| Sprint 8, Assignment 12.6 Please also update the doc name with correct numbers. | |
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| Assignment type: JS Interactive | |
| Assignment name  Can remain the same as the assignment topic name, or…  can be created depending on the task in the active form, e.g. “Create your own X” | “Iterating arrays using 'for..of' loop” |
| BDG Description\*  What is the task and why is it important?  In this part, it’s encouraged to think about storytelling and future job-specific context e.g. “You’ve been asked to help out X with Y. They want Z on their website, yet aren’t too sure on how to achieve it”.  Drawing on practical examples and adding context can increase a student's motivation and increase long term learning according to Instructional Design principles, because this helps to relate some familiar or existing knowledge to new bits of information.  This will appear in the course as text before a button, leading to the interactive platform assignment. | An advertising company wants to target the adult demographic on their mailing list, and they need you to identify only those people over 20 years old. |
| The Assignment  A short specific description of the assignment and tasks using bullet points that the student will need to do. | Create a ‘for...of’ loop, a ‘for’ loop, and a ‘forEach’ loop |

| Steps  Step-by-step instructions on what the student should do. | | |  |
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| Step # | Step  Write each small step of the task | At least 1x hint(s)  Write some text (not necessarily, but can also be a part of code if relevant) which would hint the student to figure out the correct step forward. | The correct output should be…  (if relevant to the task) |
| 1 | Declare two variables:  - subscriberAge = [16, 22, 38, 45, 33, 17, 27, 55, 17], and  - targetAudiance = []; |  | **let subscriberAge = [16, 22, 38, 45, 33, 17, 27, 55, 17];**  **let targetAudiance = [];** |
| 2 | Create a ‘for…of’ loop and log the numbers to terminal |  | let subscriberAge = [16, 22, 38, 45, 33, 17, 27, 55, 17];  let targetAudiance = [];  **for (let element of subscriberAge) {**  **console.log(element);** |
| 3 | Log to terminal whether each number is greater than 20 | Instead of simply logging each element, use template literals and interpolation to show the comparisons in terminal | let subscriberAge = [16, 22, 38, 45, 33, 17, 27, 55, 17];  let targetAudiance = [];  for (let element of subscriberAge) {  console.log(**`Is ${element} larger than 20? Ans:${element > 20} `)**;  } |
| 4 | Use a conditional to store numbers above 20 in the new variable targetAudiance | Use the .push method | let subscriberAge = [16, 22, 38, 45, 33, 17, 27, 55, 17];  let targetAudiance = [];  for (let element of subscriberAge) {  **if(element > 20){**  **targetAudiance.push(element);**  **}**  console.log(`Is ${element} larger than 20? Ans:${element > 20} `);  }  console.log(targetAudiance); |
| 5 | Perform the same sorting job using a ‘for’ loop | Remember that ‘For’ loops allow us to define up to three things:   * A variable we can use to count elements in our array * What the loop should do before going through the array (like check to see whether our instance variable has gotten bigger than the length of the array) , and * What to do after the loop has finished going-through the array | **for(let index = 0; index < subscriberAge.length; index++)** {  console.log(`Is **${subscriberAge[index]}** larger than 20? Ans: **${subscriberAge[index]** > 20}`);  if**(subscriberAge[index]** > 20){  targetAudiance.push(**subscriberAge[index]**);  }  };  console.log(targetAudiance); |
| 6 | Perform the same sorting job one more time using a ‘forEach’ loop | The ‘forEach’ loop is the shortest one to write, and we only need to do two things:   * Provide an instance variable, and * Describe what we’d like what we’d like our loop to do with that variable (essentially, write a function - but we will get to functions soon enough) | **subscriberAge.forEach(item => {**  if(**item** > 20){  targetAudiance.push(**item**);  }  **})**  console.log(targetAudiance); |
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