

Web and Mobile Technologies Assignment 1

by Tomos Joseph Leggett

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Web and Mobile Technologies Assessment 1

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Introduction

For the assignment, the author was tasked with producing a website with 3 pages demonstrating their understanding of various JavaScript features. The pages were to be written in raw JavaScript, meaning no external JavaScript sources could be used. The website itself could be developed around any topic the author wanted to pick. The author picked “Virtual Reality” as their chosen topic. The author was to develop:

- **1 component to allow interaction with a HTML form.**
(The author picked a quiz).
- **1 component to allow dynamic changes to the appearance of the page using JQuery.**
(The author picked a headset directory).
- **Another component which is a free choice on the part of the student.**
(The author picked a lightbox style gallery).

Creating the Quiz

Screenshots & Annotations



The VR Quiz

Test your knowledge on the world of Virtual Reality or learn more with this interactive quiz!

—

Question 1

What does VR stand for?

- ☐ Virtual Rendering
- ☐ Virtual Reality
- ☐ Video Rendering

Question 2

When was the first VR head mounted display introduced?

- ☐ 2001
- ☐ 2008
- ☐ 1960

Question 3

When was the first VR HMD with motion tracking introduced?

- ☐ 1961
- ☐ 1988
- ☐ 1970

Question 4

True or False, is VR used exclusively for gaming?

- ☐ True
- ☐ False

Question 5

How much did the "EyePhone 1" (HMD and gloves) cost back in the 1980s in USD?

- ☐ \$10,000
- ☐ \$30,000
- ☐ \$49,000

Question 6

What would you call a head mounted display (HMD) that doesn't require a PC?

- ☐ Standalone HMD
- ☐ Portable HMD
- ☐ Independent HMD
- ☐ on-the-go HMD

Question 7

What does the basestation (or lighthouse) do?

- ☐ Creates a 3D rendering of the play space
- ☐ calculates the size of the play space
- ☐ tracks the player's location

Question 8

What does the Oculus Quest have that the Oculus Go doesn't?

- ☐ Adjustable IPD
- ☐ 6DoF Tracking
- ☐ Virtual Theatre Software

Question 9

What is IPD?

- ☐ The spacing between your pupils
- ☐ The spacing between your eyes
- ☐ The spacing between your iris

Question 10

What does "DoF" stand for?

- ☐ Depth of Field
- ☐ Depth of Foviation
- ☐ Degrees of Freedom

Question 11

What is the "DoF" used for?

- ☐ Measuring the degrees of movement a HMD can calculate
- ☐ Measuring the Depth of Field of a headset's lenses
- ☐ Measuring the depth of foveation a headset can render

—

0/11 Correct

[Check answers](#)

The quiz itself is made up of 11 questions, each showcasing a series of radio buttons. Below all the questions is a “correct answers” counter:

0/11 Correct

Followed by a “Check answers” button at the very bottom of the page:

Check answers

When selecting the “Check answers” button, one of two dividers will appear below the question, either green for correct:

Correct! Yes! 3DoF can measure your roll, pitch and yaw - 6DoF also measures your up/down, left/right and back/foward of your position.

Or red for incorrect:

Incorrect! Try again!

And for each question that is correct, the “correct answers” counter will increase:

8/11 Correct

Once all questions have been answered successfully, an additional message will appear at the bottom of the screen:

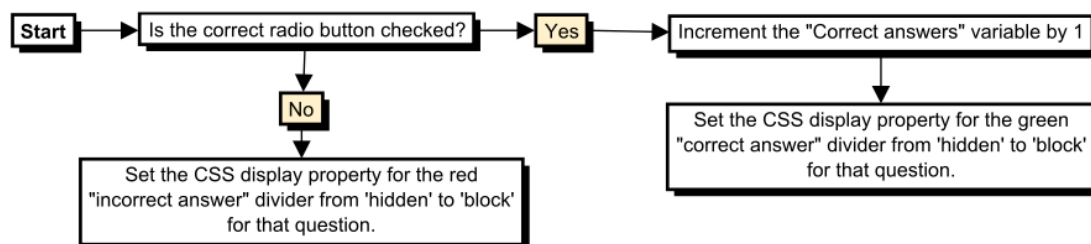
YOU GOT THEM ALL CORRECT!

Well done; Your family will live to see another day! You can now use this knowledge to pick up girls at night clubs.

Methodology

Finding the correct answer

The author created a series of radio buttons with their own custom IDs relating to the question and the answer number, the author then set up a system in which a series of dividers (one red and one green) are placed below the radio buttons and hidden using a style attribute (`display: none;`). The author set an If statement system as visualised below:



A button below the form labelled “Check answers” triggered the script itself, which also changed the value of the variable for the “correct answers” counter and updated it on the page.

