**Javascript assignment week 4 questions**

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*Why is it useful to encapsulate JavaScript code in a module as described in chapter 10 of Eloquent JavaScript?*

One benefit for using modules is that it provides an organized structure for your code; this makes it easier to understand for both the programmer and people who aren’t familiar to it yet. Another advantage modules give is decoupling: it provides an interface for external code so that other modules can benefit from updated module versions without having to change themselves.

*Describe what asynchronous programming is and how it differs from the style of programming you used in C and Python.*

In Python and C we made use of simple synchronous programming, where each task is performed continuously and one at a time. All tasks run in an order which assumes that the previously performed code has finished without any errors and the output of a function is immediately passed on to the next. In Javascript however you can make use of asynchronous programming (for example using the setTimeout function) which allows your code to perform multiple tasks at a time and to stop or start executing until a certain call is returned.

Source: http://eloquentjavascript.net/20\_node.html

*Is JSON valid JavaScript? Describe the differences between JavaScript and JSON.*

JSON is a ‘language agnostic data format’ used for portable representation of structured data. Its format allows you to convert object types to strings and the other way around. However, due differences in notation JSON declaration is valid JavaScript code but not all JavaScript declaration is valid JSON.

Source: http://stackoverflow.com/questions/3975859/what-are-the-differences-between-json-and-javascript-object