

BigLab2: Full Stack FilmLibrary

During the four weeks of the second BigLab, you will develop the back-end for your web-based FilmLibrary using Node.js + Express. In addition, you will adapt the front-end of your application accordingly and you will connect the front-end to the back-end. As for the previous BigLab, to create your repository, you must login to [GitHub Classroom](#) and accept the assignment (if needed, join or create your group). For more details, please have a look at the [GitHub Classroom instructions](#). The following lines reports the links for the BigLab repositories on GitHub Classroom. Please, choose the link of **your** course.

- Applicazioni Web I: <https://classroom.github.com/a/8nB5lyqE>
- Web Applications I [A-J]: <https://classroom.github.com/a/O7m3WOkw>
- Web Applications I [K-Z]: <https://classroom.github.com/a/rQjBNB2M>

To better keep track of your progress, we **suggest** you work incrementally “week-by-week”, e.g., by creating, inside your repository, a branch for each week of the BigLab. This approach is not mandatory, it is just a suggested methodology. We will evaluate only the content of the *main branch*.

Graphical User Interface components

The front-end of your application must respect all the requirements already specified for [BigLab1](#).

Roadmap of the following weeks

- a) During the first week, you will create a **basic back-end** for the FilmLibrary. To do so, you will use the [Express framework](#). The back-end must implement a series of **APIs** to support the main features of the web-based FilmLibrary developed in BigLab1: **create**, **read**, **update**, and **delete** the films. The data must be persistently stored in an [SQLite database](#).
- b) In the second week, you will **update the front-end** of the web-based FilmLibrary (i.e., the outcome of BigLab1) to use some of the **APIs** designed in the previous week. In particular, you will get the films to be displayed from the server, and you will give users the possibility of storing new films on the server-side database.
- c) During the third week, you will continue to **update the front-end** of the web-based FilmLibrary to use **all the APIs** designed in the first week. Specifically, you will use the APIs for deleting and updating films. You will also use the previously designed APIs to retrieve a list of film properly filtered.
- d) In the last week, you will add the possibility of **having multiple users**, enabling them to **authenticate** (i.e., *login* and *logout* functionalities) and manage their own films. The FilmLibrary access will then be refused to non-authenticated users.

Evaluation Criteria & Deadlines

The points received for your work are added to the final exam score of each member of the team.
We will follow these evaluation criteria:

- All team members will receive 1 point if the submitted React application is *complete*. In other words, it successfully implements *all the functionalities of the 4 weeks*, i.e., points a), b), c), and d).
- All team members will receive 0.5 points if the submitted React application is *partially complete*. It is necessary to implement **at least**:
 - all the functionalities of the first 3 weeks, i.e., points a), b), and c).
- All team members will receive 0 points otherwise.

The assignment must be submitted in your *main* branch of the assigned group repository before **Sunday, June 12, 2022, at 23:59 CEST**. If you did not follow the specifications contained in the [GitHub Classroom instructions](#), we will not evaluate your assignment and you will receive 0 points.

The final repository structure **must** keep the client and server sub-directories of the provided template; thus, the project will need to execute correctly with the following commands:

- i) for the back-end: `cd server; npm i; nodemon server.js;`
- ii) for the front-end: `cd client; npm i; npm start;`

Hints:

1. All the specifications of BigLab1 are available at:
<https://github.com/polito-WA1-AW1-2022/materials/tree/main/labs/BigLab1>
2. All the specifications of BigLab2 will be published at:
<https://github.com/polito-WA1-AW1-2022/materials/tree/main/labs/BigLab2>