Çukurova University

Department of Computer Engineering

SOFTWARE ENGINEERING PROJECT REPORT

Project Name: Cafe Automation

Group Members:

Bernur Ançel - 2016555005

Berfin Gökmen - 2016555036

Büşra Durak- 2016555031

1. **INTRODUCTION**

4.**ACTIVITY DIAGRAM**

5.**ENTITY DIAGRAM**

6.**CLASS DIAGRAM**

7.**SEQUENCE DIAGRAM**

8.**CAFE AUTOMATION**

9.**DATABASE**

10. **TASK SHARING**

1.1 References

1.https://www.w3schools.com/html/html_css.asp

2.https://www.tutorialspoint.com/html/index.htm

3.https://getbootstrap.com/

We use these website for html , css functions and tutorial.

4.https://flask.palletsprojects.com/en/1.1.x/

5.https://opensource.com/article/18/4/flask

6.https://stackoverflow.com/

7.https://online.visual-paradigm.com/

8.https://www.python.org/

We use these websites for python , flask.

1.2 ABOUT OF AUTOMATION

In this cafe automation, the customer can browse the menu and look at the products. However, he / she will need to register and log in before he can place an order. Otherwise, he cannot see the menu prices and add products to his cart. After logging in, you can see the products added to the cart and place an order.
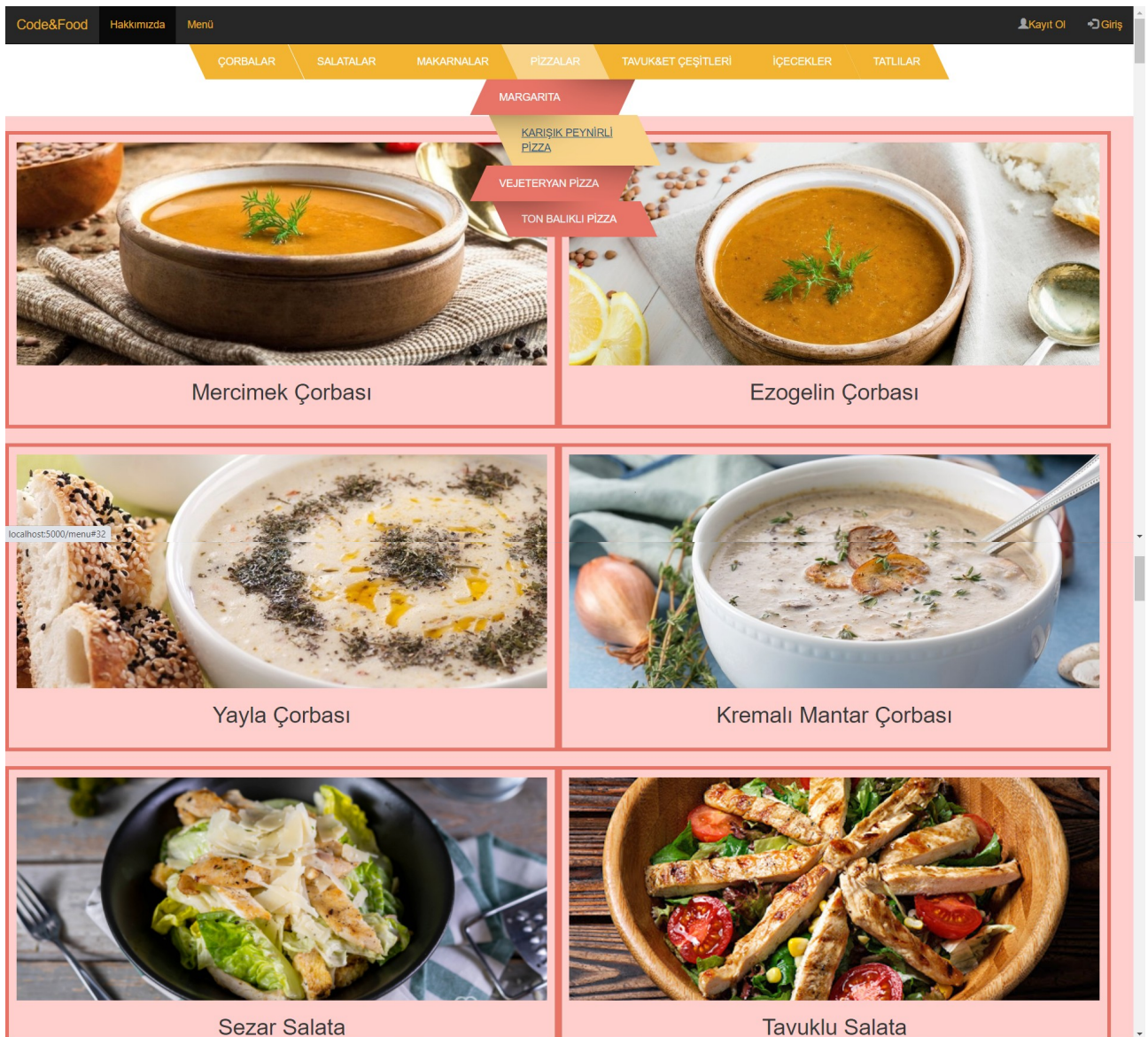
2.DETAILED SYSTEM DESCRIPTION

