## **Group members:**

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The chosen business model is a chain of pizza restaurants located exclusively in Portugal, with no intention to expand to other countries, where food delivery is outsourced to door dash companies. It includes different restaurants, customer orders, the employees of each restaurant, the hierarchy between the employees, their shifts, the delivery companies/drivers, and keeps track of the ingredients necessary for each order. Each ingredient has a measurement unit (kg, lb, cups, etc..) and can be classified as containing an allergen. The model contains different payment types, and there is an option for applying discounts to items.

The core concepts modeled in our business case are the customer order, the ordered items, and the employees.

## Order

The customer order represents the transaction between a customer and a restaurant. With the customer order, one is able to access the order's total price, date, any comments, rating, the restaurant in which it was made, the payment option used, and know whether the order type was "takeaway", "delivery" or "eat-in". If the order type is "delivery", the delivery company and the driver are stored. Customers may or may not provide their taxpayer number, and if they do their first and last names are automatically filled in. If a customer has registered in the chain's app, their personal information and contacts are also stored and may be eligible for special discounts. Each order is assigned an employee who ensures the order is properly prepared and delivered. Since the delivery service is being outsourced to various delivery companies, only general information about the company/drivers is kept, and driver address hence is not mandatory. It is worth noting that the same driver can work for multiple delivery companies.

## **Item**

Each order can contain a number of items and each item should be on the menu. The menu contains information on allergens and the ingredients of each item. To keep track of stock, each ingredient has a measurement unit. The final price of each item is determined based on its base price, size, and price modifier (e.g., the smallest size has a price modifier of 1, meaning it costs the same as the base price). This way the base price of an item only has to be updated once for all of its size variations The price modifier can also be used to apply discounts.

## **Employee**

General personal and contact information of each employee is stored, together with their salary, the bank account to which they are paid, their job title, the restaurant they work in, and their immediate superior, if applicable. A history of each employee's shifts, namely the date and whether it is a morning or evening shift, is kept, and at least one person is assigned to be the manager of each shift.