Annotated Code Listings

```
1 <script type="text/javascript">
2     function checkanswers() {
3         var correctanswers = 0;
4
5         // Getting elements from document by ID
6         correctfor1 = document.getElementById("Q1-2")
7         greenmsgfor1 = document.getElementById("q1-correct")
8         redmsgfor1 = document.getElementById("q1-incorrect")
9         correctfor2 = document.getElementById("Q2-3")
10        greenmsgfor2 = document.getElementById("q2-correct")
11        redmsgfor2 = document.getElementById("q2-incorrect")
12        correctfor3 = document.getElementById("Q3-1")
13        greenmsgfor3 = document.getElementById("q3-correct")
14        redmsgfor3 = document.getElementById("q3-incorrect")
15        correctfor4 = document.getElementById("Q4-2")
16        greenmsgfor4 = document.getElementById("q4-correct")
17        redmsgfor4 = document.getElementById("q4-incorrect")
18        correctfor5 = document.getElementById("Q5-3")
19        greenmsgfor5 = document.getElementById("Q5-correct")
20        redmsgfor5 = document.getElementById("Q5-incorrect")
21        correctfor6 = document.getElementById("Q6-1")
22        greenmsgfor6 = document.getElementById("Q6-correct")
23        redmsgfor6 = document.getElementById("Q6-incorrect")
24        correctfor7 = document.getElementById("Q7-3")
25        greenmsgfor7 = document.getElementById("Q7-correct")
26        redmsgfor7 = document.getElementById("Q7-incorrect")
27        correctfor8 = document.getElementById("Q8-2")
28        greenmsgfor8 = document.getElementById("Q8-correct")
29        redmsgfor8 = document.getElementById("Q8-incorrect")
30        correctfor9 = document.getElementById("Q9-1")
31        greenmsgfor9 = document.getElementById("Q9-correct")
32        redmsgfor9 = document.getElementById("Q9-incorrect")
33        correctfor10 = document.getElementById("Q10-3")
34        greenmsgfor10 = document.getElementById("Q10-correct")
35        redmsgfor10 = document.getElementById("Q10-incorrect")
36        correctfor11 = document.getElementById("Q11-1")
37        greenmsgfor11 = document.getElementById("Q11-correct")
38        redmsgfor11 = document.getElementById("Q11-incorrect")
39        answermessage = document.getElementById("answers")
40        allcorrect = document.getElementById("allcorrect")
41
42        // If statements for each question:
43
44        if (correctfor1.checked) { // If the correct radio button is
```

```
selected,
44     correctanswers = correctanswers + 1; // increment "correct
answers" var
45     greenmsgfor1.style.display = "block"; // Set the green
message to display
46     redmsgfor1.style.display = "none"; // Set the red message to
hide.
47     } else { // Otherwise, if the incorrect radio button is
selected:
48         redmsgfor1.style.display = "block"; // Set the red message to
display,
49         greenmsgfor1.style.display = "none"; // Set the green message
to hide.
50     }
51
52     if (correctfor2.checked) {
53         correctanswers = correctanswers + 1;
54         greenmsgfor2.style.display = "block";
55         redmsgfor2.style.display = "none";
56     } else {
57         redmsgfor2.style.display = "block";
58         greenmsgfor2.style.display = "none";
59     }
60
61     if (correctfor3.checked) {
62         correctanswers = correctanswers + 1;
63         greenmsgfor3.style.display = "block";
64         redmsgfor3.style.display = "none";
65     } else {
66         redmsgfor3.style.display = "block";
67         greenmsgfor3.style.display = "none";
68     }
69
70     if (correctfor4.checked) {
71         correctanswers = correctanswers + 1;
72         greenmsgfor4.style.display = "block";
73         redmsgfor4.style.display = "none";
74     } else {
75         redmsgfor4.style.display = "block";
76         greenmsgfor4.style.display = "none";
77     }
78
79     if (correctfor5.checked) {
80         correctanswers = correctanswers + 1;
81         greenmsgfor5.style.display = "block";
82         redmsgfor5.style.display = "none";
83     } else {
84         redmsgfor5.style.display = "block";
85         greenmsgfor5.style.display = "none";
```

```
86     }
87
88     if (correctfor6.checked) {
89         correctanswers = correctanswers + 1;
90         greenmsgfor6.style.display = "block";
91         redmsgfor6.style.display = "none";
92     } else {
93         redmsgfor6.style.display = "block";
94         greenmsgfor6.style.display = "none";
95     }
96
97     if (correctfor7.checked) {
98         correctanswers = correctanswers + 1;
99         greenmsgfor7.style.display = "block";
100         redmsgfor7.style.display = "none";
101     } else {
102         redmsgfor7.style.display = "block";
103         greenmsgfor7.style.display = "none";
104     }
105
106     if (correctfor8.checked) {
107         correctanswers = correctanswers + 1;
108         greenmsgfor8.style.display = "block";
109         redmsgfor8.style.display = "none";
110     } else {
111         redmsgfor8.style.display = "block";
112         greenmsgfor8.style.display = "none";
113     }
114
115     if (correctfor9.checked) {
116         correctanswers = correctanswers + 1;
117         greenmsgfor9.style.display = "block";
118         redmsgfor9.style.display = "none";
119     } else {
120         redmsgfor9.style.display = "block";
121         greenmsgfor9.style.display = "none";
122     }
123
124     if (correctfor10.checked) {
125         correctanswers = correctanswers + 1;
126         greenmsgfor10.style.display = "block";
127         redmsgfor10.style.display = "none";
128     } else {
129         redmsgfor10.style.display = "block";
130         greenmsgfor10.style.display = "none";
131     }
132
133     if (correctfor11.checked) {
134         correctanswers = correctanswers + 1;
```

```

135         greenmsgfor11.style.display = "block";
136         redmsgfor11.style.display = "none";
137     } else {
138         redmsgfor11.style.display = "block";
139         greenmsgfor11.style.display = "none";
140     }
141
142
143     // For "all correct" message:
144     if (correctanswers === 11) { // If all the answers are correct
(all 11)
145         allcorrect.style.display = "block"; // Display this div.
146     } else {
147         allcorrect.style.display = "none"; // Don't display this div.
148     }
149
150     // Displaying the correct answers using the "correctanswers"
variable:
151     answermessage.innerHTML = "<b>" + correctanswers + "/11
Correct" + "</b>";
152
153 }

```

Creating the “pick a headset” page

Screenshots & Annotation



Picking a headset

So you've finally decided you want to waste your life in Virtual Reality? Well, below you is a list of VR headsets. Use the filters to find the perfect headset for you!

