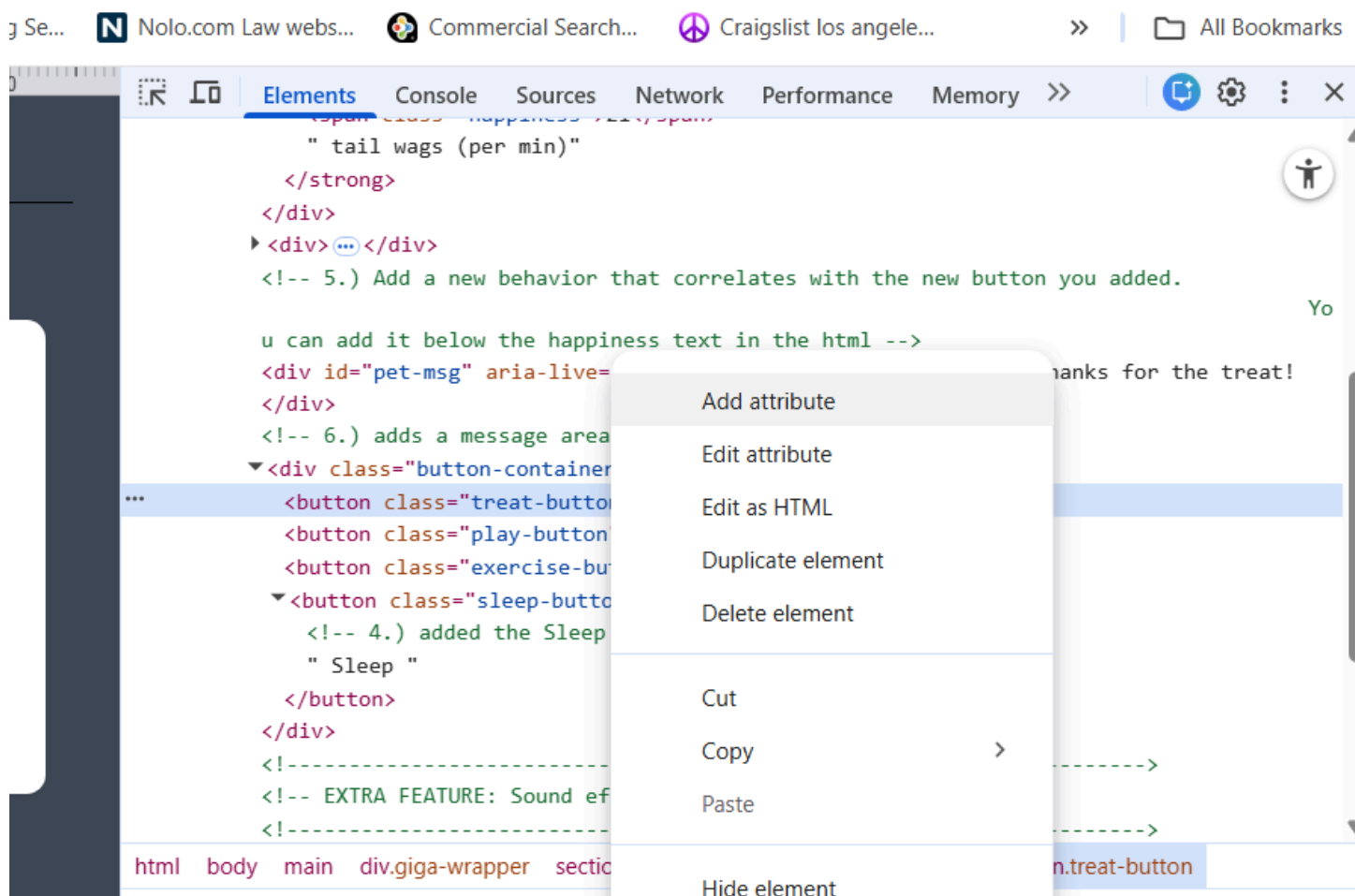
Right arrow key on keyboard the button node expands.



Show rulers on hover set.



Searched elements, ctrl-f find the string "exercise" in the HTML.



