## **Exercises for Session 4**

#### Goals

We're going to put together some puzzle pieces and build our first **real** app. A search for Star Wars characters (or beers if you want to rather do that  $\widehat{\phi}$ ).

## Building the HTML, attaching some listeners and manipulate it

Build the following HTML layout and sprinkle some CSS on top make it look nice:

```
<form>
    <input />
    <button>Search</button>
</form>
```

- Select the form element using document.getElementById (you need to give it an id)
- Add a submit listener to the form element
- The function that is executed when the listener is called should do the following:
  - Select the input (e.g. again using getElementById)
  - console.log("You searched for:", inputElement.value)

Tip: to use the form more dynamically and prevent the default behaviour of browsers to send forms to a remote server your handle should look like this:

```
formElement.addEventListener('submit', event => {
    event.preventDefault()
    // rest of your code
})
```

# Using fetch to get some real data

- Instead of using console.log to print the search query we're sending to an API with the following url: https://swapi.co/api/people/?search=\${searchQuery}
- Transform the response into json as soon as you receive it (then(response => response.json()))
- Once you have the json data from the API log it once again: console.log("Server response:", searchResult)

Tip: if you want to see the search result in your browser enter the url in a new tab (e.g. https://swapi.co/api/people/?search=luke)

## Displaying the result dynamically

• The data we want to display is the array searchResult.results . Use .map() to create a link from every element in the array:

```
searchResult.results.forEach(result => {
    // create element "a"
    // a.href = url of result
    // a.innerText = name of the result
    // append the a to the body of the document
})
```

 Add some CSS to make the links appear each on a new line and have some margin between each other.

Liked the exercise but rather want to search for beers? Use \$ curl https://api.punkapi.com/v2/beers?beer\_name=\${searchQuery} to get some refreshing hop juices instead of Star Wars characters.

### localStorage

We're going to enhance the mini-app we just build with some data storage

- After a user searches for something take the value and save it as value into localStorage
  - First read and parse the current value from localStorage: let queries = JSON.parse(localStorage.getItem('queries'))
  - If that data is null set it to an empty array []
  - o push() the current value to the array
  - Save the array into localStorage (`localStorage.setItem('queries', queries))
    - The line will not work as you need to stringify() queries when writing it into localStorage
- You can see the values being written into localStorage by checking the Application tab of your browser's dev tools. Refresh the page to ensure the data is still there.
- To remind the user of what they already searched for we want to display the past searches as text below the search form
  - In a script tag at the end of the body, read and parse all queries from localStorage (see above on how to do that)
  - if the length of queries is larger than 0 create string from all queries using join: const pastSearches = queries.join(',')
  - create a text node document.createTextNode("Previous searches: " + pastSearches)
     and append it to the body