

Assignment 9: JavaScript (DHTML)

1. Sorting a table

The file `table-sort.html` (<http://www.idi.ntnu.no/~michailg/IT2805/table-sort.html>) contains a table with three columns and three buttons. Write JavaScript code so that when each button is pressed, the rows of the table are sorted by the corresponding column in ascending order.

- One simple way of sorting the rows is to get an array of the children of the `<tbody>` element and remove them from their parent, sort the array and then add them back to the `<tbody>`.
- For the actual sorting, you may use the `.sort()` method with a custom comparator function. This function should take two rows and return 0 if they are equal (according to the column we're sorting by), -1 if the first row is smaller than the second, or 1 if it's bigger.

2. To-Do list

For this exercise, you will build a simple to-do list application using Dynamic HTML. The application should consist of a single HTML page. Look at the screenshot below to get an idea of what it could look like (<http://www.idi.ntnu.no/~michailg/IT2805/todo-list.png>).

The screenshot shows a web application titled "To-Do List". To the right of the title is a button labeled "Clear all completed tasks". Below the title is a list of three tasks, each with a checkbox:

- ☐ Complete IT2805 assignment
- ☐ Work on my project
- ☒ Do the dishes

At the bottom, there is a text input field for adding a new task, followed by a button with a "+" sign.

Figure 1:

- Each task should have a check box next to it where the user can check off tasks as they are completed. The user should be able to click the task again to undo.
- There should be a text field where user can enter a new task and a button for adding this task to the list. This will create a new entry in the list with a new check box next to it.
- There should be a button to clean the list by removing all completed tasks from the list.
- You may use CSS to improve the look and feel of the application, however this is optional.

3. (Optional) Persistence

Make the To-Do list from the previous exercise store the tasks and their completion status so that they are remembered across page reloads.

Submission

Submission can be posted in your course page under an appropriate sub-page (e.g., **assignment-09**) and also has to be uploaded as a zip file into It's Learning before the deadline.