Exercises: jQuery

Problems for exercises and homework for the "JavaScript Advanced" course @ SoftUni. Submit your solutions in the SoftUni judge system at https://judge.softuni.bg/Contests/1547.

1. Text from List

A HTML page holding a **list** of items and an **[Extract Text]** button is given. Implement the **extractText** function which will be called when the button's **onClick** event is fired.
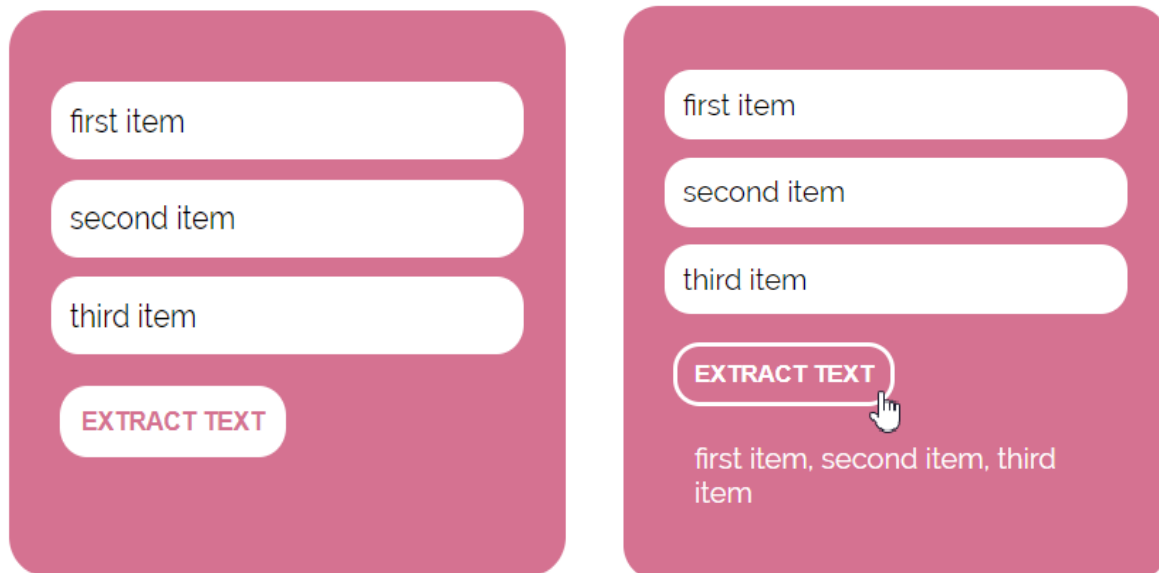
HTML and JavaScript Code

You are given the following **HTML** code:

text.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Text from List</title>
    <script src="https://code.jquery.com/jquery-3.1.1.min.js" integrity="sha256-hVVnYaiADRTO2PzUGmuLJr8BLUSjGIZsDYGmIJLv2b8="  crossorigin="anonymous"></script>
    <script src="extractText.js"></script>
</head>
<body>
<article>
    <ul id="items">
        <li>first item</li>
        <li>second item</li>
        <li>third item</li>
    </ul>
    <button onclick="extractText()">
        Extract Text
    </button>
    <div id="result"></div>
</article>
</body>
</html>
```

It comes together with the following **JavaScript** code:

extract-text.js

```javascript
function extractText() {
    // TODO
}
```

Screenshots

2. Search in List

An HTML page holds a **list** of towns, a **search** box and a **[Search]** button. Implement the **search** function to **bold** the items from the list which include the text from the **search** box. Also print the amount of items the current search **matches** in the format **"<matches> matches found."**

HTML and JavaScript Code

You are given the following **HTML** code:

<table>
<tr><th>list.html</th></tr>
</table>

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Search in List</title>
    <script src="https://code.jquery.com/jquery-3.1.1.min.js" integrity="sha256-hVVnYaiADRTO2PzUGmuLJr8BLUSjGIZsDYGmIJLv2b8="  crossorigin="anonymous"></script>
    <script src="search.js"></script>
    <link rel="stylesheet" rel="list.css">
</head>
<body>
<article>
<ul id="towns">
    <li>Sofia</li>
    <li>Pleven</li>
    <li>Varna</li>
    <li>Plovdiv</li>
</ul>
<input type="text" id="searchText" />
<button onclick="search()">Search</button>
<div id="result"></div>
</article>
</body>
</html>
```
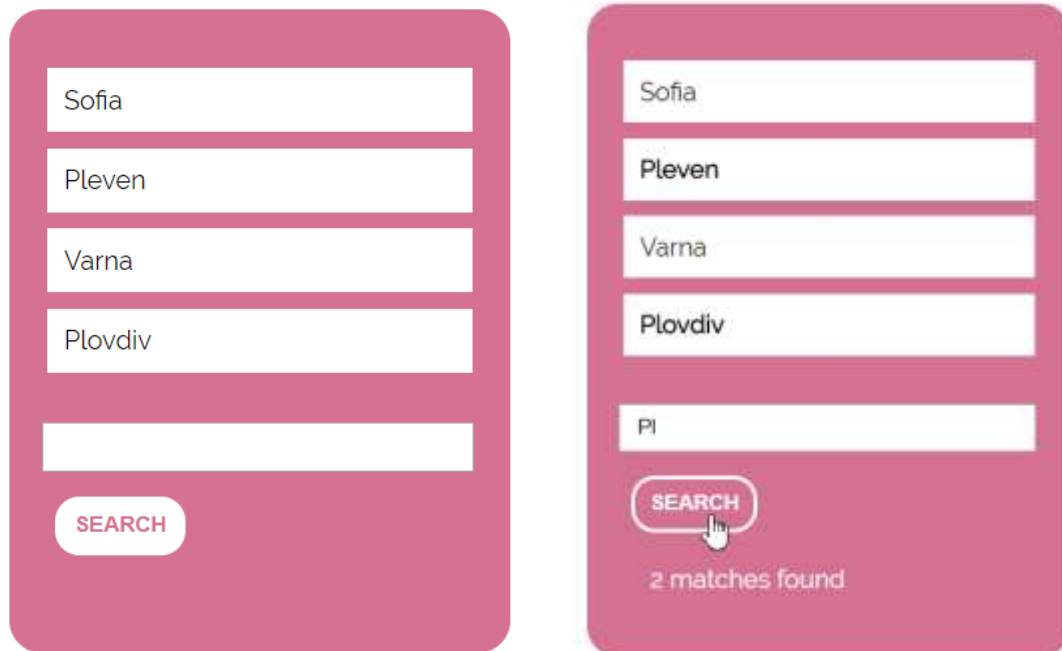
It comes together with the following **JavaScript** code:

