



Department of software Engineering  
Computer Science Faculty (CSF)  
Kabul University(KU)

**Concepts & Implementation of Acustom\_Sales Management System for  
Private Shops in Afghanistan**

Bachelor's thesis

Specialization: Computer science

By: Zakir Hussain Yousufi

Supervised By

**Prof jawed Ahmad Baktash**

**Year: 1397**

**Declaration**

I dedicated my book to my family: A special feeling of gratitude to my loving parents for their endless love, support and encouragement. Thank you for giving me a chance to prove and improve myself through all my walks of life.

## **Abstract**

The Project” Supermarket administration and management system” deals with the automation of supermarket. This software will help salesperson in managing the various types of Records pertaining to his/her customer.

This system is based on the sales transaction of the items in a supermarket. The first activity is based on adding the items on the system along with the rate which are presented in the supermarket and the name of the items which the supermarket will agree to sell. This authority is given only to admin. Any modifications to be done in the item name or in the rate can be done only by admin. He also has the right to delete any item. The system will display all the items whose name starts with the letter selected by the user. This will be saved in the database.

If the stock is not available, the supermarket orders and buys from a prescribed vendor. The amount will be paid by deducting the total amount acquired in the sales activity. And admin can provide a unique username and password for each employee through which he can login. The product will help user to work in a highly effective and efficient environment. The salespersons have been recording the customer information in the past and even in the present through their personal manual efforts.

So there are a lot of reasons I implemented this project. In the manual system, there are number of inefficiencies that a salesperson faces. The information retrieval is one of the foremost problems. It is very difficult to gather the overall performance reports of the customer. So there are many inherent problems that exist in any manual system. Usually they lack efficiency. Less efficiency has a great impact on the productivity of any human. The new system will cater to the need of salespersons of any supermarket so that they can manage the system efficiently.

## **Acknowledgement**

First I would like to express my heartiest thanks to Almighty “Allah” the most gracious and the most merciful. Special appreciation and heartiest gratitude goes to my supervisor, Prof jawed Ahmad Baktash Department computer science and Engineering. His invaluable help of constructive comments and suggestion to my friends. Special thanks, and appreciation to all those names do not appear here who have contributed to successful completion of this project.

I would like to thank all those who assisted, encouraged and supported me during this project, last my deepest gratitude goes to my beloved parents for their support and encouragement for all time in my live.

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## **5.1 Model**

Model is the best tool for any system. A system should be first designed by any model that is needed then it will be easily implemented. In this project we created many models for our project such as: ER Diagram, use case Diagram, Relational schema.

