## **DAT152**

## On the JavaScript lectures

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# JavaScript and DAT152

- Seven lectures.
- ► Four lab sessions.
- One mandatory exercise.
  - A working solution must be demonstrated to the lecturer.

# On the JavaScript lectures

- ▶ Much of the lectures will be through demonstrations.
- ▶ Slides will be updated during the course!
- ▶ If recording, the recordings will be deleted after one week.

### **Demonstrations**

When reading the slides, you will need to run and study also the accompanying code and demonstrations.

## JavaScript topics

### **Events and DOM:**

- DOM objects and methods.
- DOM events.

### GUI components and modules:

- Using separate files for each class and object.
- Reusable custom GUI elements.
- Communication between components.

#### ECMA:

- JavaScript thread model and Web Workers.
- Asynchronous code.
- Promises.

# More JavaScript topics

#### Client and server communication:

- ► Ajax (client to server).
- ▶ Websockets (bi-directional client server).

### JavaScript frameworks:

- ► Single page applications and routing.
- ► What does frameworks provide?
- Types of frameworks.

React: Introduction to React.

# JavaScript topics if time allow

## JavaScript objects:

- Working with objects.
- More on classes.
  - Inheritance, private and static properties, decorators.
- ▶ Polyfilling (new features and older browsers).
- Closure.

### More on Events and DOM:

- Event propagation.
- FORM validation.

#### More on React:

React with Next.js.