| Sprint 8 (JS Sprint 1), Assignment 8.7 (“Variables”) Please also update the doc name with correct numbers. | |
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| Assignment type: Interactive The student can practice coding. | |
| Assignment name  Should be in the active form, e.g.  “Create your own X” | “Variables” |
| 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. | Ah variables - the Amazon boxes of code! As developers, we are going to be declaring a lot of variables, and storing all sorts of stuff in them. In fact, imagine you’re a newly-hired dev tasked with **updating Amazon’s customer database code**.  Given that engineers need to think about how users will use their websites and programs …   * Can you think of information you would need to get from Amazon’s users? * Of all that information, what do you think will stay the same? Does governmental identification, like Social Security numbers, change very frequently? Aren’t things like memorial dates - someone’s birthday, or the day they became a member - likely to be permanent? You will need to make variables that can’t be accidentally changed for these sorts of things. * And what would you want to make updateable? What will likely change regularly: shipping addresses, credit card numbers, and last names for instance? * Finally, what declaration should you expect to see a lot of in old,pre-existing code? How were variables originally declared in Javascript?   ~~while~~ *~~also~~* ~~thinking about future use-cases (a skill employers will bear-hug you for)~~ |
| The Assignment  A short specific description of the assignment and tasks using bullet points that the student will need to do. | You will need to declare, and then update three different types of variables using what you’ve learned in this lesson. |

| Steps  Step-by-step instructions on what the student should do. | | | | | |
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| Step # | Step  Write each task, e.g. *Give a div with a class of “box0” a top margin of 20px.* | Hint  Write some text (and maybe a part of code if relevant) which would hint the student to figure out the correct step forward, e.g. *Use border: Xpx solid red.* | Instructions | | |
| 1 | Declare a variable. | * “Declaring” is when you create a box * Of the three ways you can declare a variable, only two are malleable/updateable, and one is no-longer favored … so of course you’ll see it in everyone’s code | * Declare three different variables, using the three different declarations you’ve learned. * Bonus Objective: name your variables something better than variableOne … because you will get along much better with your coworkers if they can quickly understand what’s in the box *just by reading* the box (ie customerFirstName).   *Live Code*: | | |
| 2 | Initialize your variables | * “Initializing” is when you give your variable a value … when you put something *inside* the box * Since “var” and “let” are updateable, these might store things like customer addresses and credit card information * Since “const” is more permanent, you may want to keep things like the ID numbers of Amazon warehouses in them * Double-Bonus Objective: try not to lose hours internally-considering the object-permanence of everything in the universe | * Initialize these variables and console.log to check that your values were successfully-stored * Bonus Objective: store a value in each declaration that embraces the strengths and limitations of that declaration   *Live Code*:  $ var warehouseEmployeeTotal = 73;  $ let warehouseManager = ;  $ const warehouseOj0peningDate = ; | | |
| 3 | Redefine your variables | * You do not need to re-use a declarative (like “let”) to put something new into your box:   variableOne = “something new”;  Instead of  **Let** variableOne = “something new”;   * If you *are* able to change all three declarations, then let me be the first to greet you Mr. Neo, sir … the year 1999 really was magical | * Try to re-declare each variable, just to see if you can   *Live Code*:  $ var warehouseEmployeeTotal = 73;  $ console.log(warehouseEmployeeTotal);  $  $ console.log(warehouseEmployeeTotal);  $ let warehouseManager = {“employee ID”: “SM364”};  $ console.log(warehouseManager);  $  $ console.log(warehouseManager);  $ const warehouseOpeningDate = “2008 8 29”;  $ console.log(warehouseOpeningDate);  $  $ console.log(warehouseOpeningDate); | | |
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