Customer is the user who joins the system as a member of the web site of the cafe using the automation. Being a member requires getting a customer email and a password to logging in to taken account for each online user. As a member, a customer can order online and provide feedback.

Ordering online: The customer can login to automation and add as many products from the menu as he wishes. Then, by going to the cart, he can remove the product he does not want. Finally, he can order the products in his cart.

Provide feedback: The customer can state and comment her opinions about the cafe as a comment from the feedback section on the main page.

3. REQUIREMENTS

3.1 SOFTWARE AND HARDWARE REQUIREMENTS

User requirements: User requirements are typically written when discussing the use cases for a project. The requirements definition is done with the customer or product managers that know how the embedded system will be used by the user. Many user requirements deal with how a user will interact with a system and what that user expects. If there is a screen or human machine interface aspect to the system, a user requirement may be based on what happens when the user selects an action on the screen.

3.2 VALIDATION CONTROL

Kullanıcı Kayıt Formu

class RegisterForm(Form):

 name = StringField("İsim soyisim",validators=[validators.length(min=4,max=25)])

    email = StringField("Email Adresi",validators=[validators.Email(message="Lütfen Geçerli bir mail adresi giriniz.")])

    password = PasswordField("Parola:",validators=[

validators.DataRequired(message="Lütfen bir parola belirleyin."),

validators.EqualTo(fieldname="confirm",message = "Parolanız uyuşmuyor...")])