Filters

Headset dependency:

- ☒ All
- ☐ Standalone
- ☐ PC/Console Required

Tracking Type:

- ☒ All tracking types
- ☐ 6DoF Tracking
- ☐ 3DoF Tracking

Max Price:

- ☒ Any Price
- ☐ Custom

£

Brand:

- ☒ All
- ☐ Oculus
- ☐ HTC
- ☐ Valve
- ☐ Pico
- ☐ Sony
- ☐ WMR/Other

[Update](#)

Results



Oculus Quest 2
6DoF | Standalone | £299



Oculus Quest
6DoF | Standalone | £399



Oculus Go
3DoF | Standalone | £199



Oculus Rift
6DoF | PC Dependent | £399



Oculus Rift S
6DoF | PC Dependent | £399



Genbasic Quad HD
3DoF | Standalone | £199



Xiaomi MI VR
3DoF | Standalone | £398



Pico Neo VR
6DoF | Standalone | £239



Pico Goblin
3DoF | Standalone | £249



PS VR
6DoF | PS Dependent | £349



Pico G2 4K
3DoF | Standalone | £369



Valve Index
6DoF | PC Dependent | £1000



HTC Vive
6DoF | PC Dependent | £599



HTC Vive Pro
6DoF | PC Dependent | £799



HTC Vive Cosmos
6DoF | PC Dependent | £799



HTC Vive Focus Plus
6DoF | Standalone | £799



Samsung Odyssey
6DoF | PC Dependent | £499



HP Reverb
6DoF | PC Dependent | £649



Acer AH101
6DoF | PC Dependent | £299

The page itself contains a grid row of different headsets with their names and attributes. On the right are the results themselves, on the left are a series of filter controls, including 4 sets of radio buttons, a text box and an update button.

Update

The update button is disabled at first, but re-enables itself when a change is made to any of the filters.

Max Price:

☒ Any Price

☐ Custom

£ Enter price here

The max price input text box is also disabled by default, but re-enables itself when the user selects “custom”.

Hidden by default, a red text block divider appears if the user inputs anything other than a number using the max price input.

£ Enter price here

Whoops!

Please enter a valid price.

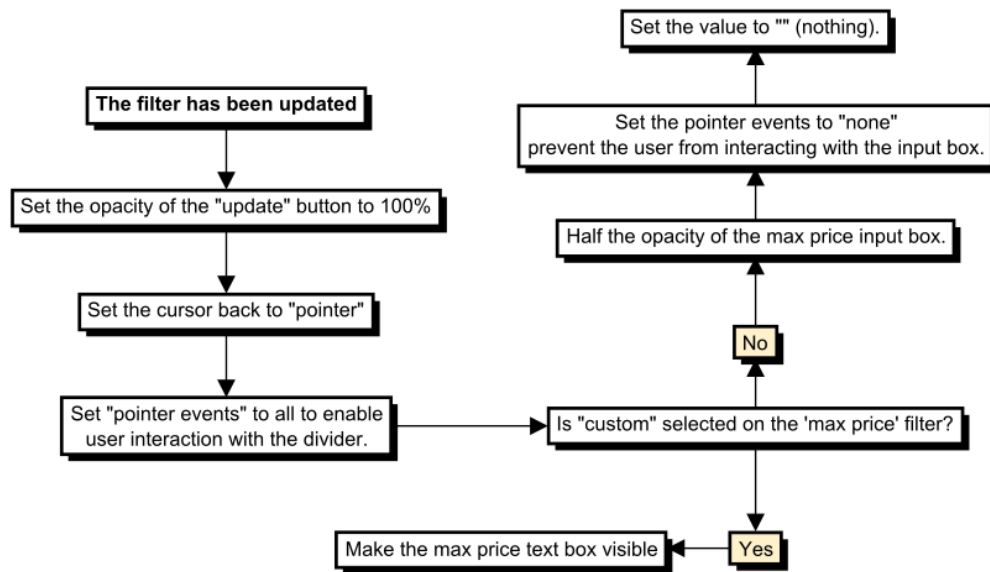
It disappears when valid input is made after pressing the “update” button.

When the “update” button is pressed, the filter will either add or remove headsets from/to the results depending on the properties of the headsets.

