Lab: DOM Events

Problems for in-class lab for the "JavaScript Advanced" course @ SoftUni". Submit your solutions in the SoftUni judge system at https://judge.softuni.bg/Contests/2762/DOM-Manipulation-and-Events-Lab

Environment Specifics

Please, be aware that every JS environment may **behave differently** when executing code. Certain things that work in the browser are not supported in **Node.js**, which is the environment used by **Judge**.

The following actions are **NOT** supported:

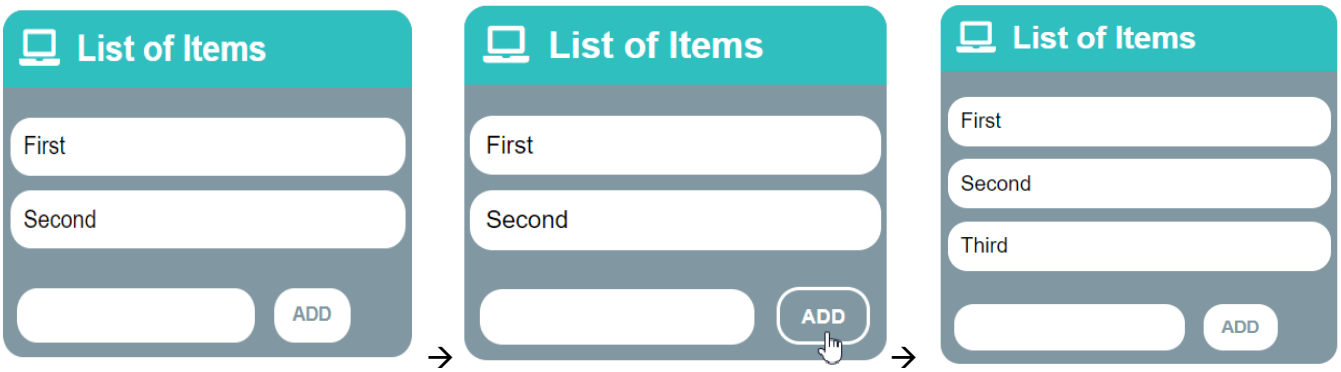
- `.forEach()` with **NodeList** (returned by `querySelector()` and `querySelectorAll()`)
- `.forEach()` with **HTMLCollection** (returned by `getElementsByClassName()` and `element.children`)
- Using the **spread-operator** (`...`) to convert a **NodeList** into an array
- `append()` in Judge (use only `appendChild()`)
- `prepend()`
- Always turn the collection into a **JS array** (forEach, forOf, et.)

If you want to perform these operations, you may use `Array.from()` to first convert the collection into an array.

1. List of Items

Write a function that **reads** the text inside an input field and **appends** the specified text to a list inside an HTML page.

Examples



2. Delete from Table

Write a program that **takes** an `email` from an **input field** and **deletes** the matching row from a table.

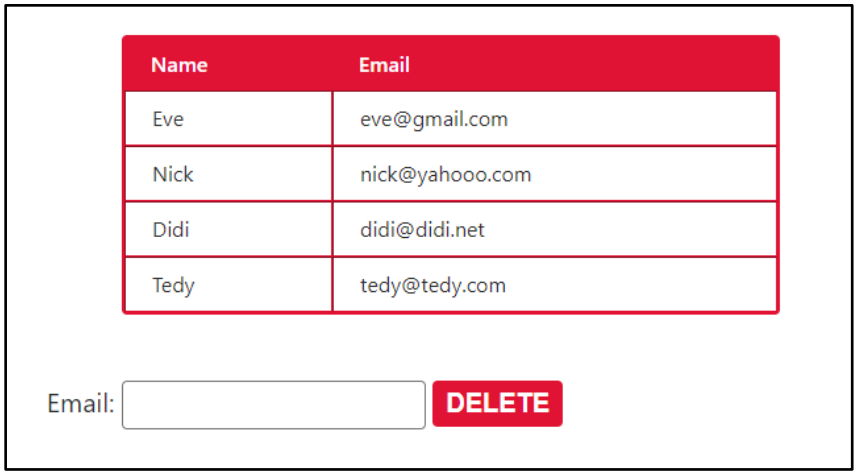
- If entry is found, the **textContent** in the element with **id="result"** must be set to **"Deleted."**
- Otherwise, an **error** should be displayed in a ** ** with **id="result"**. The error should be **"Not found."**

