01UDFOV/01TXYOV – WEB APPLICATIONS I

REACT MEETS REST API

During this ninth lab, you will update your React-enabled task manager to consume the REST API realized with Express during Lab 5.

EXERCISE – A REACT-ENABLED REST CLIENT

Update the task manager you developed in the previous lab to use the REST API realized in Lab 5, thus interacting with the REST API to get/create/update tasks, instead of acting uniquely on the local task list. In particular, implement the following functionality, resorting to the fetch API when needed:

- retrieve all the available tasks,
- create a new task,
- filter the tasks according to their properties (i.e., Important, Today, Next 7 Days, etc.),
- filter all the tasks according to their project,
- mark a task as complete, by acting on the task's checkbox,
- delete an existing task, by clicking on the $\overline{\mathbb{I}}$ button available for each task,
- edit an existing task, by acting on the *A* button, continuing to re-use the form for creating a new task.

Properly evaluate how to organize your code, especially from point of view of state location and management, and how to overcome the "two-servers" issue. Evaluate when to use and update a local version of the task list and how to synchronize it with data coming from the server, which is the "ground truth", the main source of information.

Hints:

- 1. You can use the solution available for Lab 8 as a starting point, if you prefer: <u>https://github.com/polito-WA1-2020/lab8-react-life-cycle</u>
- 2. Similarly, for the server-side part, you can use the solution to Lab 5: <u>https://github.com/polito-WA1-2020/lab5-rest-express</u>