

Exercise 9: Web - Front-end and JavaScript

Practice and application of client functionality

Bish-Bosh

Bish-Bosh lists all numbers between 1 and 100, but some exceptions: If the number is evenly divisible by 3, '**Bish**' is listed instead of the number. If the number is evenly divisible by 4, '**Bosh**' is listed instead of the number. If the number is evenly divisible by both 3 and 4, "**Bish-Bosh**" is written instead of the number.

Example:

1, 2, **Bish, Bosh**, 5, **Bish**, 7, **Bosh, Bish**, 10, 11, **Bish-Bosh**, 13, 14, **Bish** [...]

A first implementation

This implementation makes no demands on other front-ends, only that the javascript works and the application does as it should - i.e. executes according to the example above. To test if something is evenly divisible, you check if the remainder is zero upon division (hint: the modulus operator %).

In this implementation, it is fine to write the javascript within <script> tags directly in the HTML file and print it out to the console.

A second implementation: Bish-Bosh 2.0 Now you

will rewrite **Bish-Bosh** with a visual interface and presentation on an HTML page. You must also let a user set the input data, ie: Which number is Bish (previously 3), which number is Bosh (previously 4) and how far the loop should go (previously 100), no negative values are allowed.

- Variables must be used for:
 - Loop number (i.e. where the loop should end)
 - First division number (what is to be replaced with Bish)
 - Second division number (what is to be replaced with Bosh)
- A web-based UI that includes:
 - Input field for the above variables
 - A header (Bish-Bosh 2.0)
 - A footer with your name and copyright
 - A text explaining 'Bish-Bosh' and for what purpose you created the page.
 - A presentation of the speeches
- Separate files:
 - index.html
 - style.css
 - bishbosh.js

To update the actual content of the page, you can find good material here: http://www.w3schools.com/js/js_intro.asp

As we learned in other course sections, I want you to keep your script in a separate file and then reference it from HTML documents.

No script references or similar in the HTML document such as onclick!

ToDo list

The exercise consists of creating an application that creates a shopping list.

The user must be able to enter various things to be purchased which are then added to the list.

1. Create an html page where the user has the opportunity to enter an item to be added to the list in an input field.
2. Create a button that adds the item to the list.
3. Once the item has been added, you must be able to mark the item as purchased by clicking on the item.

The text will then be crossed out and the element's background color will change.

4. It must be possible to undo that the item was added.

The text then returns from crossed out to normal and the element regains its original color.

5. There must also be an option to remove the item completely from the list.

Feel free to use Bootstrap and your CSS skills to style the application, experiment!

The HTML, CSS and JavaScript files must be in different documents!

Extra functionality (completely optional)

Save the shopping list persistently

When you create a new list, you can choose an appearance or similar

Mark/Unmark all goods

Manage multiple shopping lists

Move items between lists

It is of course possible to expand the application for additional functionality.

Extra

Extras (Optional)

Several exercises:

<https://www.w3resource.com/javascript-exercises/> <https://>

javascript30.com/ <https://>

open.kattis.com/ <https://>

practity.com/582-2/ <https://edabit.com/>

challenges/javascript#! <https://exercism.io/tracks/javascript/>

[exercises](https://exercism.io/tracks/javascript/exercises)

Choose according to your own level! But be sure to challenge yourselves!

For those who have already worked with Javascript, feel free to start looking at one of the front-end frameworks such as React, Angular or Vue. But only recommend it for those who already feel they have mastered the basics of Javascript.

Good luck!