    confirm = PasswordField("Parola Doğrulama")
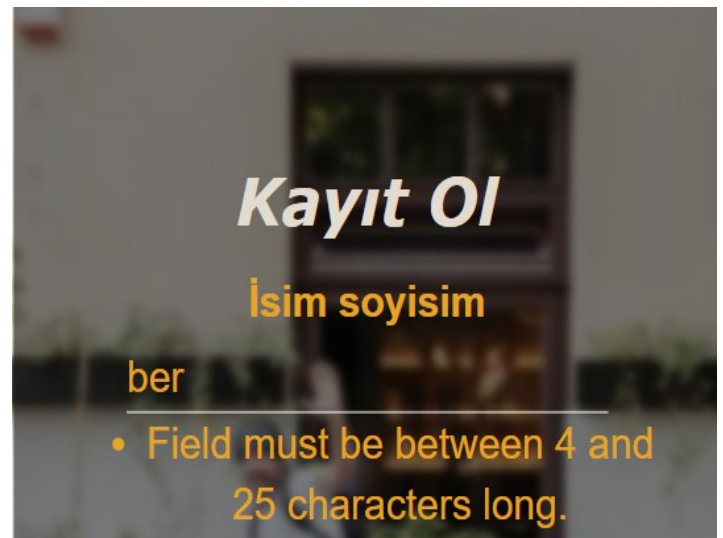
We put restrictions on name and surname using validators.
If he/she does not consider this restriction the system will fail and will not complete the registration.
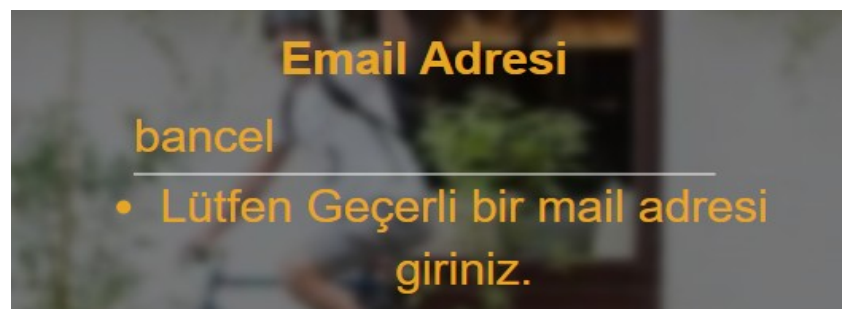
We put restrictions on emails using validators.
If it is not written according to ..... @ .... com pattern, the system will give a warning.
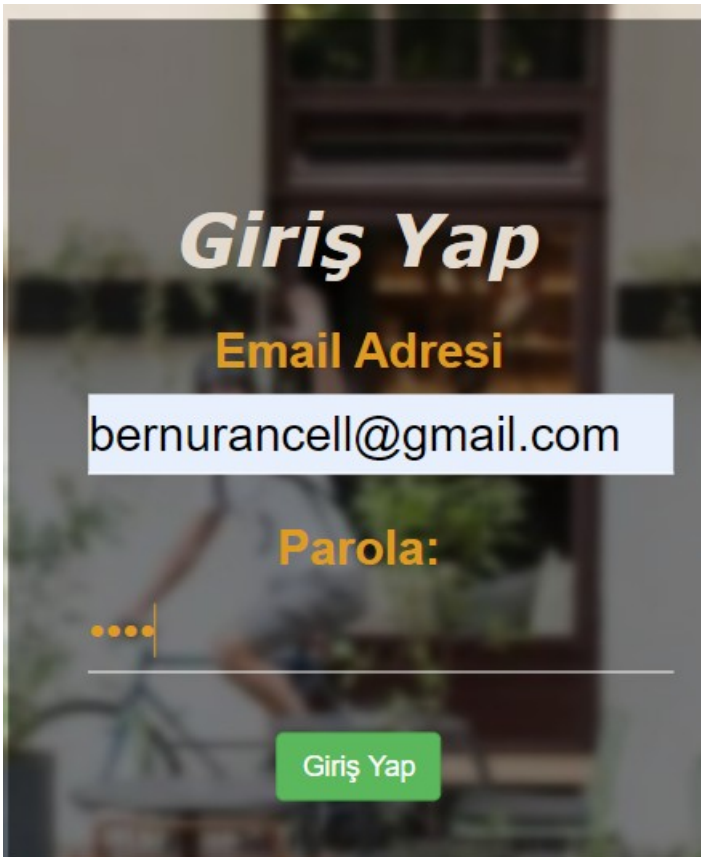
