

# Lab 12: JavaScript Basics

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The objective of this lab is to add a simple client-side search functionality to the social network developed during the course.

In particular, you will use **JavaScript** to filter the posts displayed on the homepage according to the text written by the user in a search field. The filtering will be performed directly in the browser, without reloading the page and without sending a new request to the server.

## Activity Description

1. On the main screen of the user interface, add a search field above the list of posts. The search field should allow the user to type a word or a short text and filter the visible posts accordingly.

For example:

```
<input
  type="search"
  id="post-search"
  class="form-control"
  placeholder="Search posts...">
```

2. Modify the HTML structure of each post so that JavaScript can easily select and inspect it. Each post should be contained in an element with a common class, for example:

```
<article class="post-card">
  ...
</article>
```

The text of the post should be contained in a specific element, for example:

```
<p class="post-text">
  This is the content of the post.
</p>
```

3. Create a JavaScript file and include it in the page.

The JavaScript code must:

1. select the search field;
2. select all the posts displayed on the page;
3. listen to the `input` event on the search field;
4. compare the text typed by the user with the text of each post;
5. hide the posts that do not match the search;
6. show the posts that match the search.

The search should be case-insensitive. For example, searching for `music`, `Music`, or `MUSIC` should produce the same result.

4. Add a message showing how many posts match the current search.

For example:

```
3 posts found
```

If no posts match the search, display an appropriate message such as:

```
No posts found
```

5. Make sure that the search also works when the search field is empty. When the search field is empty, all posts must be visible again.

**NOTE:** this lab implements client-side filtering. This means that JavaScript only filters the posts that have already been loaded in the browser. For larger datasets, or for searches involving many posts, the filtering should be implemented on the server side.