## **5.2 Database Model**

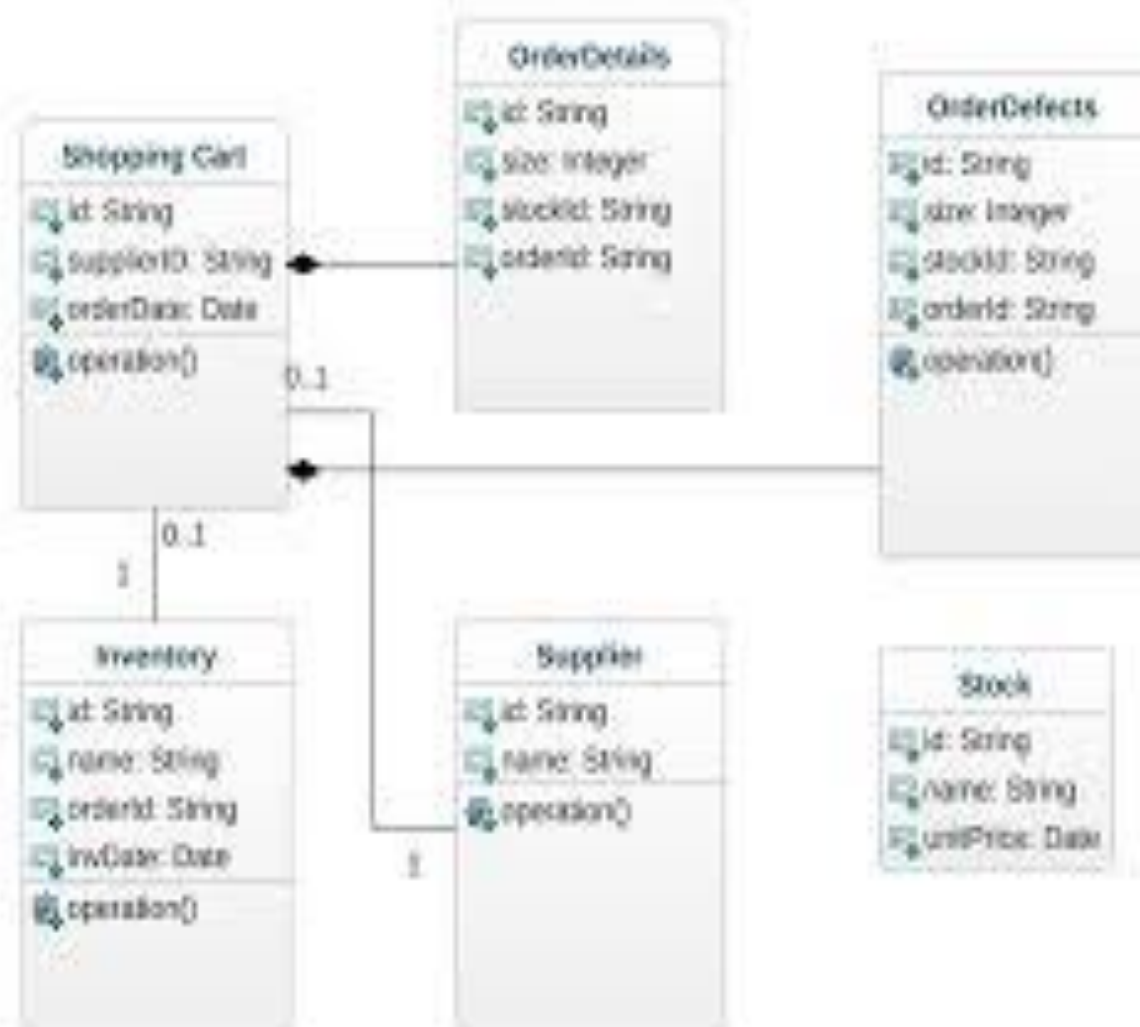
A database model is the theoretical function of a database and fundamentally determines in which manner data can be stored organized and manipulated in a database system. It thereby defines the infrastructure offered by a particular database system.