search.js

```
function search() {
    // TODO
}
```

Screenshots

3. Link Buttons

You are given HTML holding some buttons. Implement the **attachEvents** function which should attach **click** events on the **anchor elements**. When a **<a>** is clicked, you should **add** a "**selected**" **class** to him and the same time remove all others "selected" class, if any.

Note: <u>There can be only 1 <a> element with "selected" class.</u>

HTML, CSS and JavaScript Code

You are given the following **HTML** code:

buttons.html

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Title</title>
    <link rel="stylesheet" href="link-buttons.css" />
    <script src="https://code.jquery.com/jquery-3.1.1.min.js"></script>
    <script src="link-buttons.js"></script>
</head>
<body onload="attachEvents()">
    <a class="button">Sofia</a>
    <a class="button">Plovdiv</a>
    <a class="button">Varna</a>
```

```
</body>
</html>
```

It comes with this **CSS**:

<div align="center">

link-buttons.css

</div>

```css
a.button {
    border: 1px solid #CCC;
    background: #EEE;
    padding: 5px 10px;
    border-radius: 5px;
    color: #333;
    text-decoration: none;
    display: inline-block;
    margin: 5px;
}

a.button.selected {
    color: #111;
    font-weight: bold;
    border: 1px solid #AAA;
    background: #BBB;
}

a.button.selected::before {
    content: "\2713\20\20";
}

a:hover {
    cursor: pointer;
}
```
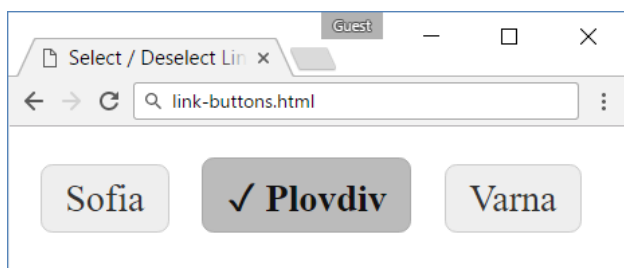
and the following **JavaScript** code:

<div align="center">

link-buttons.js

</div>