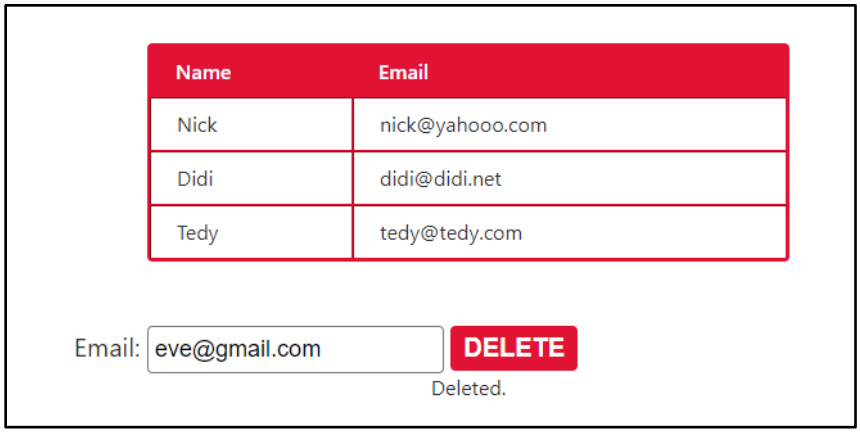
Submit **only** the **`deleteByEmail()`** function in Judge.

Input/Output

There will be no input/output, your program should instead **modify** the DOM of the given HTML document.

Examples

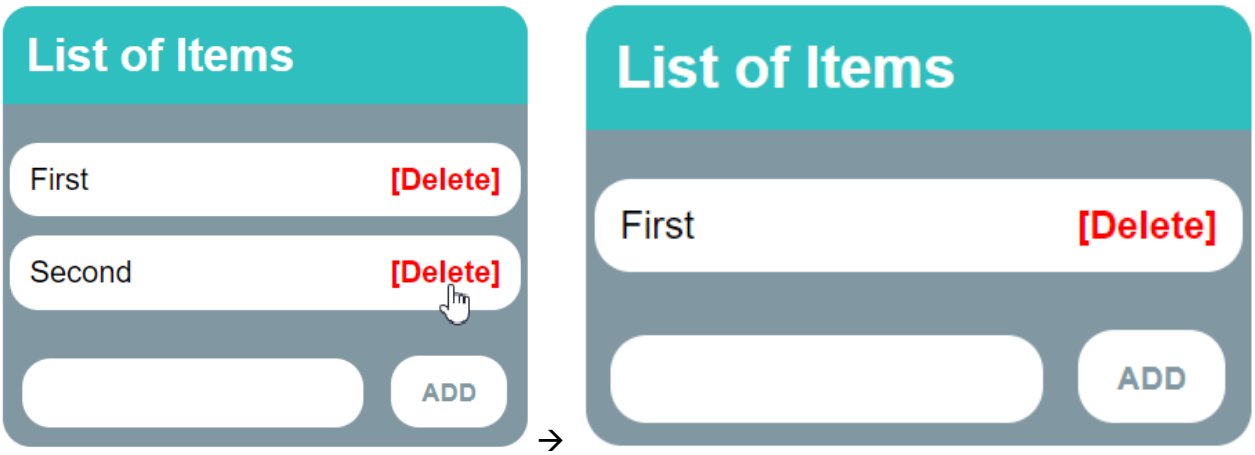




3. Add / Delete

Extend the previous problem to display **a `[Delete]` link** after each list item. **Clicking** it, should **delete** the item with no confirmation. You have to add **href="#"** to the link element.

Examples



4. Mouse Gradient

Write a program that **detects** and **displays** how far along a gradient the user has **moved** their **mouse**. The result should be **rounded down** and displayed as a **percentage** inside the **`<div>`** with id "**`result`**".

Submit **only** the **`attachGradientEvents()`** function in Judge.