## **5.3 Relational model**

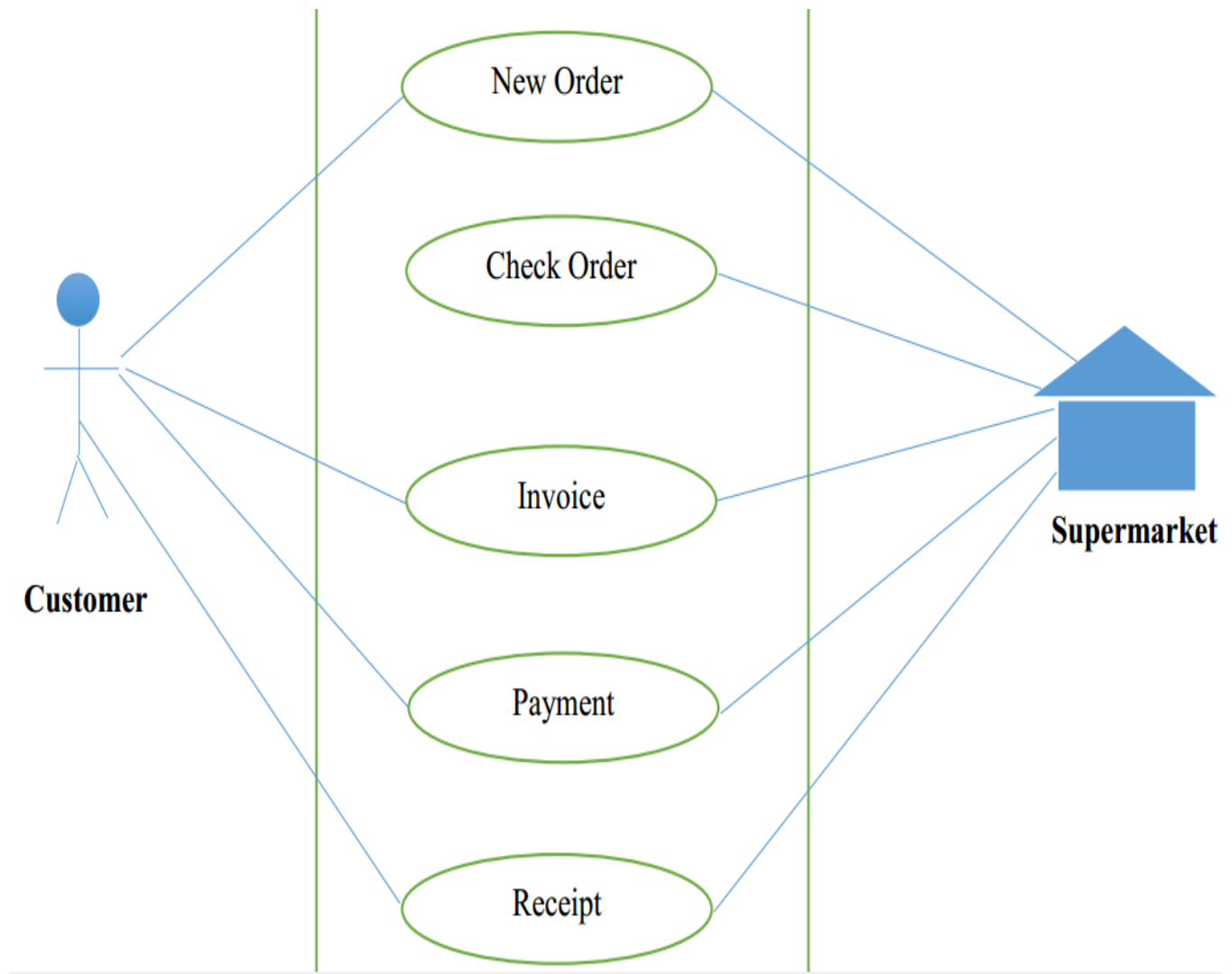
The relational database model was conceived by E.F. Code in 1969, then a researcher at IBM. The model is based on branches of mathematics called set theory and predicate logic. The basic idea behind the relational model is that a database consist of a series of unordered tables that can be manipulated using of non-procedural operations that returns tables. It is commonly through that the world relational in the relational model comes from the fact that you relate together tables in a relational database. Although this is a convened way to think of the term, it is not accurate. instead the world relational model. The relational model can be applied to both database and database management systems.

## **5.4 UML (Unified model language)**

The first time this diagram appeared was in the 1990 as an effort to select the best elements from the many modeling systems proposed at the time, and to combine them in to a single coherent notation. The use of UML as a tool for defined the structure of a system is very useful way to manage large, complex systems Having a clearly visible structure makes it easy to introduce new people to an existing project.



## 5.5 Use case diagram



## 5.6 ERD (Entity relationship diagram)

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## **Chapter one**

### **Introduction**

#### **1.1 Over view of supermarket management system**

Web application is the modern form of distributed application. One of most important aspects of web development is platform independence. Web applications consist of three libraries. First pillar is presentation layer; second pillar is serve side programming and third is database.

I have selected PHP as a front end and MYSQL as a backend because they have the best choice for programmers when compared to any other programming language and has been strategically placed by Microsoft to the corner stone of windows programming.

Supermarket management system is the system where all the aspects related to the proper management of supermarket is done. These aspects involve managing information about the various products, staff, managers, customers etc. This system provides an efficient way to managing the supermarket information. Also allows the customer to purchase and pay for the item purchased. This system will facilitate to know how many items are sold and how many items are in the store and also we need to know customer balance and also we classify the supermarket it's a profit or less.

