


**Web Applications A.Y. 2021-2022**  
**Homework 1 – Server-side Design and Development**

**Master Degree in Computer Engineering**  
**Master Degree in Cybersecurity**  
**Master Degree in ICT for Internet and Multimedia**

Deadline: 22 April, 2022

<p><b>Group</b> WAD-Team</p>	<p><b>Electromechanics shop</b> A web application to manage a store</p> 	
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# 1 Objectives

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## 2 Main Functionalities

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## 3 Data Logic Layer

### 3.1 Entity-Relationship Schema

We decided to start our project starting from the database designed by the e-team group during the FTB course. We report in the following figures the design from we started. In particular in figure ?? we reported the ER schema and in figure ?? the corresponding relational schema.

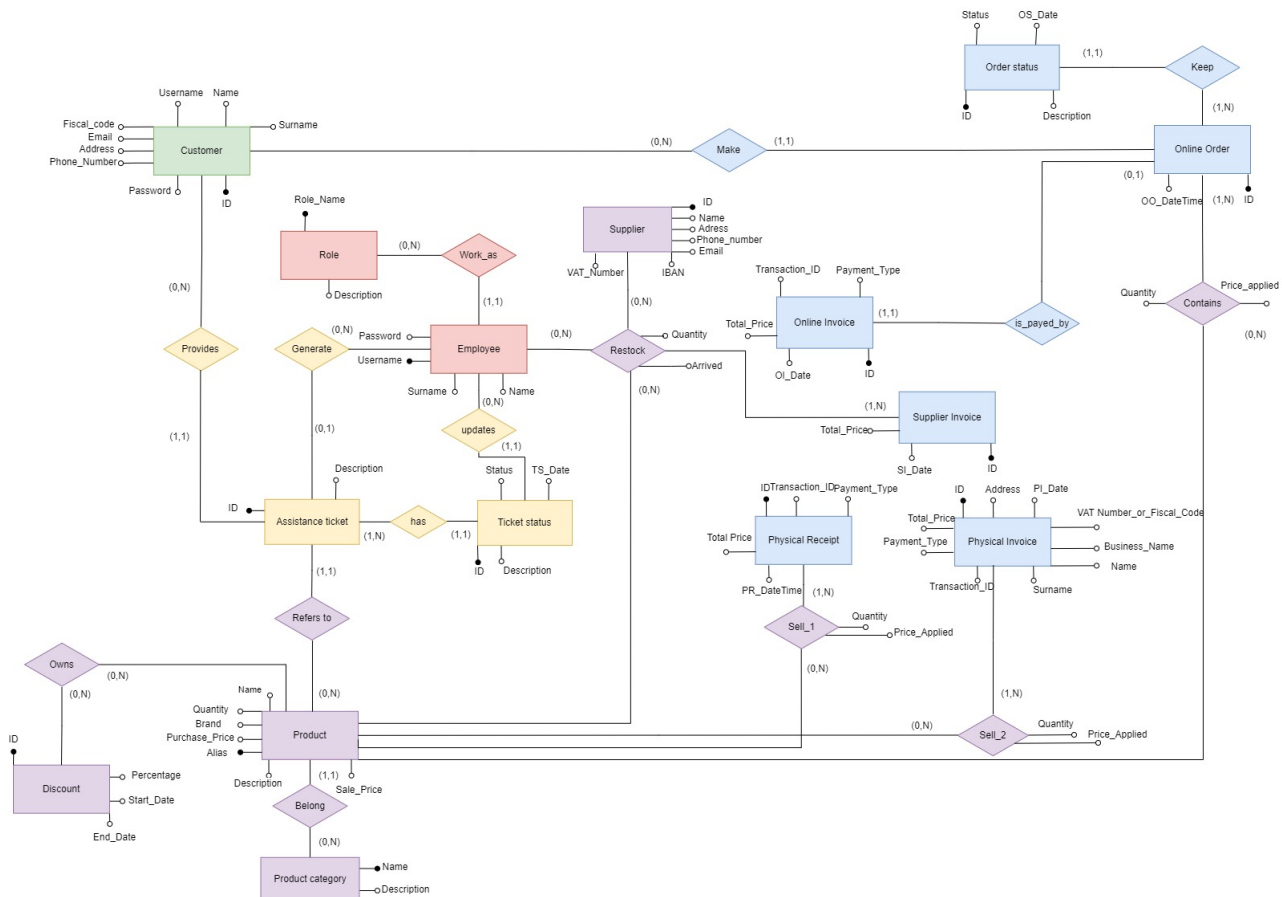


Figure 1: ER schema designed by e-team

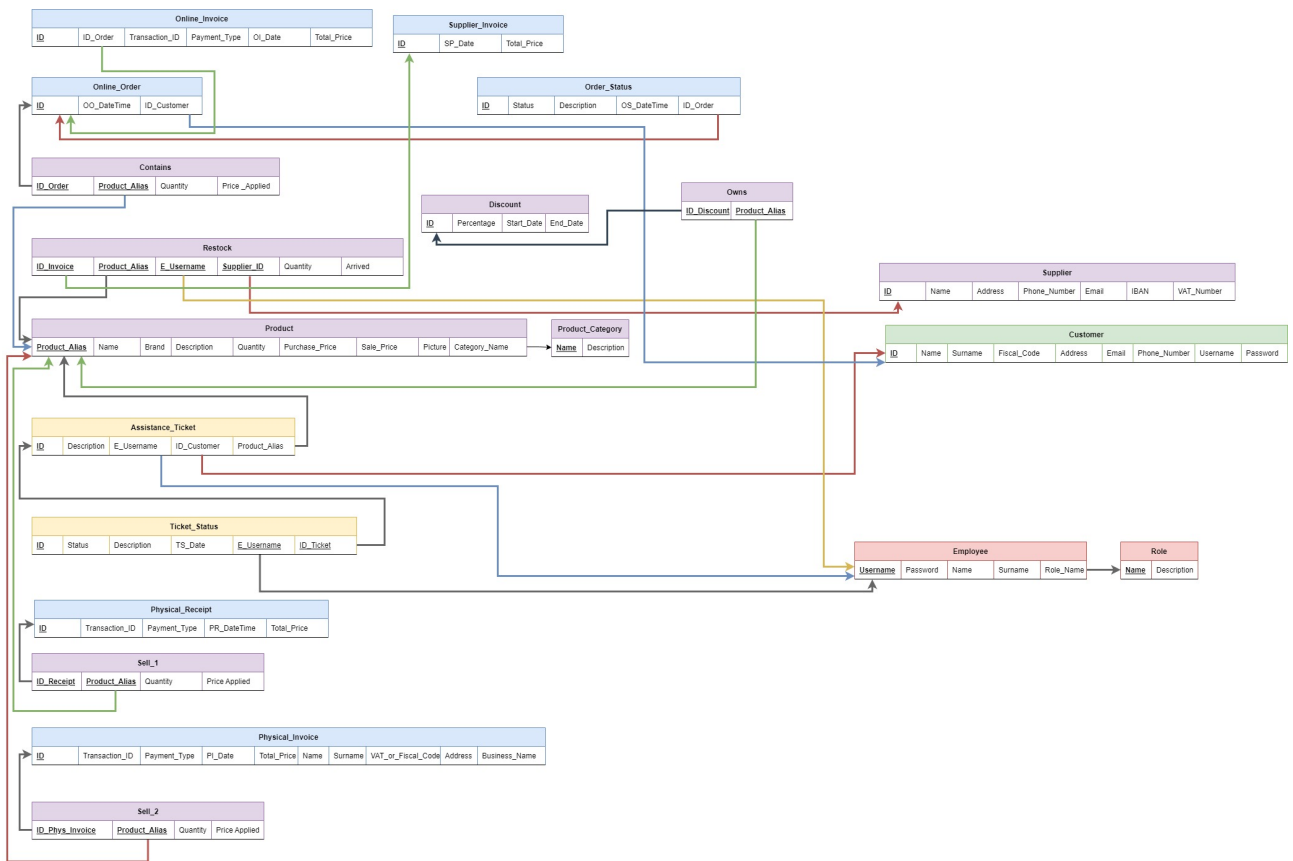


Figure 2: Relational schema designed by e-team

In order to maintain the project manageable, we decided to remove some parts. In particular we decided to remove all the "offline services" and we decided to build our web application only to manage the online store. Another part we removed is the management of the supplier, dedicating the development of our project only to the services