

Mandatory Exercise 3 - JavaScript

The deadline for this exercise is Friday December 13 08:59

Preperation

1. Create a new repository on [Github](#) called **mandatory-js-3**
2. Follow the instructions that Github gives you; create a local repository and add a remote or clone the recently created repository.

Submission

When you do the submission of your exercise in Ping Pong, **before the deadline**, you will enter the link to your repository, such as:

```
https://github.com/mygithubusername/mandatory-js-3
```

The teacher will look in the **master branch**. If any commits are done to the master branch after the deadline, the grade IG will follow.

You will either get **G** or **IG** on the mandatory exercises.

Resources

<https://dog.ceo/dog-api/documentation/>

<https://developer.mozilla.org/en-US/docs/Web/Guide/AJAX>

https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/JSON

<https://developer.mozilla.org/en-US/docs/Web/API/Window/location>

Instructions

In this lab you're gonna build a single-page application (SPA). There should only exist a single html file in the project. You're gonna build an application for viewing images of dogs. You'll be making requests to the Dog API (<https://dog.ceo/dog-api/documentation/>). On the front page of the application, a table or list of some kind should list all the different breeds of dogs that can be viewed (see "List all breeds" in the documentation). Each breed should link to a new "page" where you'll list three random images of dogs using the "by breed" endpoint (see documentation for information). Each new page should have a proper navigation route, meaning after entering a breed page, a refresh of the site should navigate you to the same place. (Tips is to use the hash "#" property of window.location). Each breed site should have a list of all sub-breeds that exists (if any) for the breed. These should work similiary to the breeds, linking to a seperate sub-breed site where both a list of images should be shown. Each breed and sub-breed site should also render the name of the breed we're looking at. On each site (index, breed, sub-breed), there should also exist three random images, and a button that refreshes these images. When under breed or sub-breed site, the random images should be of the breed or sub-breed.

To get the grade **G** the following needs to be implemented

- An index page which shows three random images of a dog of any breed, with a refresh button for the images. On the site there should also be a list of any kind that shows all the different breeds and each breed should link to a new sub-page.
- A breed page which shows three random images of a dog of the given breed, with a refresh button for the images. On the site there should also be a list of any kind that shows all the different sub-breeds (if any) and each sub-breed should link to a new sub-page. There also needs to be a text rendered on the site that identifies the breed we're looking at.
- A sub-breed page which shows three random images of a dog of the given sub-breed with a refresh button for the images. There also needs to be a text rendered on the site that identifies the sub-breed that we're looking at.
- Each page except the index page should have some kind of URL identifier that makes it possible for the correct breed or sub-breed to be shown. For example, if I try to navigate to <http://mysite.com#breed-hound>, the breed-page of the breed hound should be shown directly.
- There can only exist a single HTML file in the project that is directly rendered by the browser.