Password is the best thing to identify and distinguish the person. Therefore, this field should not be left empty, we have put restrictions for this.
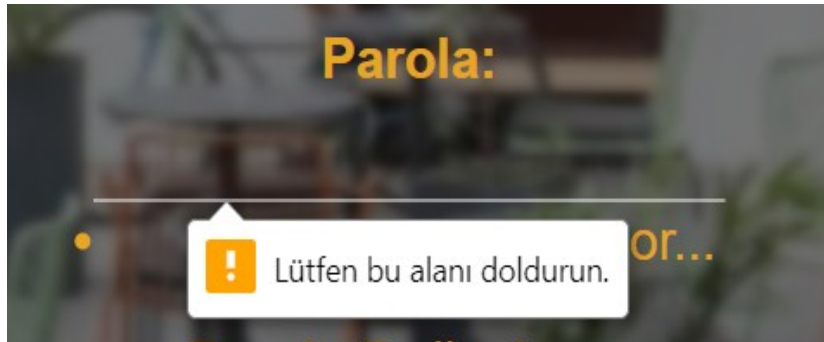
We created a confirm field for password control. If the user doesn't enter the same, the system will give an error.
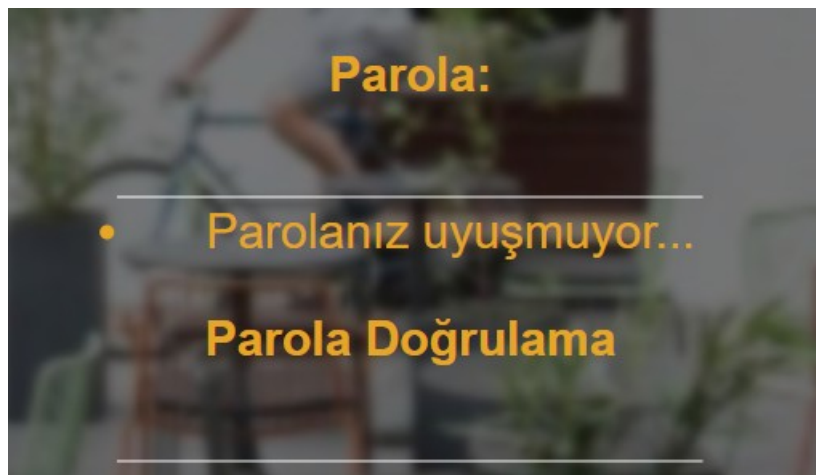
3.3 ALERT MESSAGE
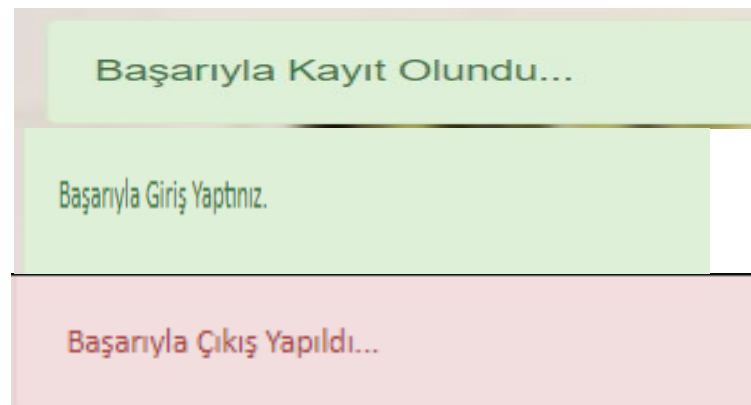
Alert messages appear on the page entered after the operation and goes away when the page is refreshed.