The users will consume less time in calculation and the sales activity will be completed within a fraction of seconds whereas manual system will make the user to write it down which is a long procedure and it also consumes a lot of time. The data will be stored in the databases. The project will be user friendly and easy to use. Most of the domestic supermarket management focuses on the theoretical study of database management and network management

#### **1.2 Objectives**

- This project is a software application which is designed in PHP for managing sales, purchases, stock details which are going out and coming into supermarket. Details are maintained in centralized database.
- The main objective of our project is to make efficient transaction management system which is user friendly and at the same time powerful.
- Making the system reliable, easier, fast, and more informative.
- It has capability to keep the complete information of a transaction and to copy it whenever required.
- System plays an important role in achieving the desired plant availability at an optimum cost.
- To produce software which manages the sales activity done in a supermarket, maintaining the stock details, maintaining the records of the sales done for a particular month/year.
- The users will consume less time in calculation and the sales activity will be completed within a fraction of seconds whereas manual system will make the users to write it down which is along procedure and it also consumes a lot of times.

### **1.3 Methodology**

The main method used for this research was interview. Data were collected from different supermarket which some half of them use manual system while others use computerized system and customers of both types of supermarket. Interviewing the people who worked and have experience how to manage supermarket. To know the quality and the intensity of the information we need.

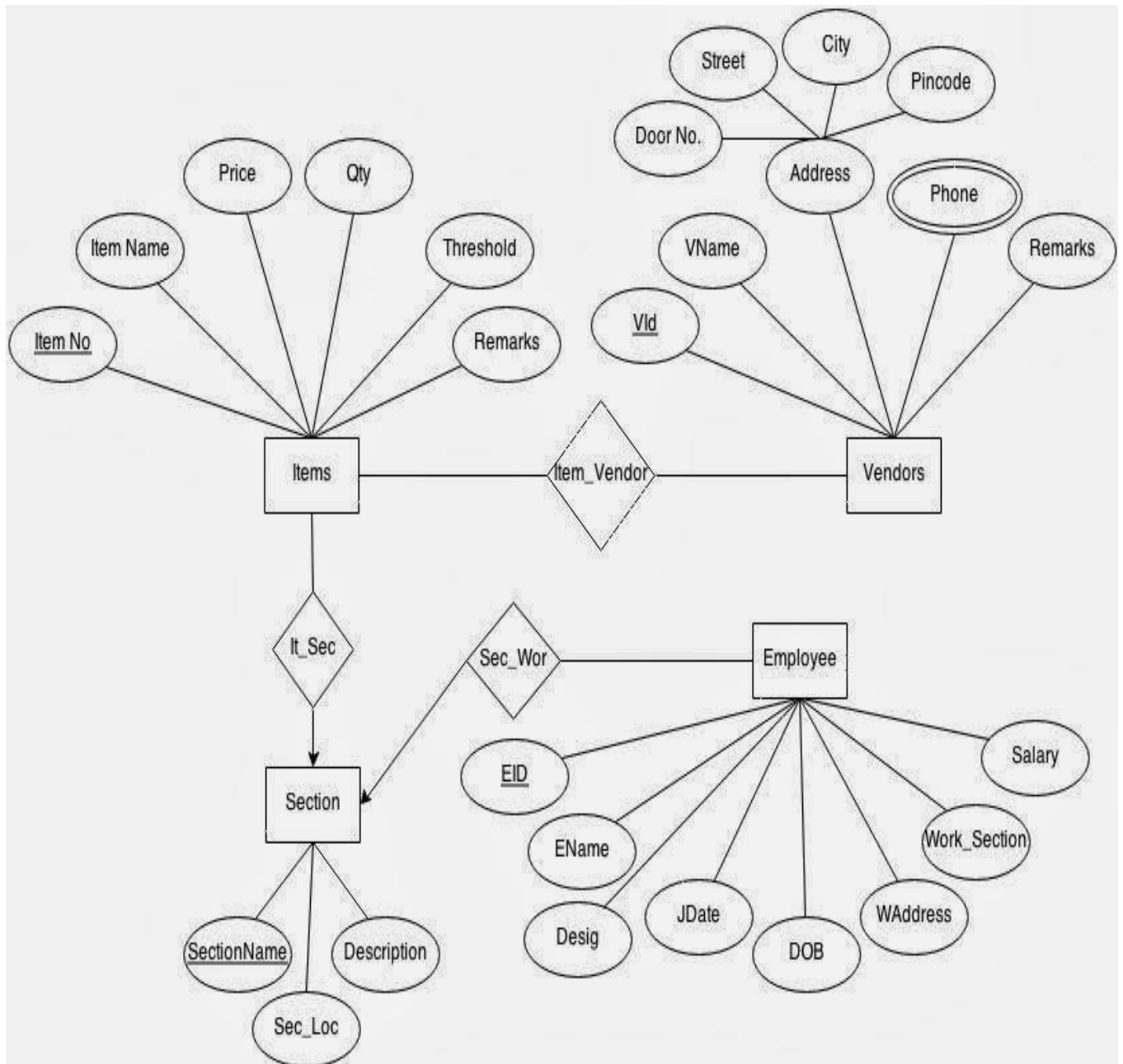
### **1.4 Scope of project**

Scope of this project is to investigate and design a software solution which can facilitate both customer and salesperson in performing their daily tasks, improving efficiency, and helping them to be more productive. This project will provide a solution through which salesperson can easily manage, handle and generate all required information in their respective format when needed. It analyses opening of new stocks, stock updates and ability to view existing once. It provides quick way of operation to capturing the manual process and automating them. This solution will help salesperson in reducing effort spend on managing orders. It will also provide them opportunity to explore possibility of generating documents.

### **1.5 Goals**



## 5.7 Relational diagram



## 5.8 Entity

Entities are concepts within the data model. Each entity is represented by a box within the ERD. Entities are abstract concepts, each representing one or more instances of the concept in

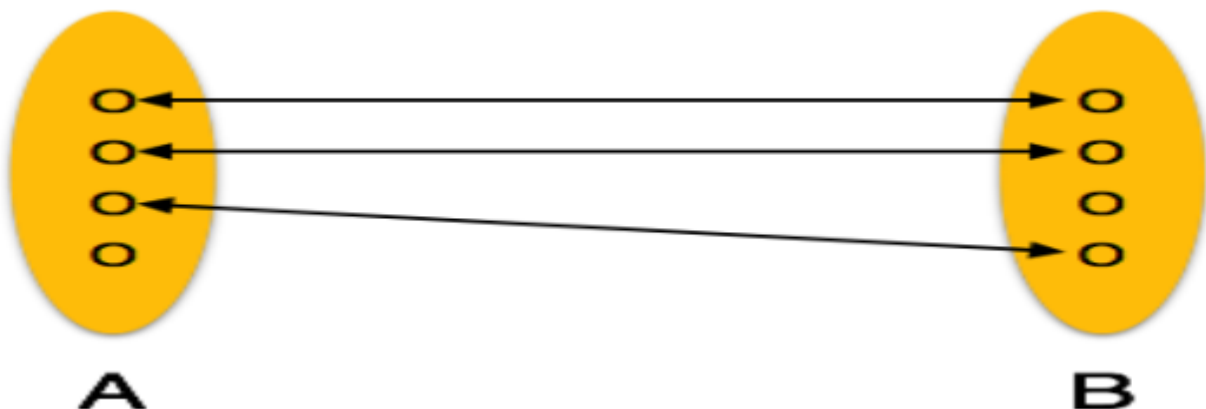
question. An entity might be considered a container that holds all of the instances of a particular thing in a system. Entities are equivalent to database tables in a relational database, with each row of the table representing an instance of that entity.

## 5.9 Relationships

Relationships are representing by lines between entities. Relationships line indicate that each instance of an entity may have a relationship with instance of the connected entity and vice versa.

### 5.9.1 One-to-One

One instance of entity (A) is associated with one other instance of another entity(B). For example, in a database of employee name (A) is associated with only one social security number (B).