Add/Edit attribute

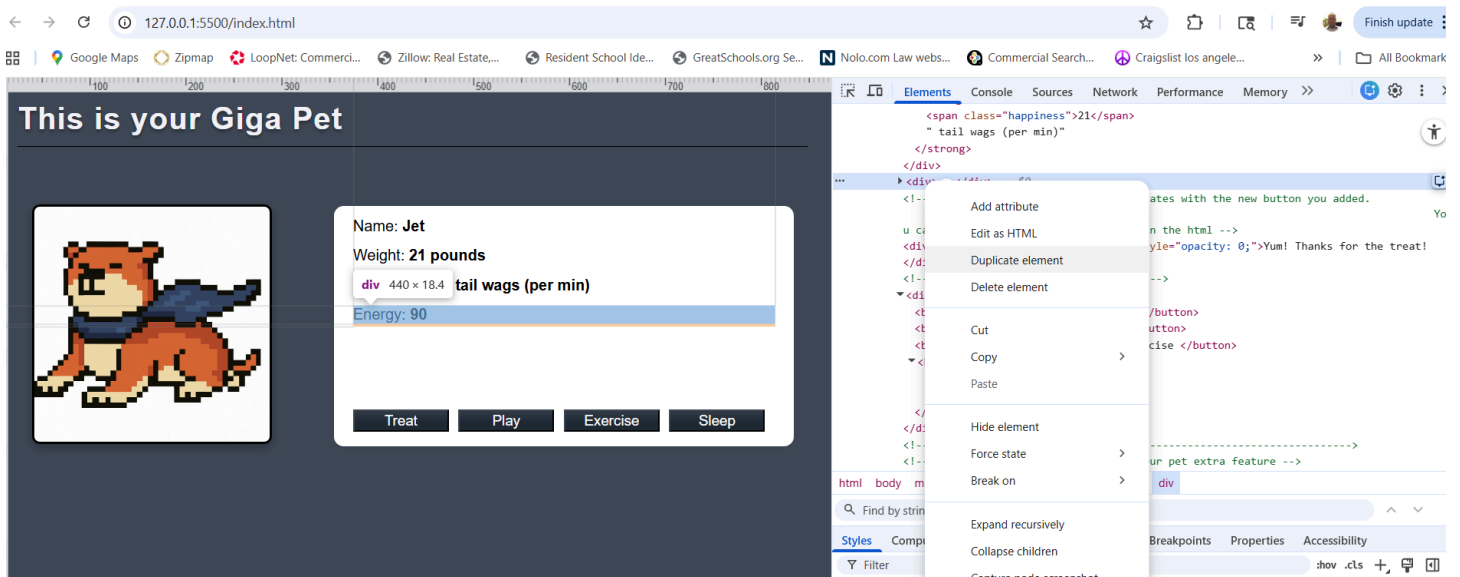
```

    <span class="happiness">21</span>
    " tail wags (per min)"
  </strong>
</div>
<div>...</div>
<!-- 5.) Add a new behavior that correlates with the new button you added.

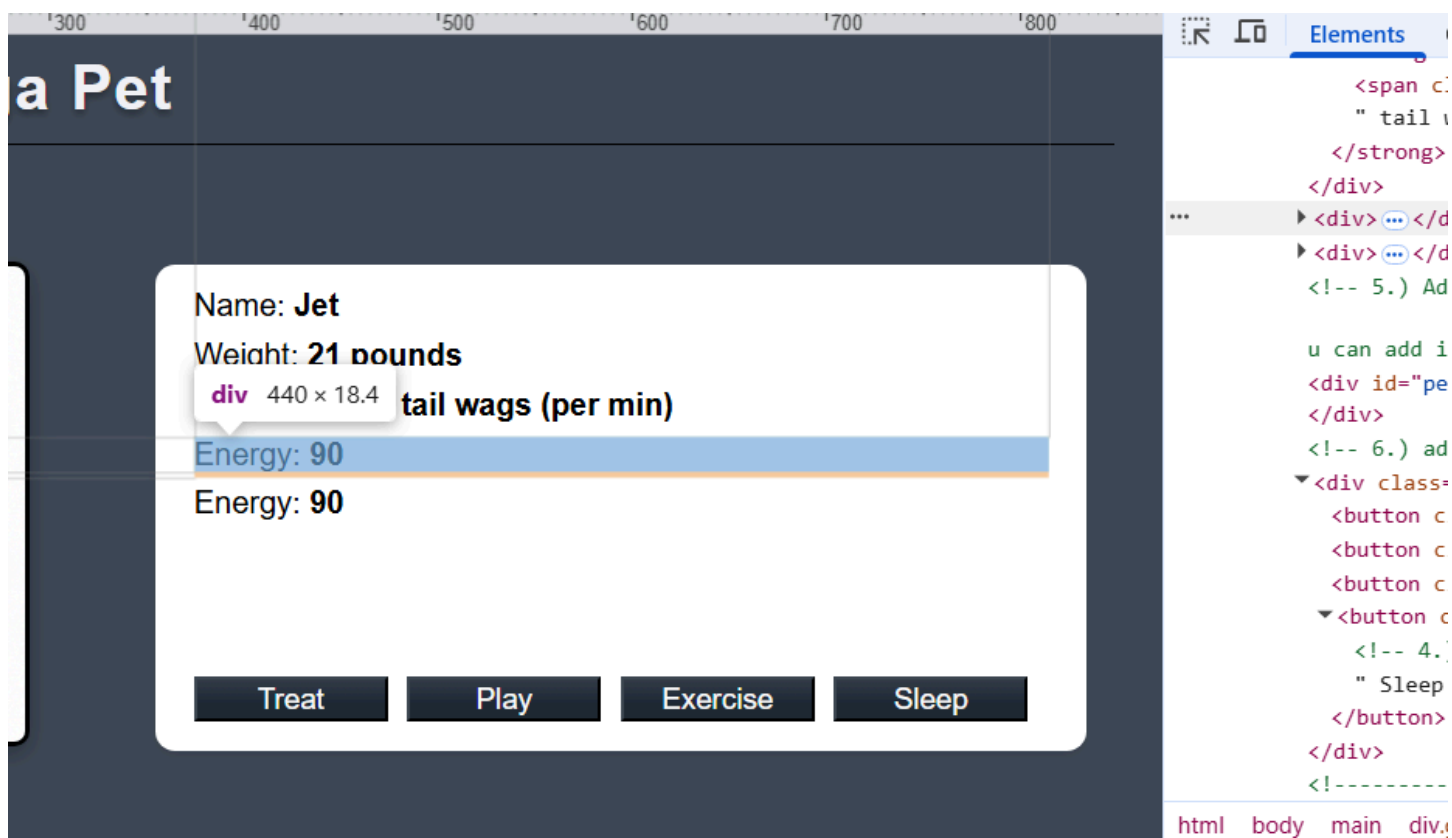
can add it below the happiness text in the html -->
<div id="pet-msg" aria-live="polite" style="opacity: 0;">Yum! Thanks for the treat!
</div>
<!-- 6.) adds a message area to step 6 -->
<div class="button-container">
  <button class="treat-button">
    Treat
  </button>
  <button class="play-button"> Play </button>
  <button class="exercise-button"> Exercise </button>
  <button class="sleep-button">
    <!-- 4.) added the Sleep button -->
    " Sleep "
  </button>