Methodology

Ensuring the “filter” button disables/re-enables appropriately

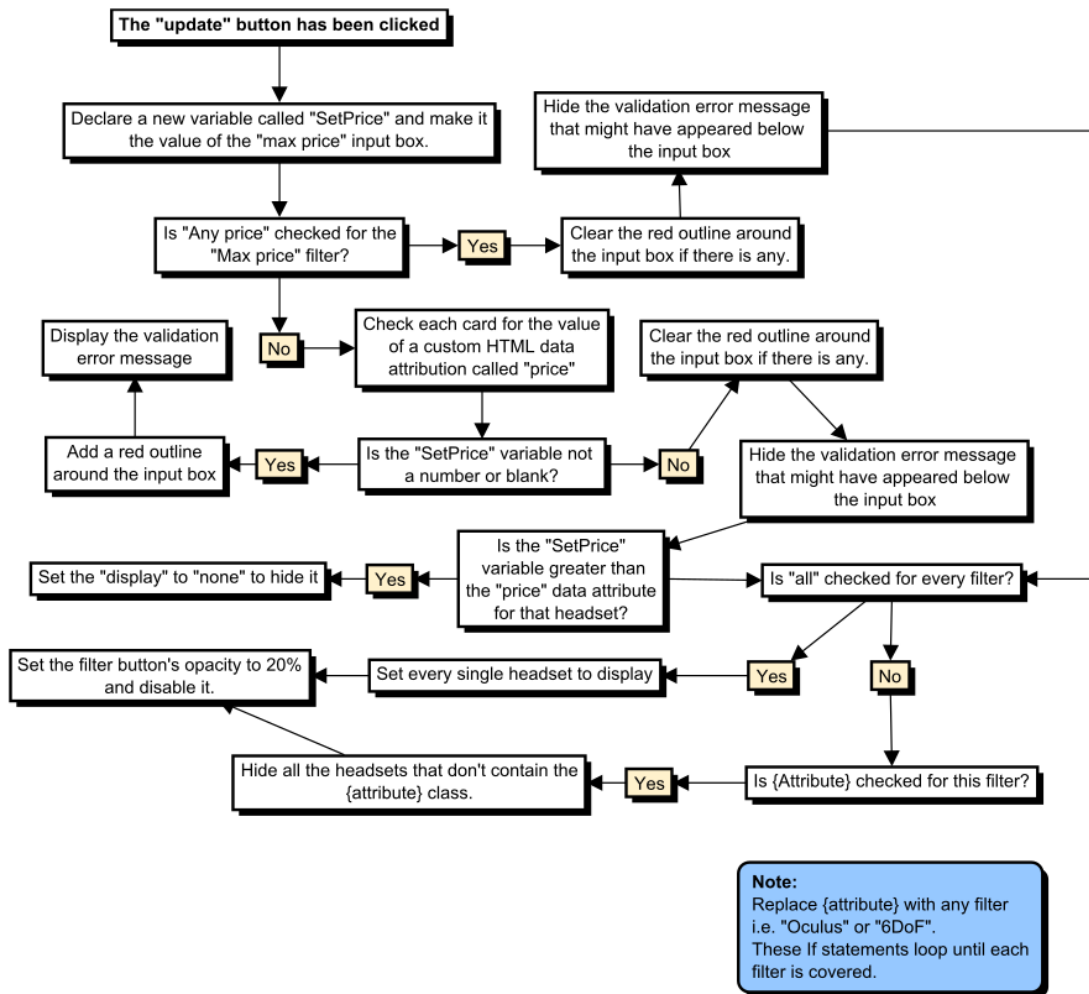
Using JQuery, an event triggers the following function anytime a change in any of the filters are made:



This allows the update button to appear enabled or disabled based on changes to the filter, this is purely for UX purposes, however, this function also carries the functionality of displaying the max price input box when the appropriate “custom” radio button is checked. A separate function for this functionality would have been pointless, so the author included it in the function.

Ensuring the results update when the “update” button is pushed

When the update button is pushed, it triggers the function that handles the main functionality of this page. Instead of nesting ‘if statements’ inside each element, the author decided to give each headset various classes, one class for each filter (except for max price). Then, depending on which radio buttons are checked, each headset’s `display` property becomes `none` for the classes that filter doesn’t point towards (i.e. the “brand” filter being set to “oculus” will hide all other headsets with other classes bar “oculus”).



This function also carries the functionality of displaying the error message and functionality of the “max price” input box. Using JQuery, we can filter custom HTML attributes for every element, the author created an attribute named `data-price` and hid each element that was greater than the max price input. This was significantly easier and more streamline than creating an array thanks to JQuery.

Annotated Code Listings

```

1 var updateButtonReady = 0;
2 $(pageready)
3
4 // When the page is ready:
5 function pageready() {
6     $(".form-check-input").click(filterUpdate); // (When the user
7     changes anything on the filter).
8     $(".update-button").click(onUpdateButtonClick); // (When the user
9     clicks the "update" button to update the filters)/
10    $("#max-price-input").on("input", function () {
11
12        // Update the "Update" button so that it appears visible when

