Lab 8: 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 must be the same as already specified in the previous labs, where you built the static HTML page.

In this lab the HTML/JS code will be restructured to take advantage of the React framework and its component-based approach. Specifically, you will divide your application into different components, and you will identify the props required to store and visualize films and the list of filters.

Note that in this lab the list of filters is not supposed to work by clicking on it.

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. In particular, use Container, Row, Col, Button, Table, Navbar, Nav, Form, ListGroup. You can find the documentation for react-bootstrap 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 with the filters*, and the *list of films*.
- Add a suitable set of *props* to each component. Props used for visualizing films must be initialized using a proper JS data structure (i.e., a statically imported array of Films). Propagate such the information through props to the component handling the appearance of the table containing the films.
- For this exercise, you do not need to implement any dynamic behavior on your page (e.g., the filters and favorite checkbox should not work yet). That is, you just design and implement the main components necessary to correctly display the same layout (appearance) developed in previous labs.

2. Implement the list of Filters.

- Create a constant data structure containing an array of filters, in which each element contains the filter internal name, the displayed name and a function to filter the array of films (this should be already available from the previous labs). Use such an array as part of the props to be passed to the component handling the filter visualization.
- Also, define a constant value that indicates the current active filter, so that it can be highlighted in the filter list and set as the name of the filter above the table containing the list of films.
- Note that you are NOT required to change this value dynamically, i.e., to change the active filter the line of the source code defining the current active filter must be changed and the page reloaded.
- However, the list of films shown in the table should be filtered according to the active filter value. For instance, pass as props, to the component handling the visualization of the films, only the relevant list of films.

Hints:
1. *Use Day.js to handle dates.*
2. You can use the Bootstrap Icons if needed: *https://icons.getbootstrap.com*