

Lab: 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/329>.

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

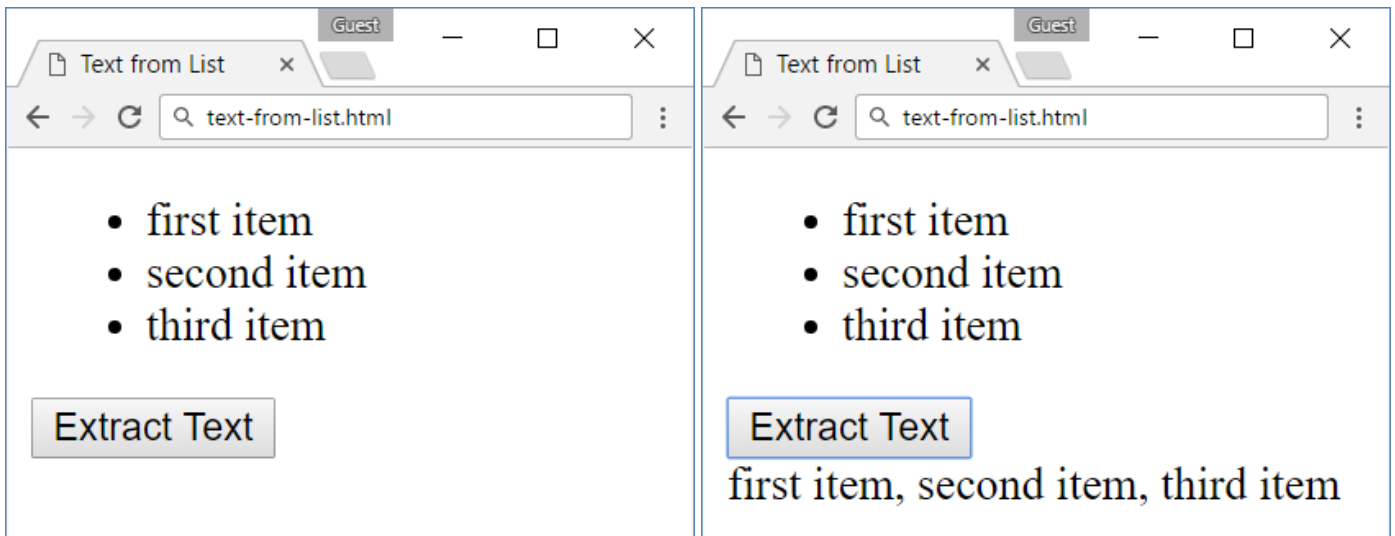
You are given the following **HTML** code:

text.html
<pre><!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- hVVnYaiADRT02PzUGmuLJr8BLUSjGIZsDYGmIJLv2b8=" crossorigin="anonymous"></script> <script src="extractText.js"></script> </head> <body> <ul id="items"> first item second item third item <button onclick="extractText()"> Extract Text</button> <div id="result"></div> </body> </html></pre>

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

extract-text.js
<pre>function extractText() { // TODO }</pre>

Screenshot



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:

```
list.html

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Search in List</title>
  <script src="https://code.jquery.com/jquery-3.1.1.min.js" integrity="sha256-
hVWnYaiADRT02PzUGmuLJr8BLUSjGIZsDYGmIJLv2b8=" crossorigin="anonymous"></script>
  <script src="search.js"></script>
</head>
<body>
<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>
</body>
</html>
```