```

```

the user makes changes to the filter:
10     $(".update-button").css("opacity", "100%"); // Such as the
opacity
11     $(".update-button").css("cursor", "pointer"); // and the
cursor type.
12     $(".update-button").css("pointer-events", "all"); // and the
cursor type.
13     });
14 }
15
16 // When the user has updated the filter on the left, this happens:
17 function filterUpdate() {
18
19     // Update the "Update" button so that it appears visible when the
user makes changes to the filter:
20     $(".update-button").css("opacity", "100%"); // Such as the
opacity
21     $(".update-button").css("cursor", "pointer"); // and the cursor
type.
22     $(".update-button").css("pointer-events", "all"); // and the
cursor type.
23
24     // If the user has checked "custom" on the max price filter:
25     if ($("#price-type-2").is(":checked")) {
26         ($("#max-price-element").css("opacity", "1")); // Make the
element appear visible
27         ($("#max-price-element").css("pointer-events", "all")); //
and allow the user to click the text field.
28     } else // otherwise, if "Any Price" is checked instead,
29     {
30         ($("#max-price-element").css("opacity", "0.5")); // Half the
element's opacity to make it look disabled,
31         ($("#max-price-element").css("pointer-events", "none")); //
don't allow the user to click the field and
32         ($("#max-price-input").val("")); // set the value to nothing.
33     }
34 }
35
36
37
38 // when the update button is clicked, this happens:
39 function onUpdateButtonClick() {
40
41     // Declare a variable called "setPrice" based on the value of the
max price input.
42     setPrice = ($("#max-price-input").val()
43
44
45     // If "Any price" is selected;

```

```

46     if ($("#price-type-1").is(":checked")) {
47         $("#max-price-element").css("border", "none"); // Don't show
a red outline around the element and
48         $("#max-price-error").css("display", "none"); // don't show
the error message underneath it.
49     }
50     // Otherwise, if "Custom" is selected:
51     else {
52         $(function () {
53             $('.card[data-price]').each(function () { // Check each
card for the custom data attribute called "price".
54                 if ((setPrice === "") || (isNaN(setPrice) === true))
{ // If the set price isn't set as anything or it's not not a number
then:
55                     $("#max-price-element").css("border", "solid 1px
red"); // show a red border around the input element to show the user
there is an error and
56                     $("#max-price-error").css("display", "block"); //
show an error message!
57                 } else {
58                     $("#max-price-element").css("border", "none"); //
otherwise remove the border and
59                     $("#max-price-error").css("display", "none"); //
hide the message.
60
61                     if ($(this).data("price") > setPrice) // for
every card that has a data attribute that is the equivalent or higher
than the set max price:
62                     {
63                         $(this).css("display", "none"); // hide it.
64                     }
65                 }
66             });
67         });
68     }
69
70     // If "All" is checked for every filter:
71     if ($("#brand-0, #tracking-type-0, #headset-dependency-
1").is(":checked")) {
72         $(".card").css("display", "block") // Every card with every
class will display.
73     }
74
75     // If "Oculus" is checked;
76     if ($("#brand-1").is(":checked")) {
77         $(".other, .htc, .valve, .pico, .sony").css("display",
"none") // All other brands will be hidden.
78     }
79

```

```
80     // If "WMR/Other" is checked;
81     if ($("#brand-4").is(":checked")) {
82         $(".oculus, .htc, .valve, .pico, .sony").css("display",
83         "none") // All other brands will be hidden.
84     }
85     // If "HTC" is checked;
86     if ($("#brand-2").is(":checked")) {
87         $(".other, .oculus, .valve, .pico, .sony").css("display",
88         "none") // All other brands will be hidden.
89     }
90     // If "Valve" is checked;
91     if ($("#brand-3").is(":checked")) {
92         $(".other, .oculus, .htc, .pico, .sony").css("display",
93         "none") // All other brands will be hidden.
94     }
95     // If "Pico" is checked;
96     if ($("#brand-5").is(":checked")) {
97         $(".other, .oculus, .htc, .valve, .sony").css("display",
98         "none") // All other brands will be hidden.
99     }
100    // If "Sony" is checked;
101    if ($("#brand-6").is(":checked")) {
102        $(".other, .oculus, .htc, .valve, .pico").css("display",
103        "none") // All other brands will be hidden.
104    }
105    // If "6DoF Tracking" is checked;
106    if ($("#tracking-type-1").is(":checked")) {
107        $(".3DoF").css("display", "none") // All other tracking types
108        will be hidden.
109    }
110    // If "3DoF Tracking" is checked;
111    if ($("#tracking-type-2").is(":checked")) {
112        $(".6DoF").css("display", "none") // All other tracking types
113        will be hidden.
114    }
115    // If "Standalone" is checked;
116    if ($("#headset-dependency-2").is(":checked")) {
117        $(".dependent").css("display", "none") // All dependent
118        headsets will be hidden.
119    }
120    // If "PC/Console Required" is checked;
```

```
121     if ($("#headset-dependency-3").is(":checked")) {  
122         $(".standalone").css("display", "none") // All standalone  
           headsets will be hidden.  
123     }  
124  
125     // Change the filter button back to normal  
126     $(".update-button").css("opacity", "20%"); // Such as the opacity  
127     $(".update-button").css("cursor", "not-allowed"); // and the  
           cursor type.  
128  
129 }
```

Creating the Gallery

Screenshots & Annotations



The Gallery

An interactive gallery of Virtual Reality headsets and other stuff. Click on something!

