

Intro to JS

DEADLINE: 27.04.2022

FOLDER STRUCTURE

FL19_HW7/*

└─ task/

└─ FL19_HW7.docx

└─ homework/*

└─ js/*

└─ task1.js*

└─ task2.js*

└─ task1.html*

└─ task2.html*

└─ .eslintrc.js*

* – required
● – not needed

TASK

Task 1. You need to find all numbers between the first and second numbers.

Workflow:

1. User inputs the first number. (Use “prompt” function).
2. User inputs second number. (Use “prompt” function).
3. You need to validate the input data: two values should be numbers, the first number can't be bigger than the second.
4. If input data is not valid, you should show message “Invalid input data”. (Use “alert” function).
5. You need to find all numbers between the first and second numbers
6. Show message: (example). Use “alert” function

Example:

First number: 5

Second number: 10

Numbers between : 6 7 8 9

Task 2. Your task is to write a simple simulator of casino roulette.

Requirements:

Step 1:

- Create a prompt window (use `confirm()`). Show the message inside the window 'Do you want to play a game?'.
- In case the user clicks the 'Cancel' button, the message 'You did not become a billionaire, but can.' should be shown (use `alert()`).

Step 2:

- If user clicked 'Ok' – start a game: randomly (use `Math.random()`) choose an integer number in range $[0; 8]$ (including 0 and 8) and ask user to enter a number of pocket on which the ball could land (use `prompt()`).
- User has 3 attempts to guess a number.
- If user guessed the number on which ball landed, on 1-st attempt prize is 100\$ (maximum prize for current numbers range), 2-nd attempt – 50\$, 3-rd attempt – 25\$.
- If user did not guess a number show the message 'Thank you for your participation. Your prize is: ... \$' (Use `alert()`) and ask if he wants to play again (use `confirm()`).

Step 3:

- If user did guess - Show the message 'Congratulation, you won! Your prize is: ... \$. Do you want to continue?'.
- If user does not want to continue – show the message 'Thank you for your participation. Your prize is: ... \$' (Use `alert()`) and ask if he wants to play again (use `confirm()`).
- If user does want to continue, make number range bigger at 4 as the previous one (for example $[0; 8] \rightarrow [0; 12]$), and two times bigger maximum prize (for example on 1-st attempt prize will be 200\$, 2-nd attempt – 100\$, 3-rd attempt – 50\$). Prize must be added to the previous one and number of attempts should be set to 3 (user should have 3 attempts to guess a number for each numbers range)
- Each time you ask user to enter a number you should show him a range of cells, how much attempts he has left, his total prize and possible prize on current attempt. See Figure 1:
- All these stuffs should be repeated until user lose or decide to quit

Choose a roulette pocket number from 0 to 8

Attempts left: 3

Total prize: 0\$

Possible prize on current attempt: 100\$

OK

Cancel

Figure 1 – The prompt window

BEFORE SUBMIT

- Read requirements and compare to your homework result
- Format the code (remove unnecessary lines of code)
- Remove all unnecessary files that you might have included by mistake
- Install **eslint** to check your code (*npm install -g eslint*)
- Open a terminal(or cmd)
- Go to 'homework' folder
- Run **eslint** (i.e. *eslint ./js/task1.js*), code should be without 'errors'
- Please note, that one js file should contain one task

SUBMIT

- The folder should be uploaded to GitLab repository "**FL-19**" into **main** branch

USEFUL LINKS

- <https://developer.mozilla.org/en-US/docs/Web/API/Window/prompt>
- <https://developer.mozilla.org/en-US/docs/Web/API/Window/alert>
- https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/parseInt
- https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/parseFloat
- https://developer.mozilla.org/uk/docs/Web/JavaScript/Reference/Global_Objects/Math
- https://developer.mozilla.org/uk/docs/Web/JavaScript/Reference/Global_Objects/String