```javascript
function attachEvents() {
    // TODO
}
```

Screenshots

Hints

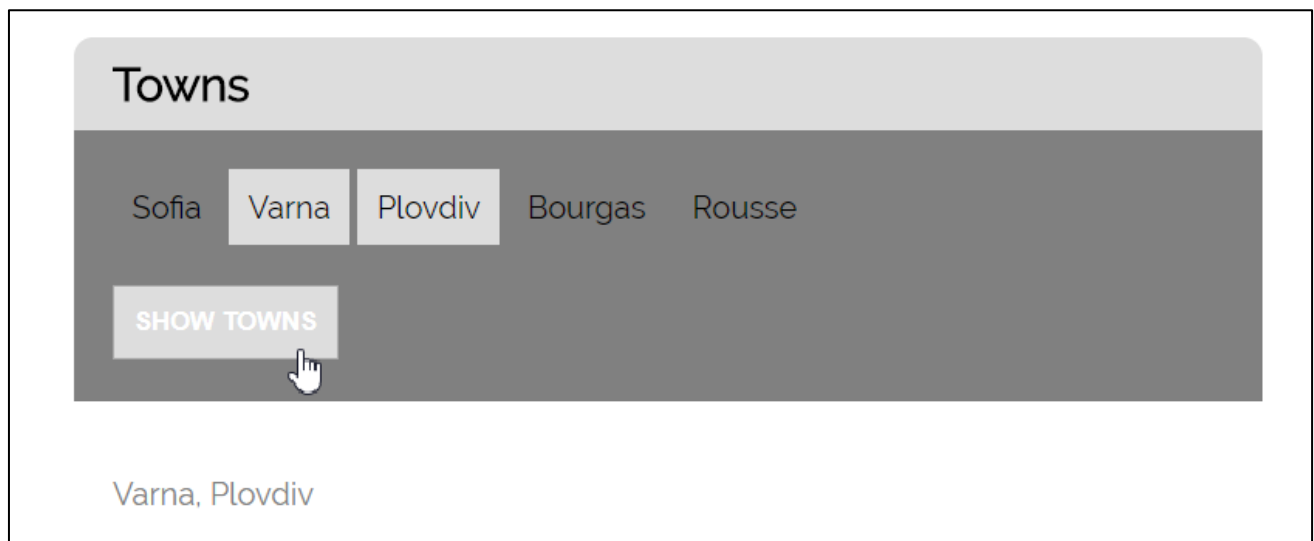- Use the **attachEventListener** function.
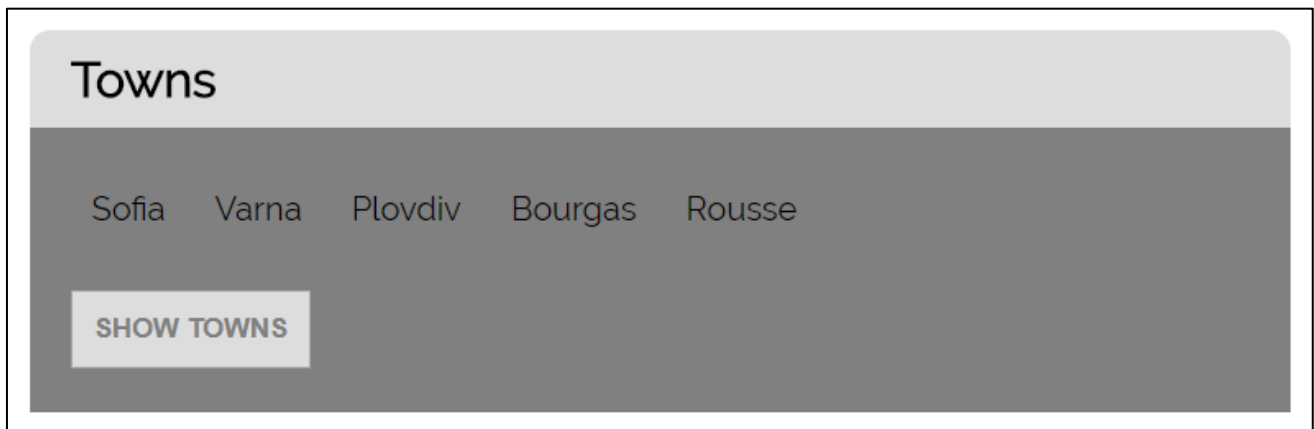
4. Selectable Towns

Create an HTML page which is listing **towns**. A town should be selectable. Clicking on a town should **select/deselect** it, a selected town should have the `data-selected` attribute added to it and its background color should be changed to **#DDD**. Also create a button **[Show Towns]** that prints the selected towns joined with a **", "**.

You are given the **HTML** and **CSS** in the **resources**. It comes together with the following **JavaScript** code:

select-towns.js

```
function attachEvents() {
    // TODO
}
```

Screenshots

5. Countries Table

You are given and HTML table holding **countries** and their **capitals**. You need to implement a **[Create]** link to create a new country and for each existing country implement **[Up]**, **[Down]** and **[Delete]** links to manipulate its position in the table.

The table needs to have the following entries when it's initialized (**add them when your functions starts**):

Bulgaria, Sofia

Germany, Berlin

Russia, Moscow

HTML and JavaScript Code

You are given the following **HTML** code:

countries.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Countries Table</title>
    <link rel="stylesheet" href="styles.css">
    <script src="https://code.jquery.com/jquery-3.1.1.min.js"></script>
    <script src="initialize-table.js"></script>
</head>
<body>
<table id="countriesTable">
    <tr>
        <th>Country</th>
        <th>Capital</th>
        <th>Action</th>
    </tr>
    <tr>
        <td><input type="text" id="newCountryText" /></td>
        <td><input type="text" id="newCapitalText" /></td>
        <td><a href="#" id="createLink">[Create]</a></td>
    </tr>
</table>
<script>$(() => initializeTable())</script>
</body>
</html>
```

It comes together with the following **JavaScript** code:

initialize-table.js

```javascript
function initializeTable() {
    // TODO
}
```

Screenshots

Country	Capital	Action
Poland	Warsaw	[Create]
Bulgaria	Sofia	[Down] [Delete]
Germany	Berlin	[Up] [Down] [Delete]
Russia	Moscow	[Up] [Delete]