

GUÍA DE ACTIVIDAD PRÁCTICA Y/O LABORATORIO

Curso:	ITI-523 – Tecnologías y Sistemas Web II	Profesor:	Jorge Ruiz (york)
Puntos a Ganar:	85	Fecha:	22/Ago/2025
Puntos Obtenidos:	0	Porcentaje:	20%
		Nota:	0

• **Goals of activity.**

- Evaluate the student's knowledge regarding the implementation of web applications with React JS and Express library to build API-Rest, processing data with MongoDB as not relational database, and use of the authentication methods and security modules.

• **Project Instructions.**

Final Work:

General remarks:

- In the course space into the Virtual Campus, exists a segment called “**Entorno de Trabajo**”, review it and carefully take any instructions, for your computer to work properly with git commands and GitHub remote repository.
- Carefully read each instruction of the project, if you have doubts, please communicate it at your professor.
- You have 3:45 hours to complete this text.
- Remember to use GitHub platform to store and share the source code with your professor.

Problem Statement

You, together with your teams, will develop a web proposal using **JavaScript technologies** to implement an academic-type solution that supports schoolteachers in scientific investigations of their students.

What are the elements that the student must present about his work?

- Title of the investigation
- Area of interest (mathematics, biology, social area, etc...)
- A brief description of the topic (500 characters).
- A pdf document (investigation).
- 4 to 6 images related to the subject of study, along with a brief description.
- The conclusions of the work (500 characters)
- The final recommendations (500 characters)

The student who wishes to participate must register himself before the platform established by you, the requested data is:

Full name

e-mail

password

school grade

A brief description of "who am I".

A photo to identify it.

The index page of this proposal must present a complete list of all research papers registered, sorted by theme name, but filters can be applied on the area of interest and/or the student academic degree.

The visitor can select a topic of interest, and this topic will be presented on an additional page where all the data on the topic can be read, including the author's data.

This page should present the comments and ratings that have been given by other visitors.

The visitor can also put a short comment (100 characters) and a score from 1 to 5 of the selected topics.

Visitors do not require registration.

Specifications required.

1. Use the API developed with the Express library for example of registering newspaper or magazine articles and adapting it to fit the new data requested. Remember that the comments segment is always used. This new proposal must incorporate the security elements seen in classes
 - a. User authentication module.
 - b. Roles and users.
2. User interfaces:
 - a. Register new user.
 - b. Authentication user (login page)
 - c. Use the other controls reviewed in the classroom.
 - d. Remember, this project has two kinds of users:
 - i. Researchers and
 - ii. Explorers (visitors)
3. Register page of the research works, only for researchers.
4. The research work list is on the index page. Remember includes the filter controls by topic and/or academic grade.
5. A presentation page contains selected research work from the index page. This page includes:
 - a. All Research work fields are stored into the collection. (Review the example document)
 - b. A space to show all written by visitor comments, ordered by time and the grade obtained so far.
 - c. A space too, for the visitor to write new comments and grade work.
 - d. And finally, a little segment for the visitor writes a question about the work and the researcher user writes your answers.

- **Project evaluation.**

Item	Description	Points
1	Modify the Article-Express API-Rest adding the new fields required and reuse the user and security module viewed in classroom and adjusted to the new specifications.	10
2	Register new user or/and login page	15
3	Register page of the research works.	15
4	The research work list: List of works. Select work and redirect to presentation page. Filter controls by topic and/or academic grade.	10 05 10
5	Presentation page: Show all data related to the selected work. Show comments and ratings. Write new comments and ratings.	05 05 10
Total points		85