

## INFO134 Klientprogrammering – Report

The project consists of four HTML-pages, 11 javascript files, and two css files. The reason for that many javascript files are because functions are divided and grouped into categories. This makes the file structure and program more readable and straightforwardly.

### Notes:

Even though some interfaces and properties contain unused functions, it is on purpose to let them be. They were first in use but I created other functions and used the other instead. The purpose to let them be is that they serve a specific purpose, also it shows how simple it is used to implement new methods to the interface while keeping it straightforwardly.

Details.html only shows data for the years that occurs in all datasets. Some datasets contain a larger range of years but are not shown in this page.

Comparing.html allows search of municipalities that is not found in the other pages. This is because the page only uses education dataset.

Each method in the script files commented, containing more accurate details about it purpose.

### CSS:

Mainstyle.css

- Stylesheet that is used for all HTML-pages. Styles such as font and navigation.

Tablestyle.css

- Stylesheet for all tables in the websites.

### Javascript:

#### Folder data – contains data url

urls.js

- Contains URLs to the datasets. The datasets are modified copies Norges befolkning (ssb.no)

#### Folder Interface – contains interfaces

EducationInterface.js

- Interface for education dataset and a set of methods.

EmployedInterface.js

- Interface for employed dataset and a set of methods.

PopulationInterface.js

- Interface for population dataset and a set of methods.

**Folder pagescript – contains script used for the HTML-pages**

Comparingscript.js

- Creates tables for page comparing.html

Detailsscript.js

- Creates tables for page details.html

Overviewscript.js

- Creates table for page overview.html

**Folder property – contains functions that is used in the other javascript files**

educationProperty.js

- Contains methods that is used in EducationInterface.js

employedProperty.js

- Contains methods that is used in EmployedProperty.js

populationProperty.js

- Contains methods that is used in PopulationInterface.js

mainProperty.js

- Contains common functions that is used over multiple javascript files.

**Main folder, html-pages – contains navigation pages**

Index.html

- Homepage of the project. Contains information regarding the datasets in use and small descriptions about the other pages.

Overview.html

- Overview of all the municipalities and their population from 2018.

Details.html

- Get a more detailed information about a municipality by typing its id. It shows information such as population, education and employment.

Comparing.html

- Compare two municipalities by typing in their respective id. The page compares their education data and announce a winner based which municipality has the majority.

### Answers to questions:

1. According to the documentation of XMLHttpRequest, the datasets are loaded “at the same time”.

From request.open(“GET”, url) in function load(url, obj), it also allows a third parameter that indicates if it should perform asynchronous or synchronous. The default parameter is set to true, which indicate the operation to perform asynchronously. Asynchronously here means that the browser continues to work as normal while other requests are being handled.

2. In this program, it does not know when the last dataset is loaded. This is because it runs asynchronous where all request runs “at the same time” as soon they are called. One solution I can think of is that the program can signal when it does not have any more dataset to load.
3. Solution to this is that I gave each table element a label with the corresponding column title (table head). In CSS line 40, the page reacts to screen adjustment. When the size of screen (width) is at 800px, the tables changes. It removes column titles and shows the label of each row. The label is highlighted (bold) and act as a row title.
4. The datasets do not have the exact number of municipalities. Both population and employment datasets have 423 municipalities, while education dataset has 476 municipalities.

This was found out in details page where I first wrote all municipalities and their corresponding data from all datasets before having a search functionality. Got an error that population and employment datasets did not find data for a municipality in education dataset.