JS Modules

**DEADLINE:** 30/10/2018

## FOLDER STRUCTURE

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| --- | --- |
| FL\_9\_11\_homework\_js-modules/\*  homework/\*  src/\*  js/\*  calculating-module.js \*  interface-module.js \*  output-module.js \*  styles/\*  styles.css \*  index.html \*  dist/\*  bundle.js \*  styles.css \*  index.html \*  package.json \*  webpack.config.js \*  .eslintrc.js \* | \* ­­­- required |

**TASK**

Your task is to create a simple calculator that performs selected arithmetic operations on numbers and outputs result on the page.

The program should contain next modules:

* Module for calculating basic mathematical operations: addition, subtraction, multiplication, and division;
* Interface module for main logic; combines basic functions and work with the state;
* Module for output result on the page;

All work with DOM should be done there - operations keys, trigger keys (clear and equals)) and keys for numeric input;

The calculator should be able to log a syntax error when a wrong calculation (Some basic validation should be added);

To configure a build use [webpack](https://webpack.js.org/). Install packages listed in *package.json* file, then run $**npm install** command. Add *webpack.config.js*, it should create *bundle.js*, from all .js files listed in src/js folder and minify them.

Additional task(optional):

* Add other mathematical functions (ln, cos, log, rad, x^ …..) (up to you).
* Install other packages and plugins to try webpack features.

## PLEASE NOTE

* Inside of index.html in dist/ folder should be imported only one JS file – bundle.js
* index.html should contain only root/wrap element
* Styles should be imported into the entry .js file
* Use EcmaScript 6 modules to create the program

## BEFORE SUBMITTING

* Check all folder names, file names and functionality
* Check code validity
* Check all function names, variables, clean code, delete all unnecessary comments
* Check all errors in the console and fix it. Use ESLint file included into homework

## SUBMIT

* The folder should be uploaded to GitHub repository 'fl-{n}' into master branch

## USEFUL LINKS

* <http://exploringjs.com/es6/ch_modules.html#sec_basics-of-es6-modules>

* <http://2ality.com/2014/09/es6-modules-final.html>
* <https://www.sitepoint.com/understanding-es6-modules/>
* <https://webpack.js.org/>