

# Back-End

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**Abstract - The Back - End, is the invisible but essential part of a website, responsible for managing the logic and data processing necessary for everything to work correctly and securely.**

## I. INTRODUCTION

This essential component called Back-End is the operational core that drives the functionality of the platform. From managing the application logic to managing critical data and establishing communication with databases and external systems.

## II. ¿WHAT IS IT?

It is the data access layer, either software or device in general, referring to the technological logic that makes a website work, which remains hidden from the visitor's eyes. It provides the solution, determining how the application will work and what experience, positive or negative, the user will get from its use.

## III. ¿WHAT IS IT FOR?

It comprises all the hidden codes that serve to ensure that a website or application works correctly. In addition, the user experience depends on its structure and organization. It is also responsible for optimizing other elements and resources such as security and privacy on a website or application.

It is responsible for tasks such as storing and retrieving data from a database, processing forms, authenticating users and managing site security.

## IV. BACK - ENDE ELEMENTS

- 1) It consists of programming languages such as PHP, Python and C++ and frameworks.
- 2) Servers control user access to files.
- 3) Databases are collections of organized and structured data.
- 4) Security is an important element, as it ensures that visitors and their information are safe.

## V. EXAMPLES OF APPLICATION

### A. *Login.*

When a person accesses a website or application using an e-mail address and password, this information is validated and safeguarded by the server, which consults its database and thus identifies and allows the user access.

### B. *Shopping cart.*

This element allows the purchase of products online and serves to facilitate the selection of the different products or services that a user wishes to acquire.

### C. *Cookies.*

Many sites use cookies to track what users have previously viewed, allowing them to suggest other relevant content (or products).

### D. *CMS.*

A content management system allows a website owner to update information without having to modify the HTML code.

### E. *Contact forms.*

If a website visitor is interested in receiving more information or getting in touch, there must be an element capable of linking the user to the company.

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