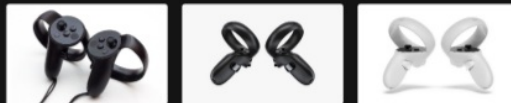
The progression of the Oculus brand

Hide

Headset



Controller



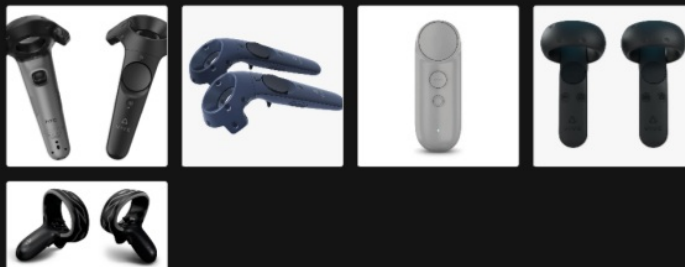
The progression of the HTC Vive brand

Hide

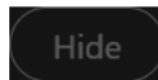
Headset



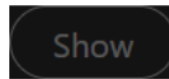
Controller



The landing page showcases a series of cards each with various widths depending on the largest card in the row showcasing various headsets from 2 brands.



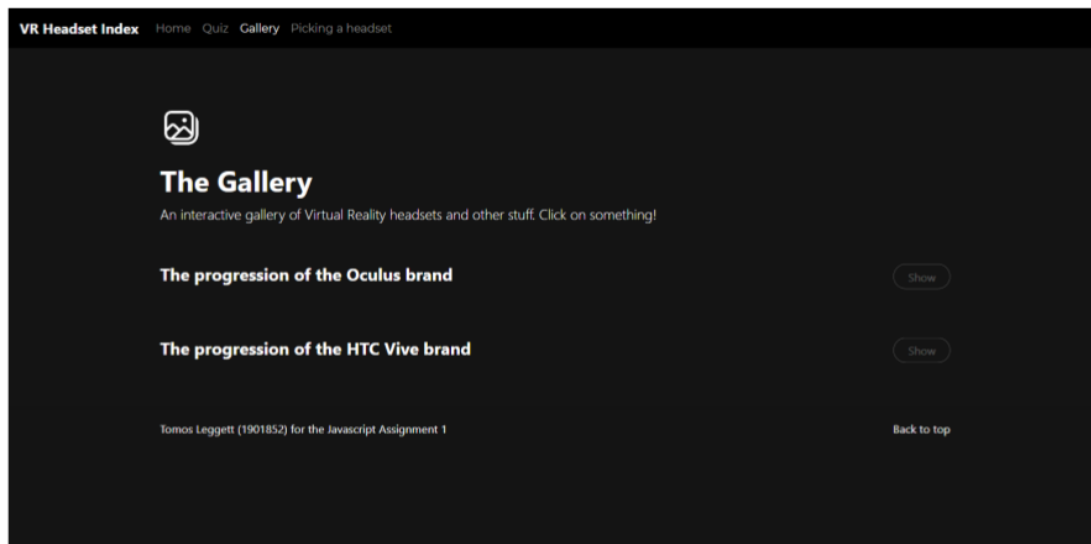
Each section has a title and a “hide” button which hides that particular section. When pressed, the “Hide” button becomes a “Show” button.



This button isn’t actually a button, to make it easier for the author to program these “buttons”, the “buttons” are actually cleverly disguised checkboxes, where the checkboxes themselves are hidden, and the label is disguised as a button using CSS.



When clicked (or more accurately, checked) the section itself is hidden, this is a UX design to make the page more accessible for those who want to see a specific column. Here’s what they look like when they’re both hidden:



Oculus Quest 2 (current)

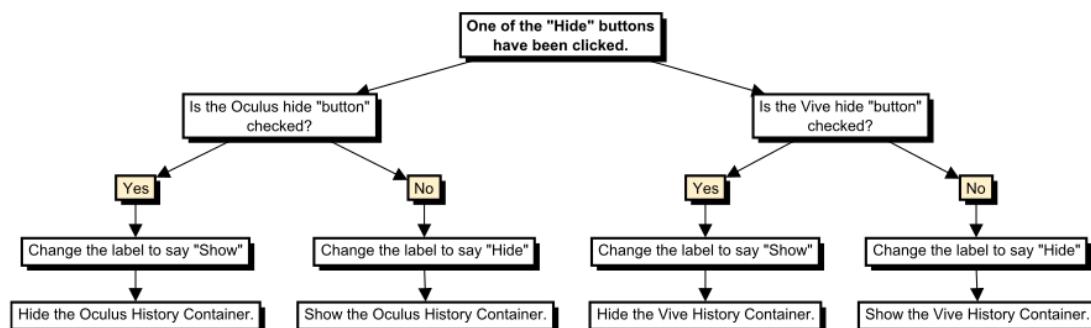


When clicking a card, a modal appears showcasing the image you clicked in full width. The modal itself also has a title on the top left, and a close button on the top right.