```

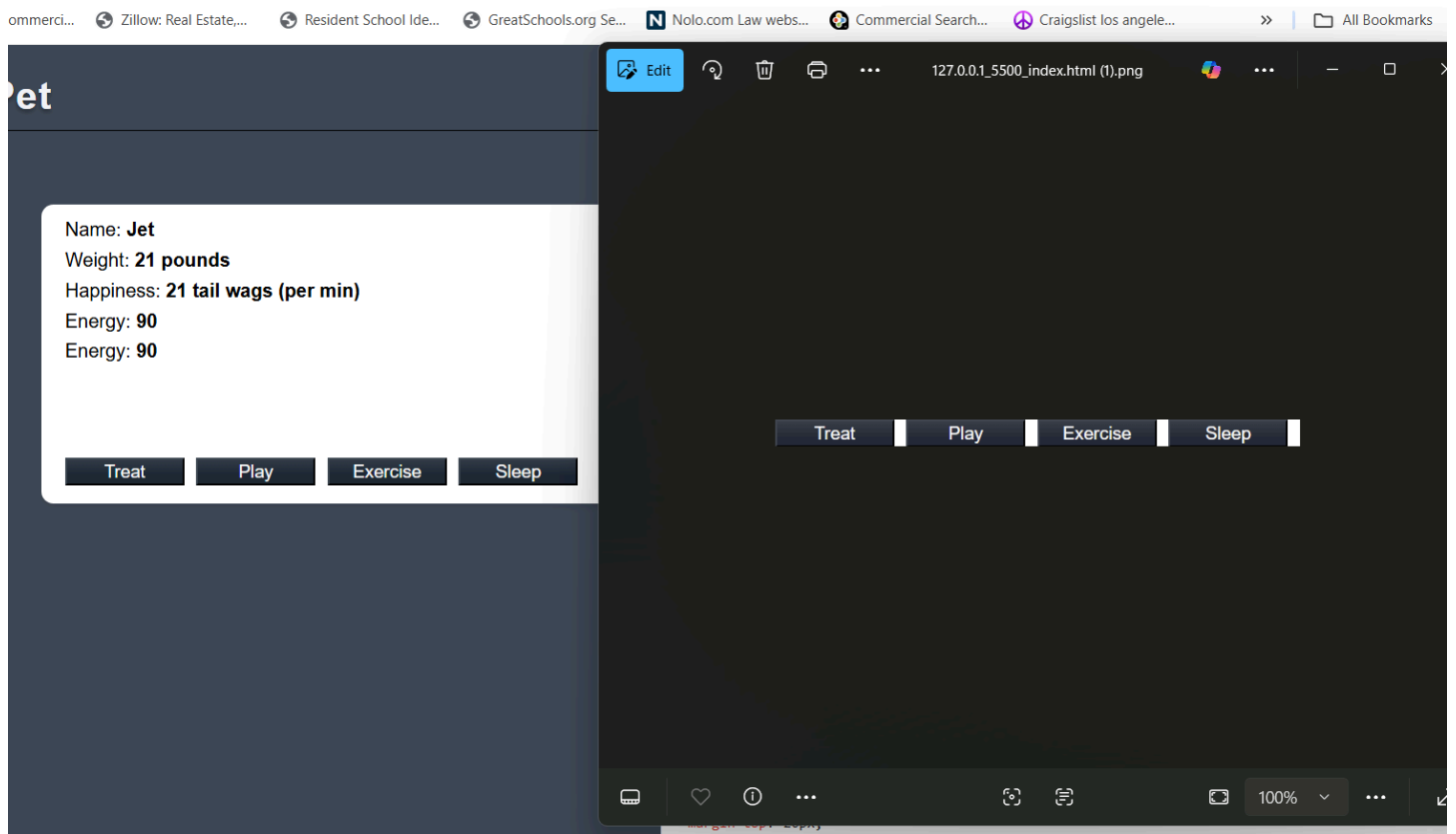
Edit as HTML



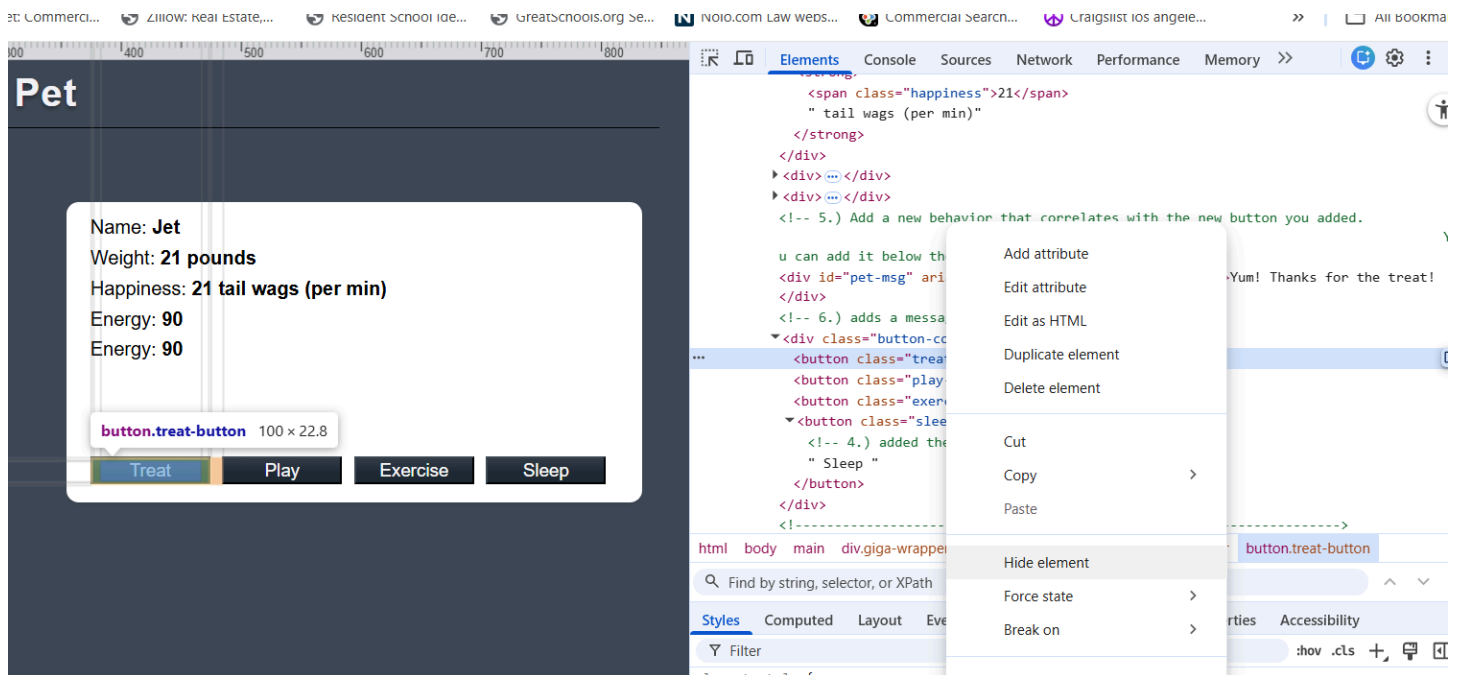
