

Lab: Intro to jQuery

1. Text from a 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

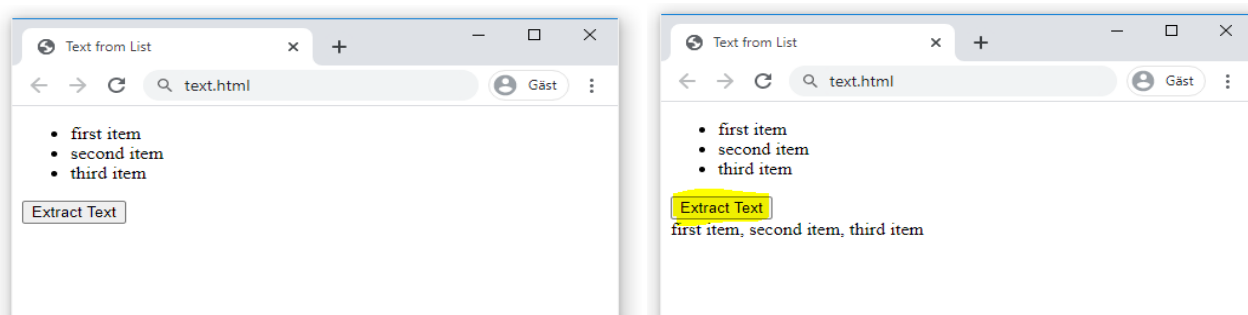
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Text from List</title>
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js">
</script>
  <script src="extractText.js"></script>
</head>
<body>
  <ul id="items">
    <li>first item</li>
    <li>second item</li>
    <li>third item</li>
  </ul>
  <button onclick="extractText()">
Extract Text</button>
  <div id="result"></div>
</body>
</html>
```

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

```
extract-text.js

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

Screenshot



2. Search in a 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://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js">
</script>

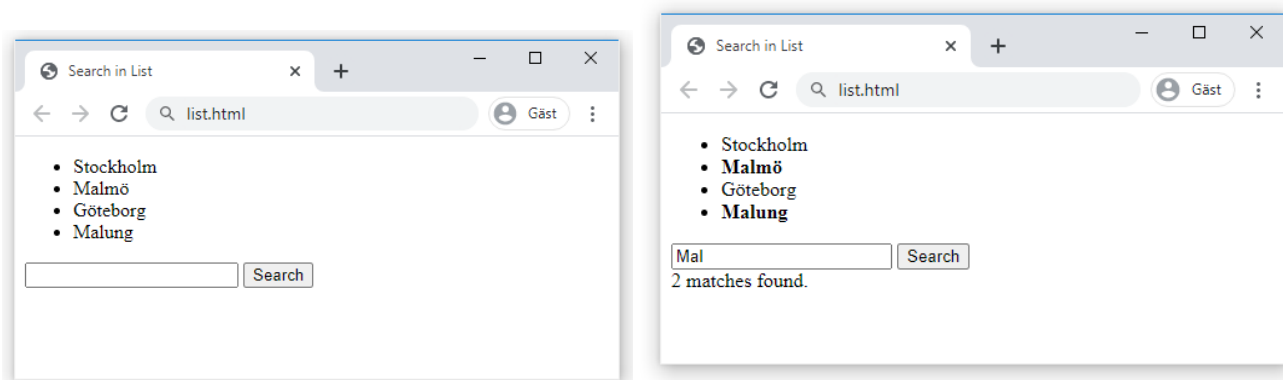
  <script src="search.js"></script>
</head>
<body>
<ul id="towns">
  <li>Stockholm</li>
  <li>Malmö</li>
  <li>Göteborg</li>
  <li>Malung</li>
</ul>
<input type="text" id="searchText" />
<button onclick="search()">Search</button>
<div id="result"></div>
</body>
</html>
```

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

```
search.js

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

Screenshots



3. Table Countries

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.

HTML and JavaScript Code

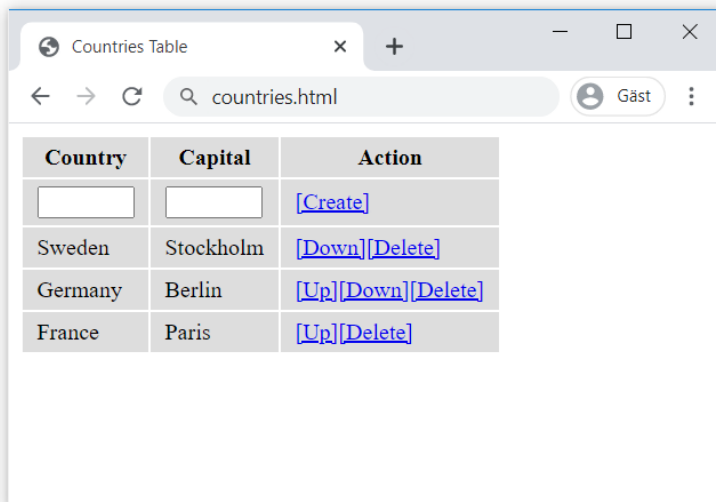
You are given the following **HTML** code:

countries.html
<pre><!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://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.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>[Create]</td> </tr> </table> <script>\$(() => initializeTable())</script> </body> </html></pre>

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

initialize-table.js
<pre>function initializeTable() { // TODO }</pre>

Screenshots



4. Buttons Link

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://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
  <script src="link-buttons.js"></script>
</head>
<body onload="attachEvents()">
  <a class="button">Stockholm</a>
  <a class="button">Malmö</a>
  <a class="button">Göteborg</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\20\20";
}

a:hover {
cursor: pointer;
}

```

and the following **JavaScript** code:

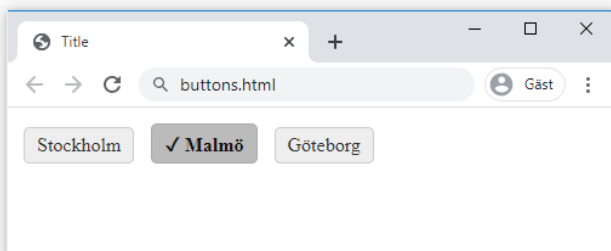
link-buttons.js

```

function attachEvents() {
  // TODO
}

```

Screenshots



Hints

- Use the **attachEventListener** function.

5. Selectable Cities

Create an HTML page listing **Cities**, a city should be selectable. Clicking on a town should **select/deselect** it, a selected city should have the **data-selected** attribute added to it and its background color should be changed to **#DDD**. Also create a button [**Show Cities**] that prints the text "**Selected cities:** " 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 Cities</title>
  <style>
    li {
      display: inline-block;
      cursor: pointer;
      padding: 10px;
    }
    ul { padding:0; }
  </style>
  <script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
  <script src="select-towns.js"></script>
</head>
<body>
<h2>Cities</h2>
<ul id="items">
  <li>Stockholm</li>
  <li>Göteborg</li>
  <li>Malmö</li>
  <li>Uppsala</li>
  <li>Umeå</li>
</ul>
<button id="showTownsButton">Show Cities</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