Input/Output

There will be no input/output, your program should instead **modify** the DOM of the given HTML document.

Examples

5. Highlight Active

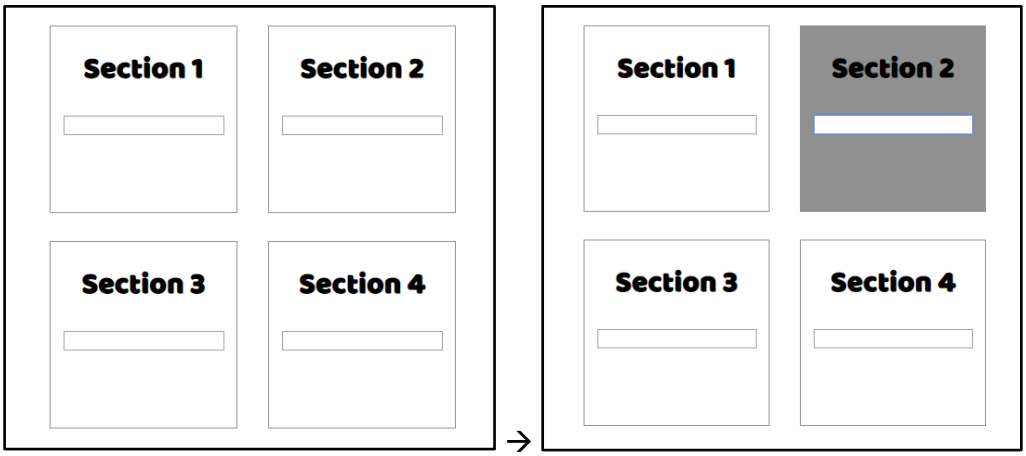
Write a `function` that **highlights** the **currently active** section of a document. There will be **multiple** divs with **input fields** inside them. Set the `class` of the `div` that contains the **currently focused** input field to "`focused`". When the focus is lost (**blurred**), **remove the class** from the element.

Submit only the `focused()` function in Judge.

Input/Output

There will be no input/output, your program should instead **modify** the DOM of the given HTML document.

Example



6. Dynamic Validation

Write a `function` that **dynamically validates** an **email** input field when it is **changed**. If the input is **invalid**, apply the style "`error`". Do **not** validate on every keystroke, as it is annoying for the user, consider only **change** events.

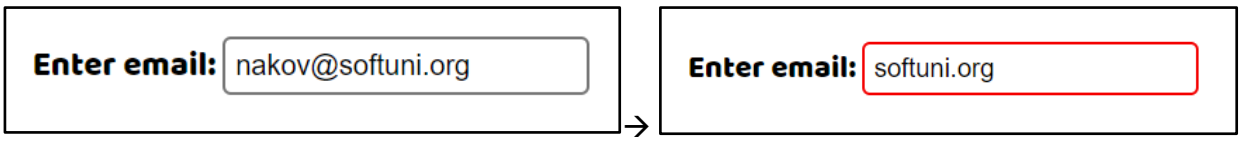
A valid email is considered to be in the format: `<name>@<domain>.<extension>`

Only **lowercase Latin characters** are allowed for any of the parts of the email. If the input is valid, **clear** the style. Submit **only** the `validate()` function in Judge.

Input/Output

There will be no input/output, your program should instead **modify** the DOM of the given HTML document.

Example



7. Shopping Cart

You will be given some products that you should be able to add to your cart. Each product will have a **`name`**, **`picture`** and **`price`**.

When the **`"Add"`** button is clicked, append the current product to the **`textarea`** in the following format: **`"Added {name} for {money} to the cart.\n"`**. The price must be fixed to the second digit.

When the button **`"Checkout"`** is clicked, calculate the **total money** that you need to pay for the products that are currently in your cart. Append the result to the **`textarea`** in the following format:

`"You bought {list} for {totalPrice}."`

The list should contain only the **unique products**, separated by **`", "`**. The total price should be rounded to the second decimal point.

Also, after clicking over "**`Checkout`**" and every from above is done you should **disable all buttons**. (You **can't** add products or checkout again, if once the checkout button is clicked).

Examples