

Documentation for solving Task-1 and Task-2 on HTML and JAVASCRIPT

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Submitted By: Abdur Rahman

M. Sc. in Digital Media University of Bremen

Introduction:

I am following some tips to develop websites which I like to share with others as well

- Creating the content precisely.
- Writing own code.
- Checking website for errors.
- Developing for multiple browsers.
- Making website responsive.
- Colors are crucial.
- Consistency is the key.
- Navigation should be intuitive.
- Design is paramount.
- Exception is always attractive.

The tasks I got to solve it was interesting to familiar with new stuffs and using them in real world applications, the sources I used to solve the exercises all are enlisted with descriptions what I tried to use out of them.

Books on Java Script

The following two books helped me to understand the structure of the general functions, Synchronous and Asynchronous functions, where arguments have their applications, call back functions and their usages.

http://eloquentjavascript.net/Eloquent_JavaScript.pdf

http://javascript.info/

Literatures research

Here I have learnt about asynchronous performance, callback and closures.

http://carstenwindler.de/javascript/free-javascript-literature/

Handling lookup() function for catching user and property:

The following sources I have used to extract methods about how to use "look up()" function for handling arrays to find out the actual user, property and returning the results.

- https://www.w3schools.com/jsref/jsref find.asp
- https://coderwall.com/p/6e7rea/consider-lookup-tables-instead-of-switch-or-if-else
- http://www.nikola-breznjak.com/blog/javascript/converting-a-javascript-switch-statement-into-a-function-lookup/
- https://codereview.stackexchange.com/questions/25858/json-lookup-by-key

- http://www.codereadability.com/replacing-if-statements-with-object-lookups/
- $\underline{http://www.webdeveloper.com/forum/showthread.php?36932-Help-with-Javascript-Lookup-function}\\$
- https://stackoverflow.com/questions/6104757/how-to-create-javascript-function-lookup-object
- $\underline{https://www.toptal.com/javascript/javascript-prototypes-scopes-and-performance-what-you-need-to-know}\\$
- https://developer.salesforce.com/forums/?id=906F00000008mILIAY
- $\underline{http://type-exit.org/adventures-with-open-source-bi/2010/06/custom-database-lookups-using-javascript-and-firetodb/}$
- https://www.youtube.com/watch?v=gm5J pxDzcM
- https://www.youtube.com/watch?v=WR8TTkyOlF0&t=8s
- https://www.youtube.com/watch?v=NXX0aYtQGLg
- https://www.youtube.com/watch?v=FYe10oH89PE
- https://www.youtube.com/watch?v=ltPOucA0-sI
- https://www.youtube.com/watch?v=UUWmDxs-FxA

Handling lookup() function for error to throw unknown user and property:

The sources below stand for understanding error handling while a function understands what to accept and reject.

- https://www.w3schools.com/js/js errors.asp
- https://www.sitepoint.com/proper-error-handling-javascript/
- https://www.joyent.com/node-js/production/design/errors
- http://odetocode.com/blogs/scott/archive/2015/10/01/javascript-promises-and-error-handling.aspx
- http://www.techrepublic.com/blog/australian-technology/error-handling-in-javascript-rarely-done-often-needed/
- https://people.cs.pitt.edu/~mehmud/cs134/javascript7.html
- https://www.youtube.com/watch?v=cFTFtuEQ-10
- https://www.youtube.com/watch?v=79RjHaAYT-4

<u>Understanding Synchronous & Asynchronous function:</u>

Clearing the idea about Synchronous and Asynchronous function how do they work, their processing of variables and corelation to each other.

- $\underline{https://stackoverflow.com/questions/16336367/what-is-the-difference-between-synchronous-and-asynchronous-programming-in-node}$
- $\underline{http://blog.carbonfive.com/2015/01/29/composing-synchronous-and-asynchronous-functions-in-javascript/}$
- https://www.pluralsight.com/guides/front-end-javascript/introduction-to-asynchronous-javascript
- https://frontendmasters.com/courses/rethinking-async-js/synchronous-and-asynchronous-thunks/
- https://blog.risingstack.com/node-hero-async-programming-in-node-js/
- https://www.youtube.com/watch?v=jJM6o2EF54Y
- https://www.youtube.com/watch?v=YxWMxJONp7E
- https://www.youtube.com/watch?v=vUEi0M5VrLM

Understanding callback function:

Getting to know about the definition of call back, when we are going to deal with call back function which is passed as argument inside of another function, then how to retrieve the callback from argument to use .

