

## Lab 5: Getting Started with React

We will start setting up a React-based front-end for a web-based Film Library. The appearance of the front-end have to be built according to the specification already provided in Lab 3 (<https://polito-wa1-aw1-2023.github.io/materials/labs/lab03-html-css.pdf>).

You will continue to re-structure your web-based FilmLibrary to exploit the React framework and its component-based approach. Specifically, you will divide your application into different components, and you will identify the state and props required to store and visualize films. In addition, you will implement the filtering of the displayed films.

### 1. Create and configure the React application

- Create a new React app using **Vite**.
- Use the React-enabled version of Bootstrap and its components to structure the front-end of your web-based Film Library. You can find the documentation at <https://react-bootstrap.github.io/>
- Organize the page using React functional components stored in different files. Your application, for example, might have distinct components to manage the *navigation bar*, the *sidebar*, and the *list of films*.
- Add a suitable set of *props* and *states* to each component. States and props used for visualizing films must be initialized, as in Lab 4, using a proper JS data structure (i.e., an array of Films). To display the FilmLibrary, decide which components will hold the states, and how information propagates using props.

### 2. Implement the Filters

Create all the suitable callbacks to implement the filters described below. When a filter is clicked, only the films respecting the specified filter criteria must be visualized. Specifically, filtering should not affect the value of the state(s) used to store the films, but **only** their visualization. To implement the filtering, you must associate the items in the sidebar to the following actions:

- **All:** display *all* the films in the FilmLibrary (default filter).
- **Favorite:** display only films marked as *favorite*.
- **Best Rated:** display only films whose score is *five out of five*.
- **Seen Last Month:** display only films watched *between today and the last 30 days*.
- **Unseen:** display only films *without a watch date*.

#### Hints:

1. For handling dates and times, you can exploit [Day.js](#).
2. You can use find the FilmLibrary logo (plus other useful icons) in the Bootstrap Icons site: <https://icons.getbootstrap.com>