Methodology

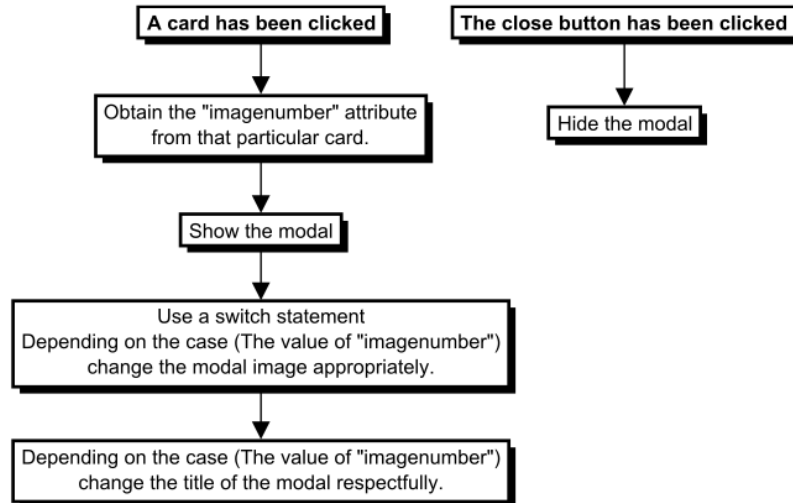
Making the Hide “button” work

In order to make the hide “button” work, a cleverly disguised checkbox was placed inside a flexbox with the label designed to look and act a lot like a button. When the label was pressed:



This is an incredibly easy approach compared to alternative routes.

Making the Modal work



The modal appears when a card has been clicked. Each card has an onclick event with their own variable attached. Like so:

```
showmodal(17)
```

When the card is clicked, the modal will appear, and a switch statement will associate the correct image and title based on the card that was clicked. For example, if card #17 was clicked, then the title would be “The HTC Vive Focus” and the image corresponding would be of a HTC Vive Focus.

The author wanted to instead inherit the source of the image based on the card’s “img” tag, however, the author was unable to do this due to complications that required JQuery code instead of raw JavaScript.

The close button closes the modal by hiding it.

Annotated Code Listings

```
1
2 // When the page loads
3 function onPageLoad() {
4
5     // Set these variables:
6     modal = document.getElementById("modal"); // A variable for the
modal.
7     button = document.getElementById("launchModal"); // A variable
for any "button" that launches the modal.
8     closebutton = document.getElementById("closebutton"); // A
variable for the close button on the modal.
9     modalTitle = document.getElementById("modalTitle"); // And the
Modal title.
10
11
```

```

12
13     oculushidecheckbox = document.getElementById("oculus-hide"); // A
variable for the lovely "hide" button next to the Oculus container
14     oculushidecheckboxlabel = document.getElementById("hide-button-
oculus") // A variable for the label of the lovely "hide" button next
to the Oculus container
15     vivehidecheckbox = document.getElementById("vive-hide"); // A
variable for the lovely "hide" button next to the Vive container
16     vivehidecheckboxlabel = document.getElementById("hide-button-vive")
// A variable for the label of lovely "hide" button next to the
Oculus container
17     oculushistory = document.getElementById("oculus-history"); // A
variable for the Oculus container itself.
18     vivehistory = document.getElementById("vive-history"); // A
variable for the Vive container itself.
19     modalimage = document.getElementById("modalImage") // A variable
for the image inside the modal that makes this slideshow functional
to begin with.
20 }
21
22 // A function for those lovely "hide" buttons:
23 function hide() {
24
25     // Despite looking like a button, they're actually check boxes,
this makes it much easier to program. The checkbox itself is hidden
and the label acts like a checkbox!
26     // If the so called "checkbox" is checked, then:
27     if (oculushidecheckbox.checked === true) {
28         oculushidecheckboxlabel.innerHTML = "Show"; // Change the
button to say "Show" and
29         oculushistory.style.display = "none"; // Hide the Oculus
container.
30         // Otherwise:
31     } else {
32         oculushidecheckboxlabel.innerHTML = "Hide"; // Change the
button to say "hide" and
33         oculushistory.style.display = "block"; // Show the Oculus
container.
34     }
35
36     // and vice versa for the Vive (it's the same, okay?):
37     if (vivehidecheckbox.checked === true) {
38         vivehidecheckboxlabel.innerHTML = "Show";
39         vivehistory.style.display = "none";
40     } else {
41         vivehidecheckboxlabel.innerHTML = "Hide";
42         vivehistory.style.display = "block";
43     }
44 }

```

```

45
46     // An entire function set for the modal showing (with a variable
called "imagenumber" which determines what image we've clicked):
47     function showmodal(imagenumber) {
48
49         modal.style.display = "block"; //Shows the modal itself (wouldn't
be very useful without this line, would it?)
50
51         // Instead of burying you with 'if statements', I've used a
Switch statement:
52         switch (imagenumber) { // Take that very useful variable (the
imagenumber variable is actually attached to the onclick event, each
image has its own imagenumber)
53             case 1: // If the image number is "1" then:
54                 modalimage.src = "media/Oculus-Progression/1.jpeg" // Set the
image number on the modal image appropriately,
55                 modalTitle.innerHTML = "<b> Oculus Development Edition </b>"
// And the title of the Modal.
56                 break;
57
58                 // and so on and so fourth for the entire switch statement:
59
60             case 2:
61                 modalimage.src = "media/Oculus-Progression/2.jpeg"
62                 modalTitle.innerHTML = "<b> Oculus Development Edition 2
</b>"
63                 break;
64             case 3:
65                 modalimage.src = "media/Oculus-Progression/3.png"
66                 modalTitle.innerHTML = "<b> Oculus Rift </b>"
67                 break;
68             case 4:
69                 modalimage.src = "media/Oculus-Progression/4.jpeg"
70                 modalTitle.innerHTML = "<b> Oculus Rift S </b>"
71                 break;
72             case 5:
73                 modalimage.src = "media/Oculus-Progression/6.png"
74                 modalTitle.innerHTML = "<b> SAMSUNG Gear VR </b>"
75                 break;
76             case 6:
77                 modalimage.src = "media/Oculus-Progression/5.png"
78                 modalTitle.innerHTML = "<b> Oculus Go </b>"
79                 break;
80             case 7:
81                 modalimage.src = "media/Oculus-Progression/7.png"
82                 modalTitle.innerHTML = "<b> Oculus Quest </b>"
83                 break;
84             case 8:
85                 modalimage.src = "media/Oculus-Progression/8.png"