seen by the client of the shop (excluding the management of the employees that is needed in our webapp in order to setting up the permission.). In figure ?? and ?? are reported the final version of the design for the data layer (ER schema and relational schema respectively).

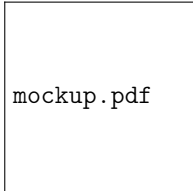




## 4 Presentation Logic Layer

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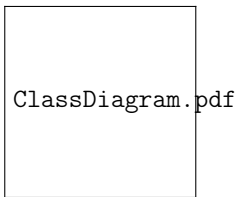
### 4.1 A page



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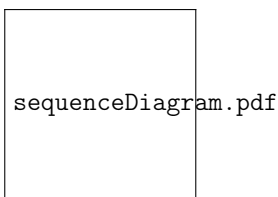
## 5 Business Logic Layer

### 5.1 Class Diagram



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### 5.2 Sequence Diagram



### 5.3 REST API Summary

URI	Method	Description	Filter
What is the URI?	What HTTP method uses?	Describe briefly the result of calling the URI	is it behind a filter?

Table 2: Describe in this table your REST API

### 5.4 REST Error Codes

Error Code	HTTP Status Code	Description
Error Code Identifier	Corresponding HTTP Status Code	Description of the error

Table 3: Describe in this table your REST API

### 5.5 REST API Details

#### A resource

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- URL: the URL to retrieve it
- Method: Method to retrieve it
- URL Parameters:
- Data Parameters:
- Success Response:
- Error Response:

## 6 Group Members Contribution

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