

Internet technologies

Task List No. 5

1. Prepare the following two scripts in JavaScript, which enable mode "strict":

- will correct execution,
- cause an error while checking off this mode leads to correctly not to executing the script (enter at least "three causes of" mistakes).

Scripts should contain at least 20 lines. Determine too, in which case the script in the "strict" can perform faster than without this mode.

[1p]

2. Create a hierarchy of objects: Vehicle, Car, Truck, which is the object of Vehicle the base for the other (think about how to do that was abstract). Each vehicles Car and Truck should have characteristics:

- currentPosition,
- fuelConsumption,
- tankStatus,

and methods

- move (x, y)
- loadFuel (fuelAmount)

wherein the method should reduce the move condition Baku in accordance with the value of properties Justice determining fuel consumption. Prepare the structure of objects that execute these demands, and the code that uses this structure. Additionally, you should use the mechanism of getters and setters. Is the behavior differs from that in C # or Java?

[2p]

3. From the <http://www.dofactory.com/javascript/design-patterns> choose two behavioral patterns, understand the examples described and based on them to prepare the other two, their own that need to be explained.

[1p]

4. Prepare an HTML document with the content `<div id = "content"> </ div>`. From the residue level development tools browser:

- Add the `<div id = "menu"> </ div>` and `<div id = "sidebar"> </ div>`, the then after creating order in the document tree should be: *menu*, *content*, *sidebar*.
- Use CSS to set the border in the following colors: the *menu*
 - Blue for *content* - yellow, for *sidebar* - green.

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- Do div-menu and add 3 links: *Red*, *Black*, *Brown*. After clicking RE-lected presence in the *content* should appear square 100 by 100 pixels the background color specified by the link name and the name of the link should sidebar to add to the history of clicked links.

[2p]

5. Prepare the form of fields: account number, SSN, date of birth and e-mail. For Form should implement appropriate validation boxes, which should be run after leaving the field after editing, or when you try to send data from the form mason. The whole should be implemented using *unobtrusive JavaScript*.

[2p]

6. See iterators and generators:

https://developer.mozilla.org/en-US/docs/Web/JavaScript/Guide/Iterators_and_generators. Provide both approaches and think that will be better to receive consecutive primes. Implement the chosen approach.

[2p]

All documents HTML / XHTML should pass a check in the application on <http://validator.w3.org/>, and CSS - the application page <http://jigsaw.w3.org/css-validator/>.

Paul Rajba