

Career: Software Engineering

**NRC:** 7179

Subject: Advanced Web Development

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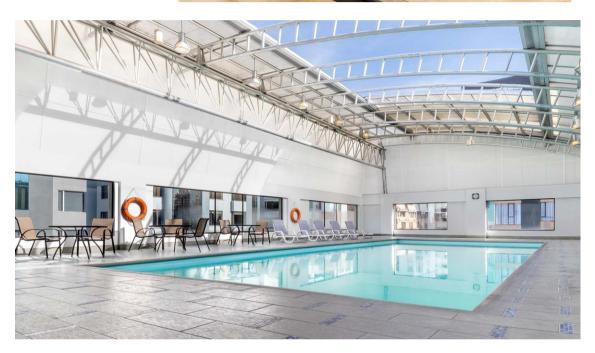
Group #7

2021 - 2022

Theme: Maintenance control system of a chain of gyms.







## **Problem**

We need a system (web application) that receives requests for repair and maintenance of technological equipment and machines of a gym, it is necessary to differentiate the actors involved in the application, as is the case of the user in charge of entering the requests, also must take into account the place from which comes the request for repair (considering that it is a chain of gyms), such data should be contained in a database that allows viewing the

arrangements that have been made continuously, thus allowing to obtain a history of work, which will be controlled by the systems manager of the company.

## Overview

A gym always needs maintenance, because the flow of users and machines, according to its use, have a limit in their time of life. So the leaders of gyms and the maintenance manager need software that records the needs of the gyms about the maintenance of machines and also keeps them communicating. This project will be useful for the development and growth of the gyms, because with this efficient software will provide useful information so that the gyms are always kept in good condition.



## **Background**

A gym is a place that has both sports equipment and other technological equipment; many of these equipment can break or wear out, preventing them from performing their functions normally, and therefore, they need repair. The system to be developed is for the systems department of a chain of gyms, and therefore, the software is dedicated to keep track

of the repairs made to the computer and sports equipment of the various gyms that make up the chain.

Four actors will be involved in this system, which are: the systems manager, the maintenance manager, his maintenance staff and the leaders of each gym.

The Systems Manager will be the main administrator who will be responsible for creating users, this will be done because it will be a private web application that can only be accessed by a certain number of designated people, also have the possibility that if you create a new gym this can be added to the database of its chain of gyms. From their profile they will be able to see if the maintenance tasks have been completed or not, thus achieving greater agility and control over the care of the gyms.

The maintenance manager will have access to the list of repair requests entered by the different leaders of each gym, once these requests are received, the maintenance manager must assign a member of his staff to proceed with the repair of the same.

Once the work is done, it should be recorded as "Completed" once the maintenance staff member has done it correctly and when this has been done this information will be sent to their database, along with the details of the completed fixes.

The leaders of each gym are in charge of reporting the different problems with the equipment (computer and sports) in their gym, which will be received by the maintenance manager and the systems manager.