

Computing Debugging

As I coded each feature bit by bit, there was no massive debugging required and most issues solved themselves upon creation.

Retrieve button id regularly to identify which button was hovered upon

Create a function in my JavaScript file to attribute the button id to a variable. Use alert to view the state of the variable.

| Problem | Solution |
|---------------------------|--|
| The function isn't called | Imbed the function in the HTML file using <code><script></code> . Use onmouseover function on each element to call the function. |



| Problem | Solution |
|---|---|
| The variable can't view it from my JavaScript file. | Try importing the variable in the JavaScript file with import |
| | Doesn't work |
| | Try saving the variable with <code>window.sessionStorage</code> then import it in the JavaScript file |

IT WORKS!

| Problem | Solution |
|---|---|
| Only stored the first button hovered upon when loading the page. I would need it to constantly refresh. | Set a function to reiterate the retrieving of the variable every X amount of times. (<code>setTimeout()</code>) |



| Problem | Solution |
|---|--|
| The information doesn't show up immediately. As more icons are hovered upon, it gets more reactive. | Set a constant function using <code>document.onmouseover()</code> . This happens all the time so the function is in a constant loop. |

IT WORKS!

Show a welcome message for each page to inform the user how the page works

| Problem | Solution |
|---|--|
| If the user's mouse happens to go over a button when the page loads, the user doesn't have the time to read the message | Set a timer to start displaying individual information after a certain amount of time. |



| Problem | Solution |
|---|---|
| Initially, a lot of time is required for the image to display itself when moving from one icon to another. Gets better with time. Not the user experience wanted. | Show the message whenever the mouse isn't on a button. Set it back to the initial message when the mouse leaves the button. |

IT WORKS!

Reset the initial display of the keyboard on the shortcut page

| Problem | Solution |
|---|---|
| Noticed the buttons for the previously researched shortcut remained grey when changing to another button. | Retrieve all the elements from the page with the class name "active_keys" to make them all grey |



| Problem | Solution |
|--|--|
| The result of document.getElementsByClassName() is not iterable therefore doesn't work | Make an array with all the buttons' ids and iterate with that. |

IT WORKS!

Make the Icons red when hovered upon

| Problem | Solution |
|--|------------------------------------|
| When changing the background of the image, nothing happens. I want a transparent background so this wouldn't work. | Use filters to modify them to red. |



| Problem | Solution |
|---|---|
| For filters to work well the image needs to be black initially. This make them a bit too harsh on the page. | Add initial filter to make the PNG black. |

IT WORKS!

On the desktop and file explorer virtual screens, the menu elements should only appear when the menus are opened.

| Problem | Solution |
|--|--|
| After building all the elements, I noticed the buttons for the menus appeared each time they were hovered upon, despite the menu being closed. | Separate the buttons inside the menu ids from the others. Launch function to show the elements of the menu only when the menu is opened. |



| Problem | Solution |
|---|--|
| Once the menu has been opened once, the buttons of the menu continue appearing despite the menu being closed. | <u>Research</u> : Almost impossible to stop a function in JavaScript Use a variable to indicate when the menus are opened. Add an if statement to only show the elements when the menu is opened. |



| Problem | Solution |
|--|--|
| I opened a menu, hovered upon the elements, closed the menu, opened another one. When hovering upon the elements of the previously opened menu they showed up. | Use variables to indicate when each menu is opened. Constantly call for all elements separately for each menu them but only show them if the menu is opened. |



| Problem | Solution |
|---|--|
| Noticed some buttons weren't functioning correctly (only worked when one small corner is hovered upon but not when mouse was in the middle.) Don't know why. <u>Identification</u> : When building the file explorer page, noticed the same issue. Found out it was due to the hidden buttons placed in front which disabled the on hover function for those behind. | Change the layering of the elements with the z-index when menu is opened |

IT WORKS!

| Problem | Solution |
|---|--|
| When a menu is opened, you can still click on another one and open it despite the button not highlighting itself. This makes it very confusing. | Add another if statement to only open the menu if all others are closed. |

IT WORKS!

| Problem | Solution |
|---|--|
| When a menu is opens, the button to open it hides itself when it would be better if it stayed open to show the user where to click to close it. | Show the button whenever the menu is open. |
| | Doesn't work as the button becomes invisible again when the mouse leaves the button. |
| | Show the button whenever the menu is open. |



| Problem | Solution |
|---|---|
| Broke when I combined into a function the display of the information when hovering on a button. | Collect which menu button should stay displayed and use and if statement to display it whenever a menu is open. |

IT WORKS!

| Problem | Solution |
|---|--|
| When the menu is first opened, the information is displayed but it disappears as soon as the mouse moves. | Change the initial message according to the menu opened. |

IT WORKS!

| Problem | Solution |
|---|---|
| The customize menu and file menu don't open on first click but on the second when the page is reloaded. Once opened once, it functions correctly. | Initially set the menu's opacity to 0 to get the correctly branch of the if statement from the start. |

IT WORKS!

Have 10 unique questions in the quiz

| Problem | Solution |
|--|---|
| Repetition of questions within the 10 occurs when playing. | Use an array to track which questions have already been asked. If the question has already been asked, the server is asked for another one. |

IT WORKS!

Several lines of my code are too long

| Problem | Solution |
|---|---|
| Several lines in my code are longer than 80 characters, especially in my data object. | Write the data in another file and import it from there using fetch |



| Problem | Solution |
|-------------------------------|--|
| Fetch function isn't defined. | Define fetch like in ajax.js with window.fetch |



| Problem | Solution |
|-----------------------|--|
| window isn't defined. | Try defining fetch in another JavaScript file and importing it after |

Doesn't work. Find another path.

| Problem | Solution |
|---|--|
| Several lines in my code are longer than 80 characters, especially in my data object. | Use parentheses and string addition to make all of them shorter than 80 characters |

IT WORKS!

Code readability

| Problem | Solution |
|---|---|
| Code is very chunky and hard to read. A lot of repetition in between different pages. | Make a common function for all in a main.js file to import into each. |



| Problem | Solution |
|---|---|
| One element can't be modified easily with a variable (changing the key we want to retrieve) | Give a code name to each of the pages. Retrieve it in the main function and use it to display in the correct location using if statements |

NOT THE BEST, BUT WORKS!