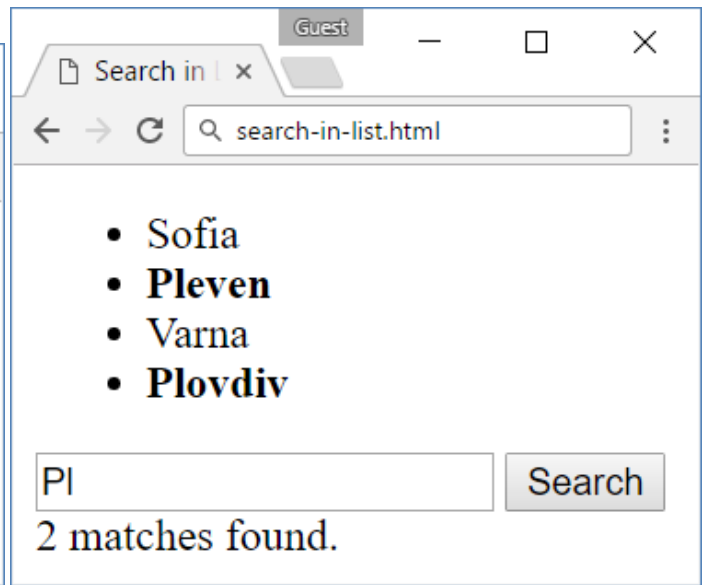
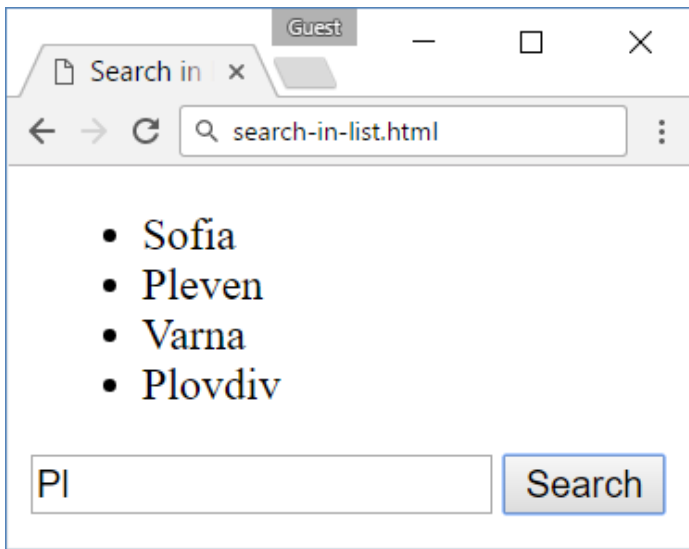
It comes together with the following **JavaScript** code:

```
search.js

function search() {
```

```
} // TODO
```

Screenshots



3. Countries Table

You are given an 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

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Countries Table</title>
  <style>
    td, th { background: #DDD; padding: 5px 10px }
    input[type='text'] { width: 60px }
  </style>
  <script src="https://code.jquery.com/jquery-3.1.1.min.js" integrity="sha256-
hVVnYaiADRT02PzUGmuLJr8BLUSjGIZsDYGMILv2b8=" crossorigin="anonymous"></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

```

function initializeTable() {
  // TODO
}

```

Screenshots

The screenshot shows a web browser window with the title 'Countries'. The address bar shows 'countries.html'. The table displayed is as follows:

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

4. Link Buttons

You are given HTML holding some buttons. Implement the **attachEvents** function which should attach **click** events on the buttons. When a button is **clicked** it should **remove** the **class="selected"** attribute from the button that currently holds it and **add it to its own attributes**.

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**:

link-buttons.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\2020\2020";
}

a:hover {
  cursor: pointer;
}

```

and the following **JavaScript** code:

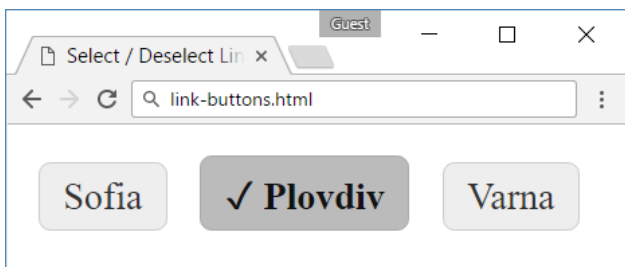
link-buttons.js

```

function attachEvents() {
  // TODO
}

```

Screenshots



Hints

- Use the `attachEventListener` function.

5. Selectable Towns

Create an HTML page 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 text "**Selected towns:** " followed by all selected towns joined with a ", ".

HTML and JavaScript Code

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

towns.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Selectable Towns</title>
  <style>
    li {
      display: inline-block;
      cursor: pointer;
      padding: 10px;
    }
    ul { padding:0; }
  </style>
  <script src="https://code.jquery.com/jquery-3.1.1.min.js"></script>
  <script src="select-towns.js"></script>
</head>
<body>
<h2>Towns</h2>
<ul id="items">
  <li>Sofia</li>
  <li>Varna</li>
  <li>Plovdiv</li>
  <li>Bourgas</li>
  <li>Rousse</li>
</ul>
<button id="showTownsButton">Show Towns</button>
<div id="selectedTowns"></div>
<script>$(attachEvents())</script>
</body>
</html>
```

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

select-towns.js

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

Screenshots

