

# Introduction aux architectures web TP3

## Goals and indications

Your objective is to create a dynamic *todo* list using HTML/CSS and JavaScript.

The list must have the following functionalities:

- A way to add new elements (tasks) to the list;
- The possibility to set a task as done (without removal);
- The possibility to remove a task;
- The possibility to order the tasks in the list by drag and drop.

Everything must be done using only one HTML page.

Try to avoid using inline or internal CSS code but rather external CSS files. For JavaScript, use only one script included at the top of the HTML document.

Try to make the *todo* list as easy to use as possible. For example, pressing the "Enter" key after typing the name of a new task automatically triggers the addition of the element without the need to click.

## Bonus goal

Implement sub-tasks in the *todolist*. The new functionalities to add are the following:

- A task may have multiple sub-tasks such that setting the main task as done, sets all sub-tasks as done;
- Setting all sub-tasks of a task as done, sets the task as done;
- Drag and drop the main task automatically move the sub-tasks;
- Drag and drop a sub-task can only be performed within the task' scope.

## A few useful events and functions

Useful events for JavaScript are: *click*, *dragstart*, *dragover*, *drop*, *dragend*, *keypress*, ...

Useful functions are:

- `addEventListener(event, function);`
- `getElementById(id);`
- `createElement(htmlElement);`
- `getAttribute(attributeName);`
- `setAttribute(attributeName, value);`
- ...

Use the 'data-\*' attributes to handle the different tasks ids.