Select Duplicate element



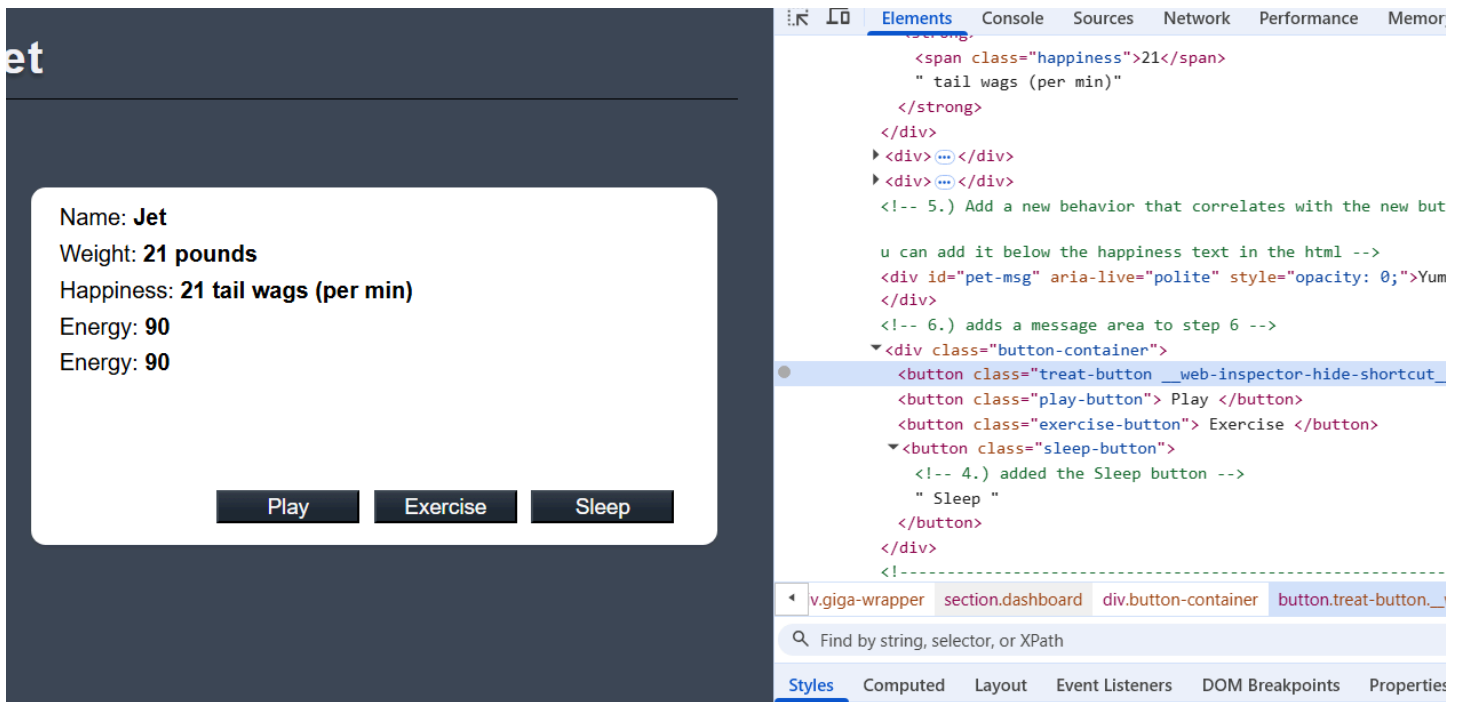
Element has been duplicated.