Color is determined according to its category.For example, if category danger is in the red background, if category succes is in the green background.

4.ACTIVITY DIAGRAM
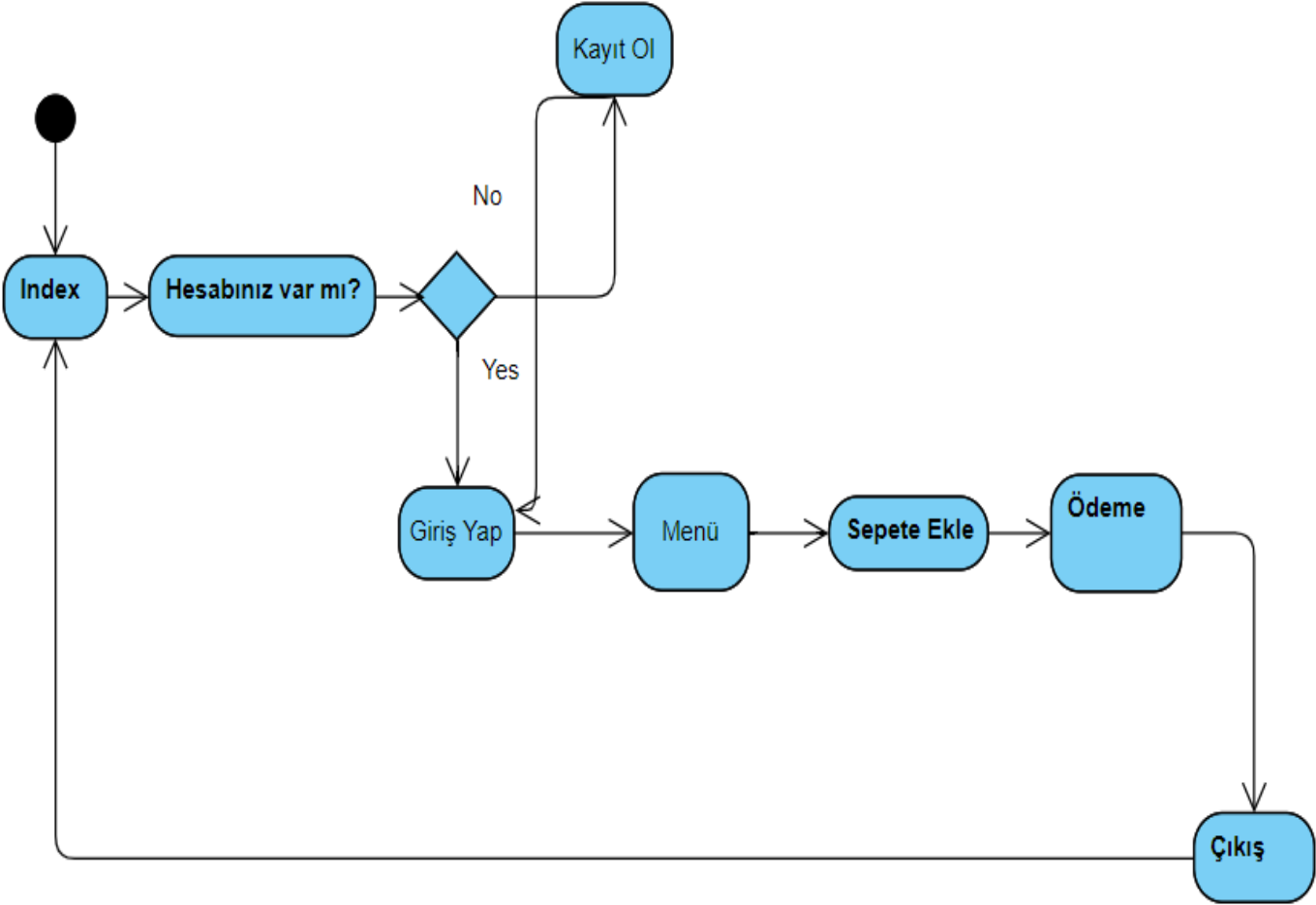
5.ENTITY RELATIONSHIP DIAGRAM