```

```
86         modalTitle.innerHTML = "<b> Oculus Quest 2 (current) </b>"
87         break;
88     case 9:
89         modalImage.src = "media/Oculus-
Progression/controllers/v0.png"
90         break;
91     case 10:
92         modalImage.src = "media/Oculus-
Progression/controllers/v1.png"
93         modalTitle.innerHTML = "<b> V1 Controllers</b>"
94         break;
95     case 11:
96         modalImage.src = "media/Oculus-
Progression/controllers/v2.png"
97         modalTitle.innerHTML = "<b> V2 Controllers </b>"
98         break;
99     case 12:
100        modalImage.src = "media/Oculus-
Progression/controllers/v3.png"
101        modalTitle.innerHTML = "<b> V3 Controllers (current) </b>"
102        break;
103    case 13:
104        modalImage.src = "media/Vive-progression/1.png"
105        modalTitle.innerHTML = "<b> The HTC Vive </b>"
106        break;
107    case 14:
108        modalImage.src = "media/Vive-progression/2.png"
109        modalTitle.innerHTML = "<b> The HTC Vive Pro</b>"
110        break;
111    case 15:
112        modalImage.src = "media/Vive-progression/3.png"
113        modalTitle.innerHTML = "<b> The HTC Vive Pro Eye</b>"
114        break;
115    case 16:
116        modalImage.src = "media/Vive-progression/4.png"
117        modalTitle.innerHTML = "<b> The HTC Vive Cosmos</b>"
118        break;
119    case 17:
120        modalImage.src = "media/Vive-progression/5.png"
121        modalTitle.innerHTML = "<b> The HTC Vive Focus</b>"
122        break;
123    case 18:
124        modalImage.src = "media/Vive-progression/6.png"
125        modalTitle.innerHTML = "<b> The HTC Vive Focus Plus</b>"
126        break;
127    case 19:
128        modalImage.src = "media/Vive-
progression/controllers/vive.png"
129        modalTitle.innerHTML = "<b> Original Vive Controllers</b>"
```

```

130         break;
131     case 20:
132         modalimage.src = "media/Vive-progression/controllers/vive-
pro.webp"
133         modalTitle.innerHTML = "<b> Vive Pro Controllers</b>"
134         break;
135     case 21:
136         modalimage.src = "media/Vive-
progression/controllers/focus.webp"
137         modalTitle.innerHTML = "<b> Vive Focus Controllers</b>"
138         break;
139     case 22:
140         modalimage.src = "media/Vive-progression/controllers/focus-
plus.jpeg"
141         modalTitle.innerHTML = "<b> Vive Focus Plus Controllers</b>"
142         break;
143     case 23:
144         modalimage.src = "media/Vive-
progression/controllers/cosmos.png"
145         modalTitle.innerHTML = "<b> Vive Focus Plus Controllers</b>"
146
147         // My fingers are tired but the switch statement is finished.
148     }
149 }
150
151 // So when the close button is pressed:
152 function closemodal() {
153     modal.style.display = "none"; // The modal is hidden. Pretty easy
stuff.
154 }

```

Conclusion

In conclusion, the author is happy with the results of their website. It demonstrates their core understanding of JavaScript and use cases within websites and components. The author can hide/show elements, use If statements and variables and more. The author has learnt various skills when developing their project, such as JQuery use cases, additional functionality such as custom data attributes in HTML which the author was unaware you could do. The author struggled with some concepts, the gallery was originally intended to showcase the ability to switch between various images using raw JavaScript instead of JQuery, but was unable to. Otherwise, the author is happy with the level of functionality for the website and is excited to develop their skills in JavaScript further.

Web and Mobile Technologies Assignment 1

GRADEMARK REPORT

FINAL GRADE

73/100

GENERAL COMMENTS

Instructor

WEBSITE

Range of Javascript code demonstrated. Quiz is good and you have shown the answers well, allowing the user to go back and have another go. It would have been more efficient to use an array rather than have a number of questions that have almost identical code. The carousel is OK, though again quite repetitive: I appreciate that you've recognised this and tried to cut down the code (a bit!) with a switch. Passing a parameter here would have helped you to cut down your code. I like the jQuery section - again the code is a bit repetitive but the result is good. 42/60 -

Overall integration of website - Simple layout, but nevertheless quite a clean design and clearly states from the outset what the site is about. I'm never sure about entirely black and white sites, but that is a personal preference I suppose! :) 8 /10 -

REPORT

Analysis of technical development 11/15 - You've related what you did well, I would have liked a bit more of a technical analysis - eg what do you recognise as inefficient or with room for improvement.

Annotated code listing Well explained on the whole, particularly the jQuery section 12/ 15

A good assignment overall. Think about functions/parameters for the future to help shorten your code (and make your life easier as a programmer!)

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