

# Share with the candidate - Architecture Assignment

## Architecture Assignment

This is an assignment of creating a solution based on the architecture you create.

This assignment:

 Does not require any coding

### Definition of Done

The final output of this assignment is:

- **Architecture Diagrams** - this should be whatever you think (we encourage you to create Block Diagram/Sequence Diagrams)
- **Architecture Spec** - Textual Explanation of the Solution and decision points

### The Storyline - Pizza Order Website

We have a company that has a website for ordering **Pizza**.

The following are the different steps to order Pizza:

- The client is entering the website ([pizza.hiredscore.com](https://pizza.hiredscore.com))
- The client decides what to order by browsing the different options
- The client sends the Order (Pay the bill, fill out the address and email & cellphone) to the website
- The client would get a notification (cellular & email) on his successful order
- After 1 hour the client gets the Pizza home

### Requirements

Define the architecture that can support the storyline above and the additional following requirements

#### Website

- A website that would be able to serve 10s of thousands of concurrent users
- a Website that can scale, since we might get peaks and the Mondial and other occasions

#### Persistence

We would like to persist the user's Data as well as their order history.

- Choose the Databases you would like to use for this data for easy querying (as well as scalability)

#### Notifications

We would like to send a notification to the user

- Define the pipeline to create the notifications

#### Security

Secure the site against DDOS Attacks

The site and Pizza have a lot of competition, and we suspect some malicious parties trying to harm the website.

- You need to secure it!

Authentication (bonus requirement)

The website can support accounts as well as guests, hence we would need to support authentication.

- Authenticate users for login