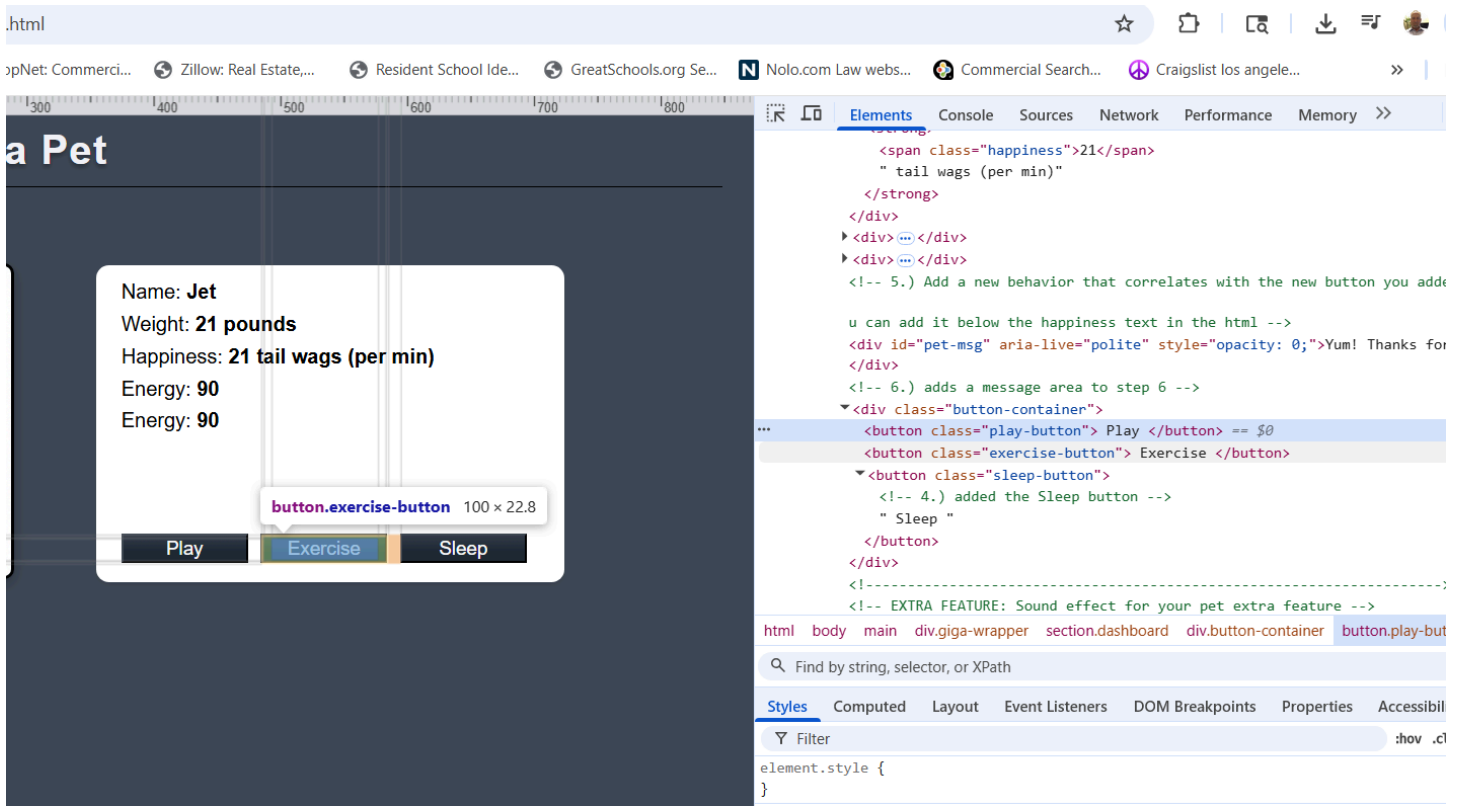
Capture node screenshot



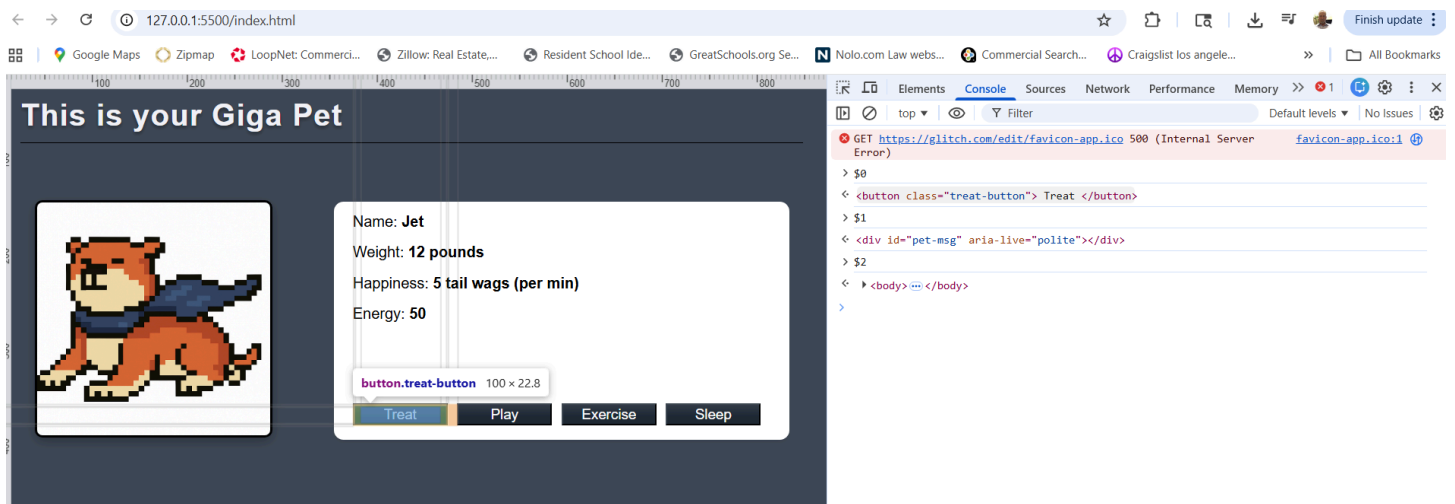
Hide element



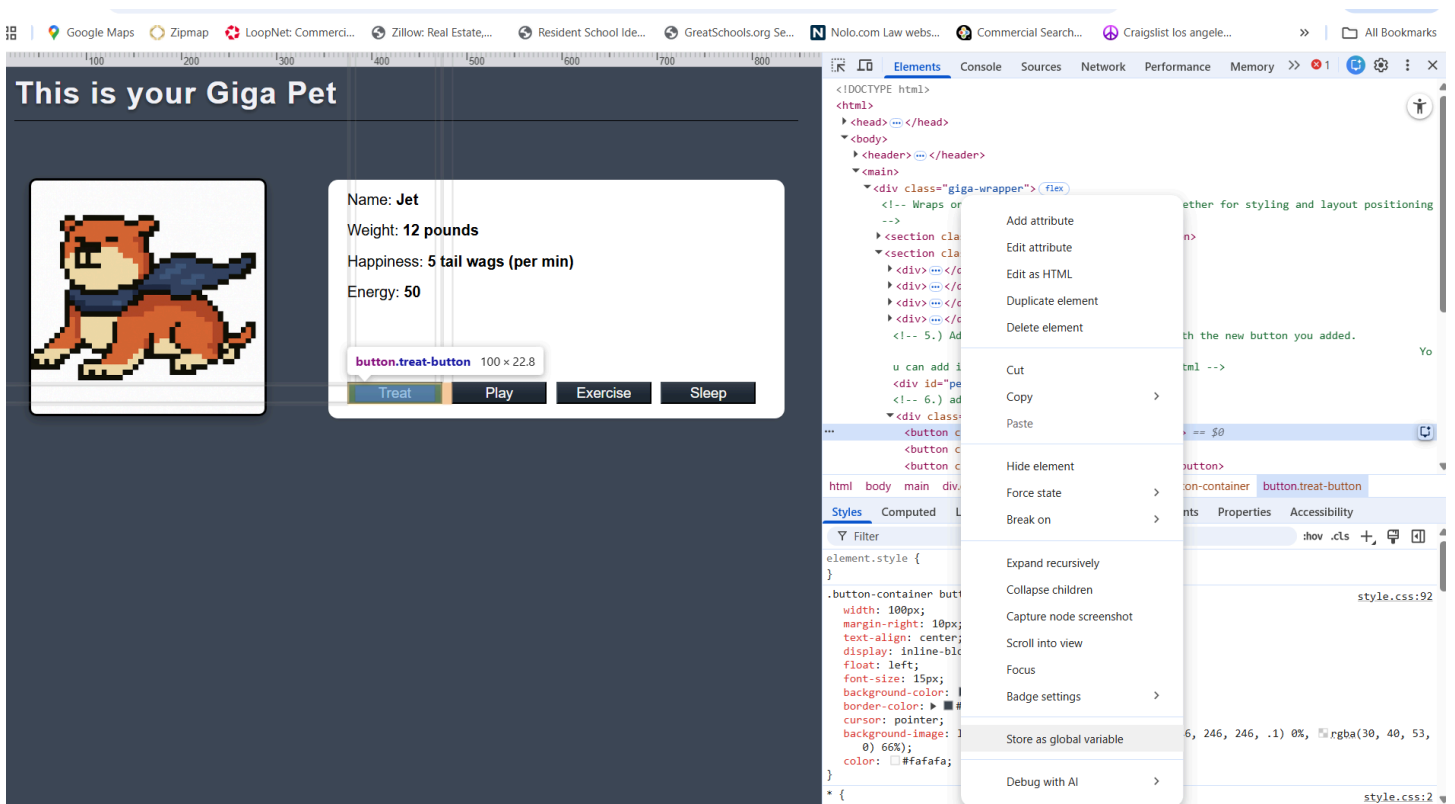
Element is hidden in DOM



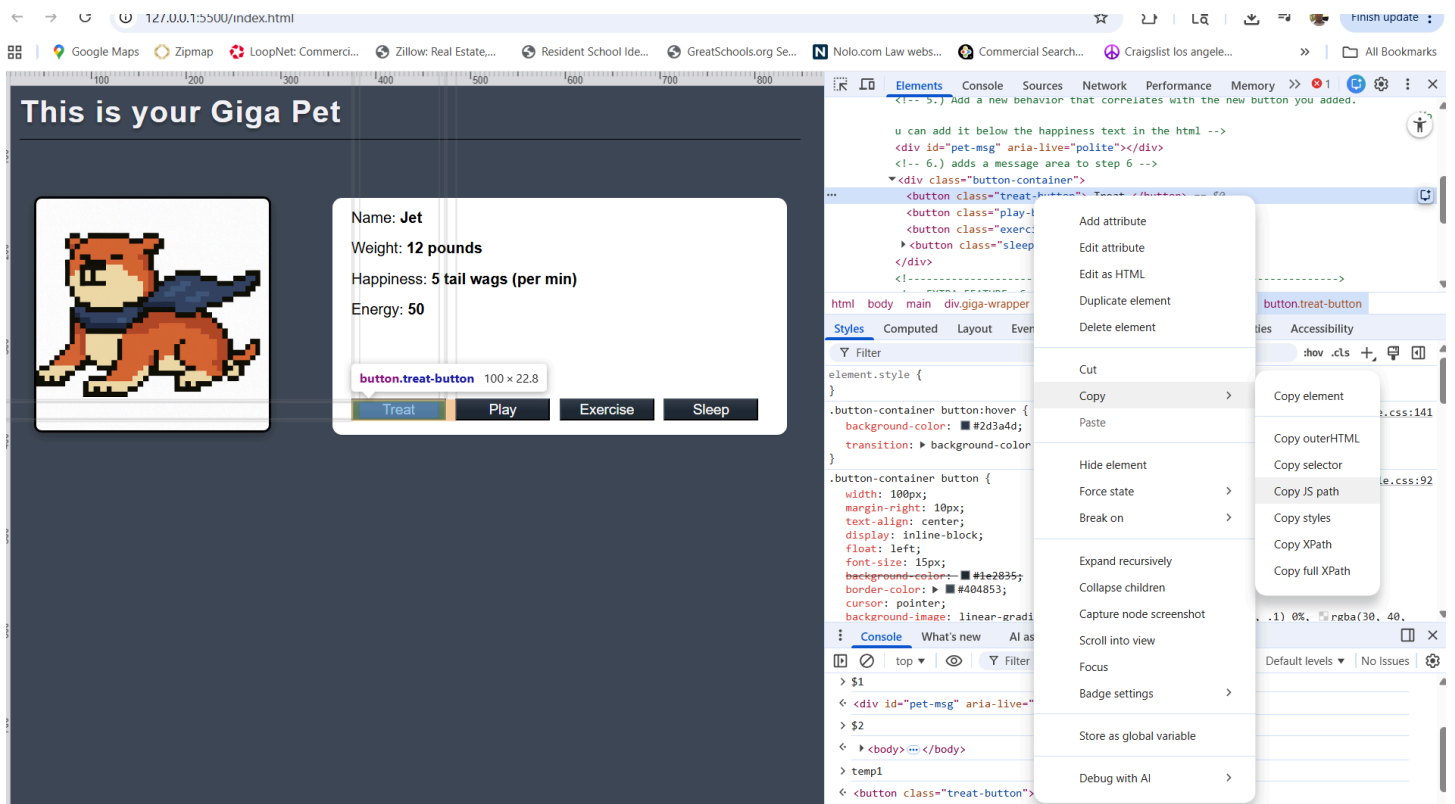
Delete element



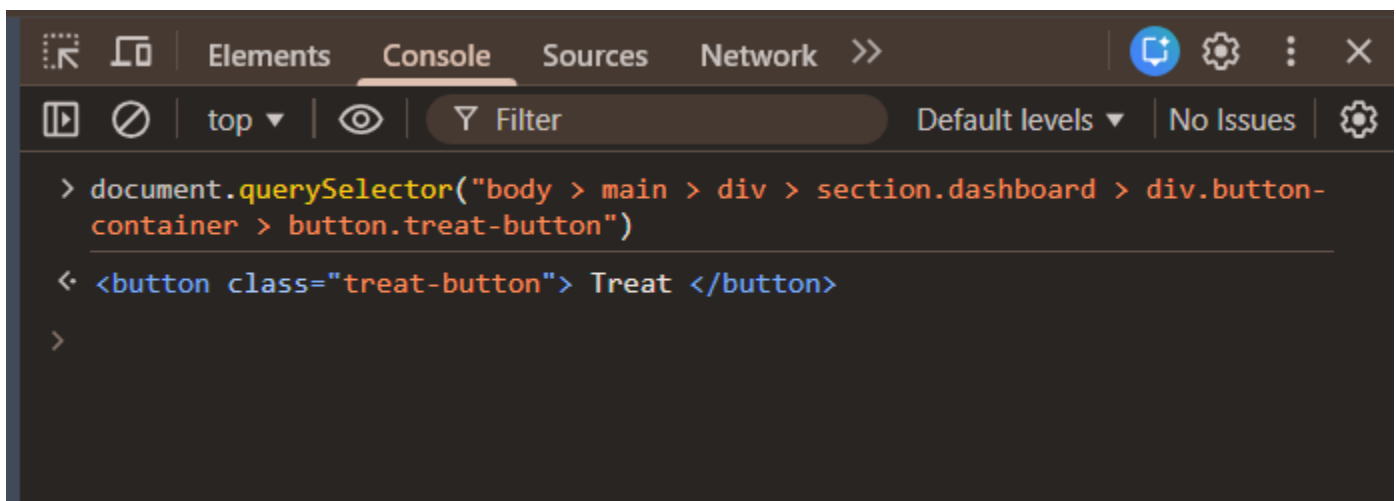
In console \$0 shows currently selected node



Store as global variable



Copy > Copy JS path



Paste JS path into console displays that HTML.

HTML versus the DOM

This section quickly explains the difference between HTML and the DOM.

When you use a web browser to request a page like `https://example.com`, the server returns an HTML document:

```
<!doctype html>
<html>
  <head>
    <title>Hello, world!</title>
  </head>
  <body>
    <h1>Hello, world!</h1>
    <p>This is a hypertext document on the World Wide Web.</p>
    <script src="/script.js" async></script>
  </body>
</html>
```

The browser parses the HTML and creates a tree of objects:

```
html
  head
    title
  body
    h1
    p
    script
```