- http://javascriptissexy.com/understand-javascript-callback-functions-and-use-them/
- http://recurial.com/programming/understanding-callback-functions-in-javascript/
- http://dreamerslab.com/blog/en/javascript-callbacks/
- https://developer.mozilla.org/en-US/docs/Mozilla/js-ctypes/Using_js-ctypes/Declaring_and_Using_Callbacks
- http://callbackhell.com/
- https://stackoverflow.com/questions/2190850/create-a-custom-callback-in-javascript
- http://cwbuecheler.com/web/tutorials/2013/javascript-callbacks/
- https://codeburst.io/javascript-what-the-heck-is-a-callback-aba4da2deced
- https://medium.freecodecamp.org/javascript-callbacks-explained-using-minions-da272f4d9bcd
- $\underline{https://medium.freecodecamp.org/understanding-asynchronous-javascript-callbacks-through-bousehold-chores-e3de9a1dbd04}$

- https://www.dashingd3js.com/lessons/javascript-callback-functions
- <a href="https://www.google.de/url?sa=t&rct=j&q=&esrc=s&source=web&cd=18&cad=rja&uact=8&ved=0ahUKEwjE2f27w5XVAhUCbVAKHcQiAjs4ChAWCFAwBw&url=https%3A%2F%2Fwww.sitepoint.com%2Fdemystifying-javascript-closures-callbacks-iifes%2F&usg=AFQjCNFfWzDvi4Nu5ZWCC3l5EO3kwGpfsQ
- https://medium.com/dailyjs/asynchronous-adventures-in-javascript-callbacks-39880f1b470e
- https://www.google.de/url? sa=t&rct=j&q=&esrc=s&source=web&cd=21&cad=rja&uact=8&ved=0ahUKEwi55bD4w5XVAh UQaFAKHcvfCHI4FBAWCCcwAA&url=https%3A%2F%2Fbrandonwamboldt.ca %2Fasynchronous-javascript-with-callbacks-1769%2F&usg=AFQjCNGpvMHZnFQH94dwVbcDWK4DtYoD0w
- https://www.shieldui.com/blogs/callback-functions-in-javascript
- https://houssein.me/javascript/2016/05/10/asynchronous-javascript-callbacks.html
- https://zellwk.com/blog/callbacks/
- http://www.jstips.co/en/javascript/passing-arguments-to-callback-functions/
- $\underline{https://www.pluralsight.com/guides/front-end-javascript/javascript-callbacks-variable-scope-problem \\$
- https://en.wikipedia.org/wiki/Callback (computer programming)
- http://fredkschott.com/post/2014/03/understanding-error-first-callbacks-in-node-js/
- https://www.google.de/url?
 sa=t&rct=j&q=&esrc=s&source=web&cd=54&cad=rja&uact=8&ved=0ahUKEwjateO6xJXVAhW
 SZIAKHW-KDVE4MhAWCDowAw&url=https%3A%2F%2Fadam.merrifield.ca
 %2F2016%2F06%2F28%2Fpassing-arguments-to-a-javascript-callback-function
 %2F&usg=AFQjCNHBscAsD5VaRNo-Og6jcZonqBstUA
- https://closebrace.com/tutorials/2017-01-17/understanding-javascript-callbacks
- https://www.youtube.com/watch?v=qN0dkXj7jc0
- https://www.dashingd3js.com/lessons/javascript-callback-functions
- https://www.youtube.com/watch?v=CY6spvVdFBo
- https://www.youtube.com/watch?v=QqiNn3GfTMc
- https://www.youtube.com/watch?v=ZuNP7jNADCQ
- https://frontendmasters.com/courses/js-fundamentals-to-functional/higher-order-functions-callbacks/
- https://www.youtube.com/watch?v=GxyFlXbhdsY

Callback error and result handling:

After learning callback then output comes as result or error to handle, the mentioned sources were effective to learn.

- https://stackoverflow.com/questions/38853167/javascript-callback-error-handling
- https://docs.microsoft.com/en-us/scripting/javascript/reference/throw-statement-javascript
- https://hackernoon.com/promises-and-error-handling-4a11af37cb0e
- http://2ality.com/2016/03/promise-rejections-vs-exceptions.html
- https://ruben.verborgh.org/blog/2012/12/31/asynchronous-error-handling-in-javascript/
- https://github.com/caolan/async/issues/1279
- https://www.joyent.com/node-js/production/design/errors

Discussion:

As a web developer my conception is the more we engage ourselves with new ideas and creativity the more we become the owner of special characteristics. We try to meet success, all efforts get paid off after we meet the desired output what just happened to me after solving the tasks successfully.

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