

# === AUTHENTICATION AND AUTHORIZATION ===

## 1 - Why Are Authentication and Authorization Crucial ?

We live in a world full of cybersecurity threats, and data breaches compromise the information of customers and could ruin the reputation of an affected company. Thus, security measures which limit who has access to what information are crucial.

For instance, SQL injection is a cyberattack where instead of typing a username or email into the fields, they enter SQL code to sign in as an admin and steal information from a MySQL data base.

## 2 - Authentication ?

First and foremost, a system needs to validate users as they attempt to access the system. This is usually initiated by filling in the username and password fields. Beyond that, the site might send a one-time password (OTP) to confirm it is truly a valid user trying to sign in.

In fact, as web hosting company IONOS puts it, “more and more online services are beginning to use two-factor authentication, especially when it comes to sensitive data.”

This is due, in large part, to the fact that so many passwords have been compromised over the years”.

## 3 - Authorization

After users are authenticated, authorization is a matter of determining what level of access authenticated users should have.

For instance, the system admin of a web application has typically more access than a regular user.