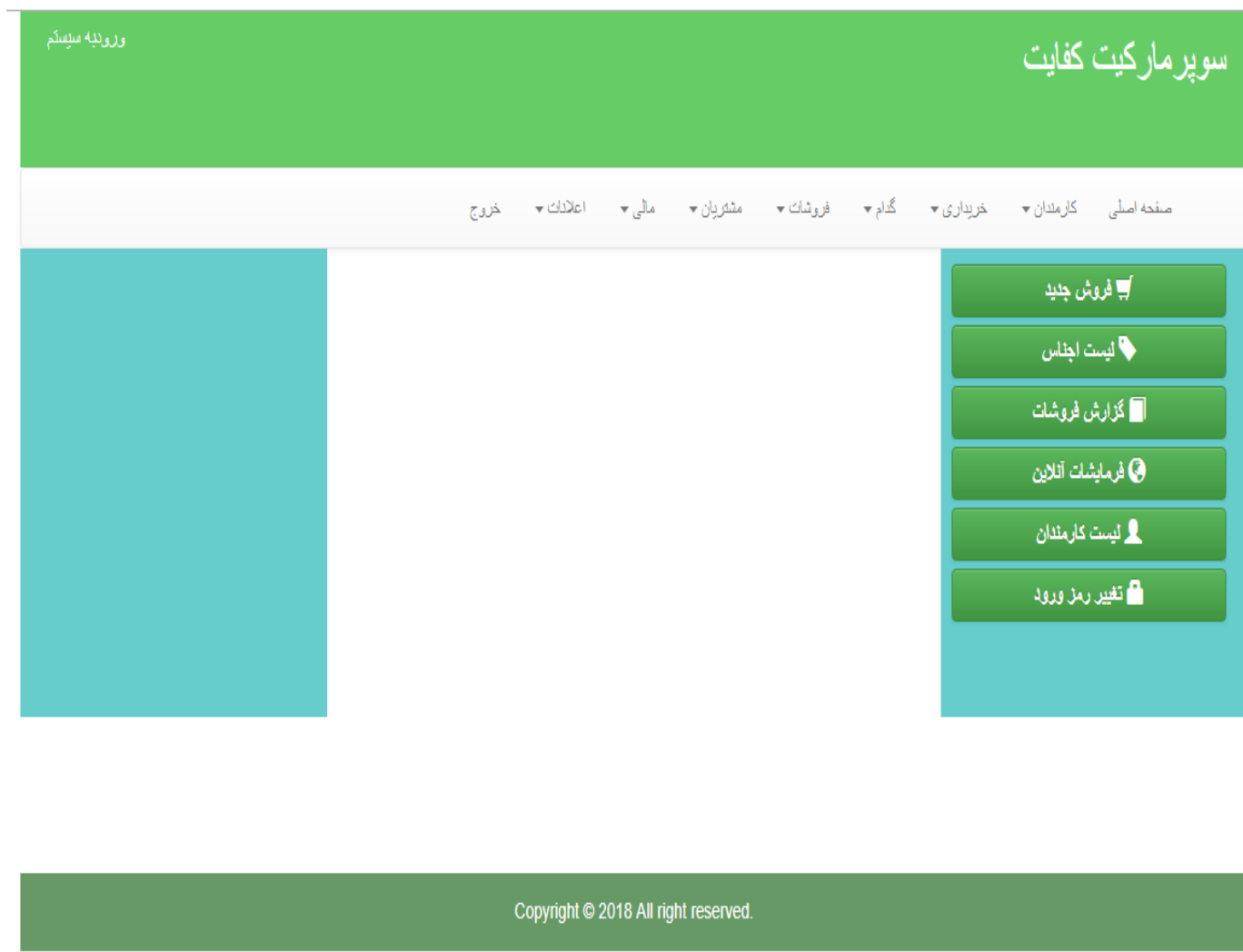
### 5.9.2 One-to-Many

One instance of an entity (A) is associated with zero, one or more instances of another entity (B), but for one instance of entity B there is only one instance of entity A. For example, for a company with all employees working in one building, the building name (A) is associated with many different employees (B), but those employees all share the same singular association with entity A.

## ورود به سیستم مدیریت سوپرمارکت کفایت

<input type="text"/>	نام یوزر:
<input type="text"/>	رمز عبور:
<input type="button" value="ورود"/>	

## 7.2 Home page form



## 7.3 Employees form

This screenshot shows the 'ثبت نمودن کارمند جدید' (Register New Employee) form on the website. The form is located in the center of the page, below the navigation bar. It contains several input fields and radio buttons for user registration. The sidebar on the right remains the same as in the previous screenshot.

**ثبت نمودن کارمند جدید**

نام:

تخلص:

جنسیت: ☒ مذکر ☐ مؤنث

حالت مدنی: ☒ مجرد ☐ متأهل

وظیفه:

معاش:

تحصیلات:

نیسواد

تلفون:

### 7.3 Employees form

<input type="text"/>	ایمیل:
<input type="text"/>	آدرس:
<input type="text" value="No file chosen"/> <input type="button" value="Choose File"/>	عکس:
<input type="text"/>	تاریخ استخدام:
<input type="text" value="2000"/>	سال تولد:
<input type="text" value="قبل از ظهر"/>	اوقات کاری:
<input type="button" value="ثبت نمودن"/>	

### 7.4 buys form



ورود به سیستم

سوپرمارکت کفایت

صفحه اصلی

کارمندان

خریداری

گدام

فروشات

مشتریان

مالی

اعلانات

خروج

ثبت خریداری جدید

فروشنده: حبيب الله گزازه

خریدار: ali karimi

تاریخ خریدار: 2018-12-12

ثبت نمودن

سبد فروش جدید

لیست اجناس

گزارش فروشات

فرمایشات آنلاین

لیست کارمندان

تغییر رمز ورود

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## 7.4 Buys form

ورود به سیستم

سوپرمارکت کفایت

صفحه اصلی
کارمندان
خریداری
گدام
فروشات
مشتریان
مالی
اعلانات
خروج

فروش جدید

لیست اجناس

گزارش فروشات

فرمایشات آنلاین

لیست کارمندان

تغییر رمز ورود

لیست خریداری ها

شماره خریداری	فروشنده	خریدار	تاریخ خریداری	جزئیات
2	حبیب الله گزارلمند	yasin yousufi	2018-11-11	
1	حبیب الله گزارلمند	ali karimi	2018-11-09	

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## 7.5 Sales form

ورود به سیستم

سوپرمارکت کفایت

صفحه اصلی
کارمندان
خریداری
گدام
فروشات
مشتریان
مالی
اعلانات
خروج

فروش جدید

لیست اجناس

گزارش فروشات

فرمایشات آنلاین

لیست کارمندان

تغییر رمز ورود

اضافه نمودن جنس به بل

جنس:

جنس را انتخاب کنید

تعداد:

قیمت:

قیمت مجموع:

تخفیف:

0

قیمت نهایی:

افزودن

بازگشت

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## 7.6 Customer form

ورودی به سیستم

سوپرمارکت کفایت

صفحه اصلی

کارمندان

خریداری

گدام

فروشات

مشتریان

مالی

اعلانات

خروج

فرویات آنلاین

جنس: جنس را انتخاب نمایید

تعداد:

قیمت:

قیمت مجموع:

تبره: 0

ثبت فروش

ثبت نمودن

فروش جدید

لیست اجناس

گزارش فروشات

فرویات آنلاین

لیست کارمندان

تغییر رمز ورود

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## 7.7 Finance form

ورود به سیستم

سوپرمارکت کفایت

صفحه اصلی

کارمندان

خریداری

گدام

فروشات

مشتریان

مالی

اعلانات

خروج

گزارش فروشات

نوعیت گزارش: روزانه

نمایش

فروش جدید

لیست اجناس

گزارش فروشات

فرمایشات آنلاین

لیست کارمندان

تغییر رمز ورود

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## 7.8 Advertisement form

ورود به سیستم

سوپرمارکت کفایت

صفحه اصلی

کارمندان

خریداری

گدام

فروشات

مشتریان

مالی

اعلانات

خروج

اضافه نمودن اعلان جدید

عنوان:

تصویر:

تشریحات:

آدرس وبسایت:

تاریخ نشر:

تاریخ انقضا:

نشر نمودن

No file chosen

Choose File

فروش جدید

لیست اجناس

گزارش فروشات

فرمایشات آنلاین

لیست کارمندان

تغییر رمز ورود

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