mycafe feedback
- FID : int(11)
- CID : int(11)
- Rate : int(11)
- FBack : text

mycafe orderdetail
- Emails : text
- OrderdId : int(11)
- OrderID : int(11)
- ProductID : int(11)
- ProductsName : text
- UnitPrice : int(11)
- Total : int(11)

mycafe employee
- EmployeeID : int(11)
- FName : text
- LName : text
- Salary : double
- PhoneNo : int(11)

mycafe customer
- CustomerId : int(11)
- CustomerName : text
- CEmail : text
- Password : text
- OrderId : int(11)

mycafe category
- CategoryId : int(11)
- CategoryName : text

mycafe product
- ProductID : int(11)
- ProductName : text
- ProductPrice : double
- CategoryId : int(11)

mycafe orders
- OrderID : int(11)
- OrderDate : timestamp
- Orderstatus : int(11)
- TableID : int(11)

mycafe tables
- TableID : int(11)
- TableName : text

6.CLASS DIAGRAM

7. SEQUENCE DIAGRAM

7.1 Register Sequence Diagram
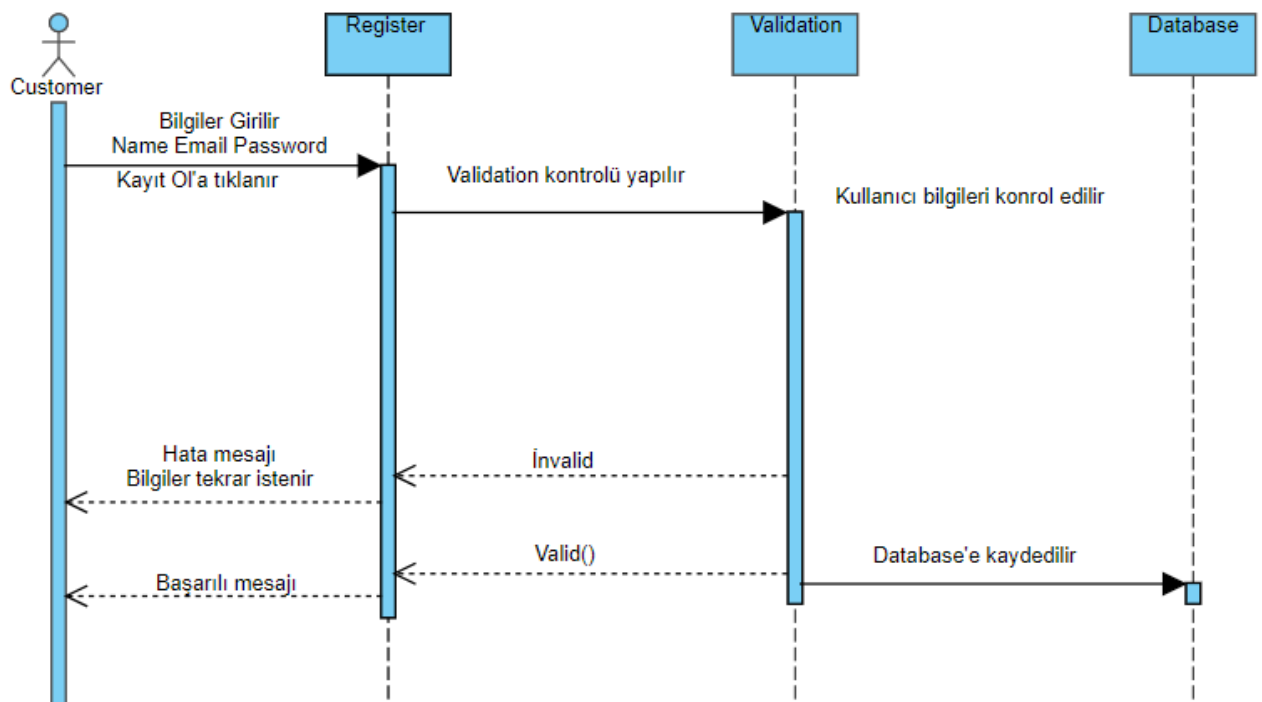
7.2 Login Sequence Diagram
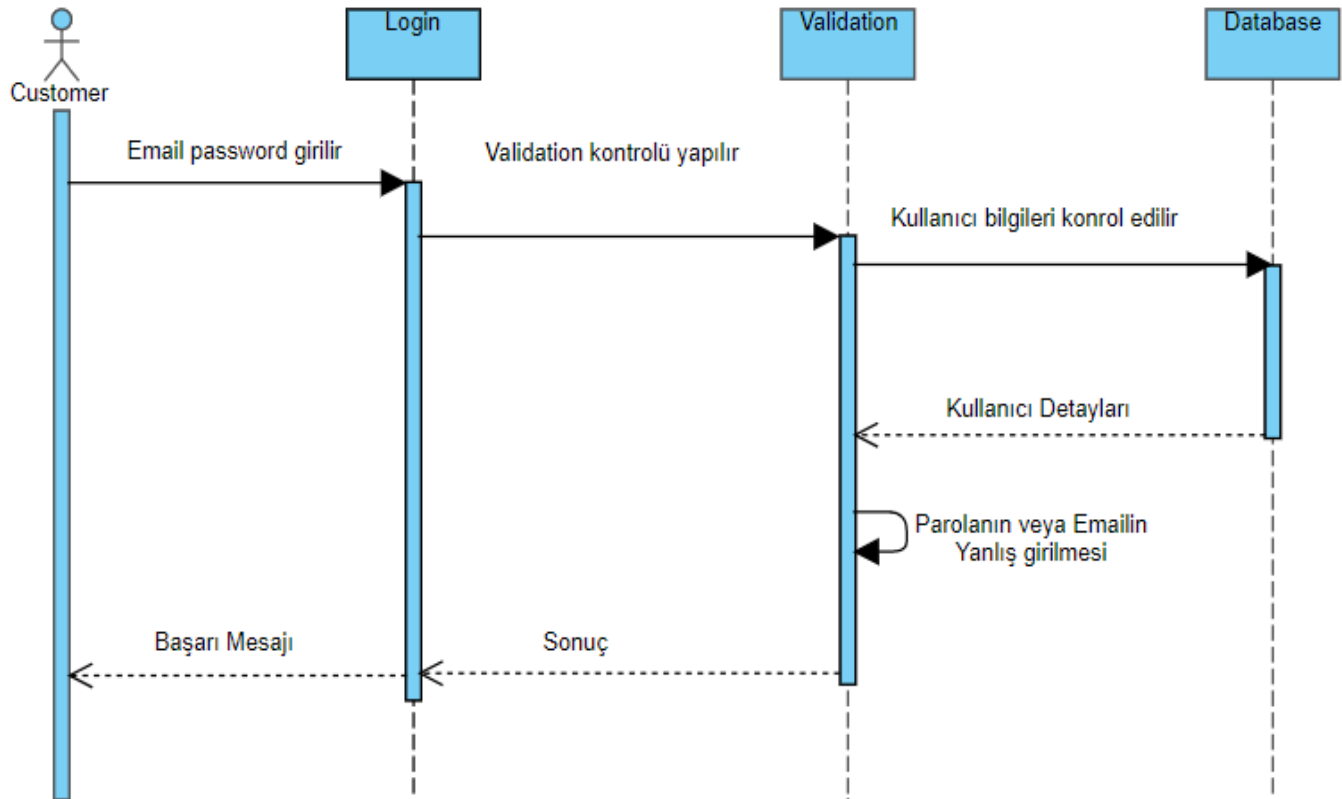
7.3 Logout Sequence Diagram
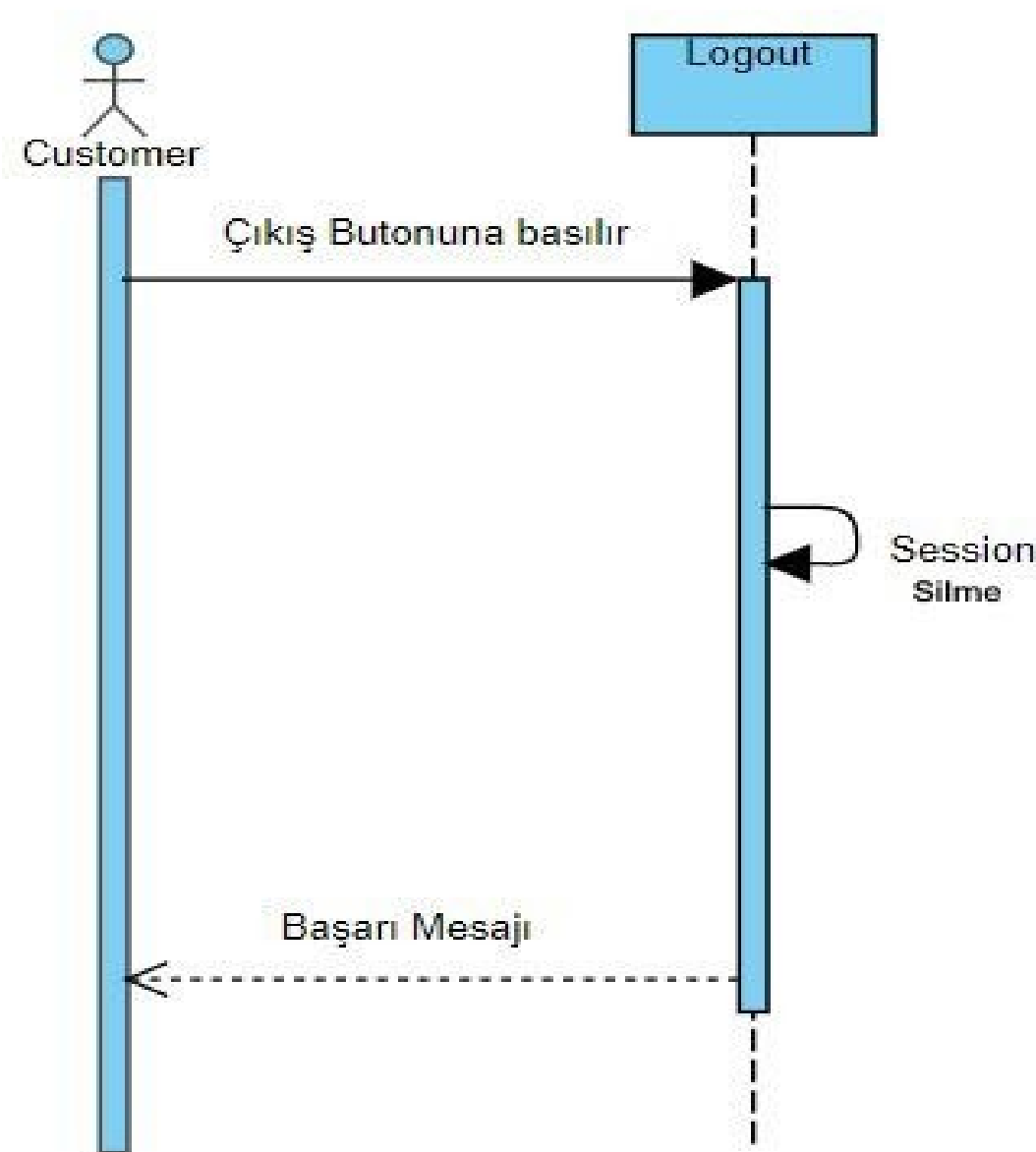
7.4 Order Sequence Diagram
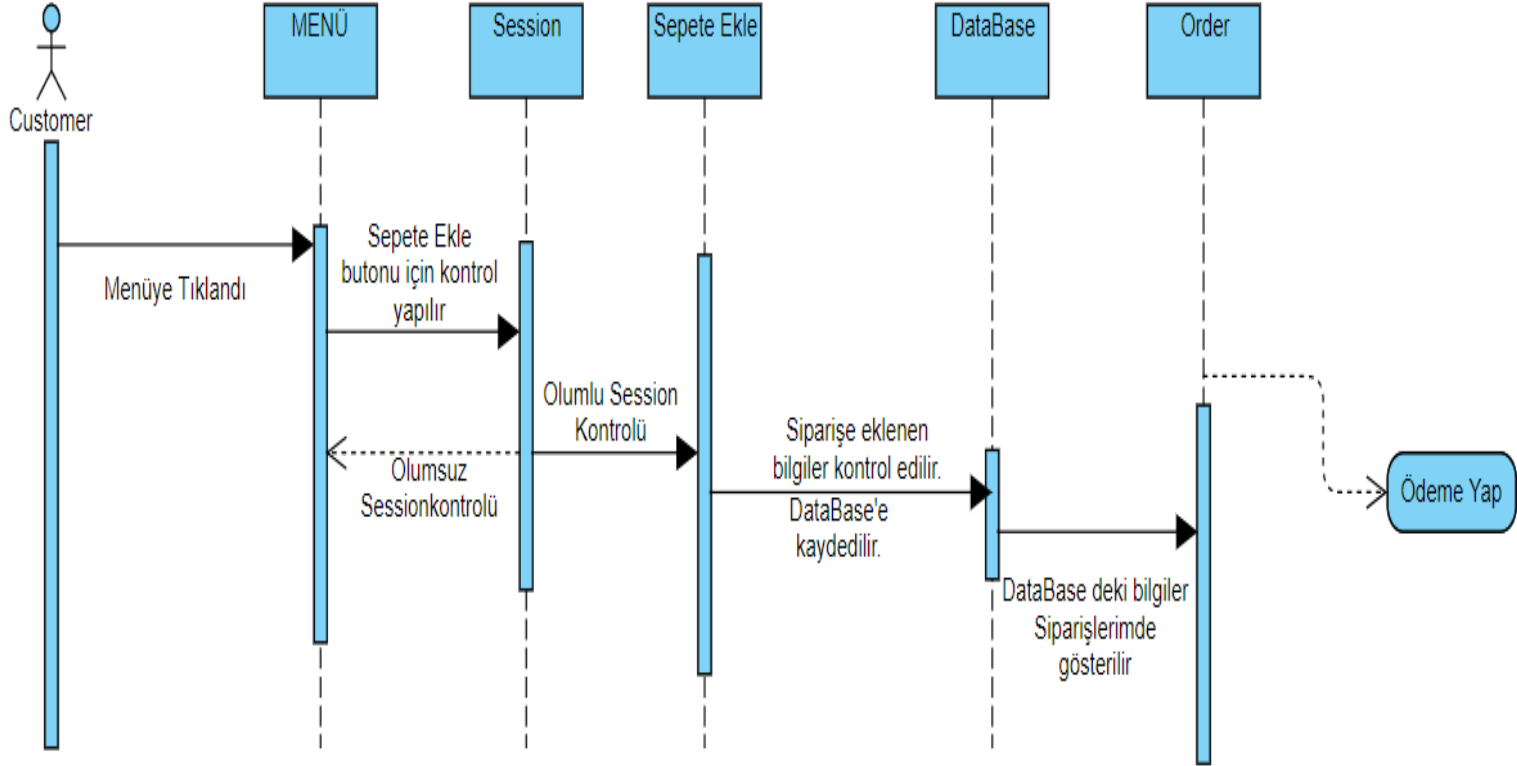
8.CAFE AUTOMATION

8.1 MENU
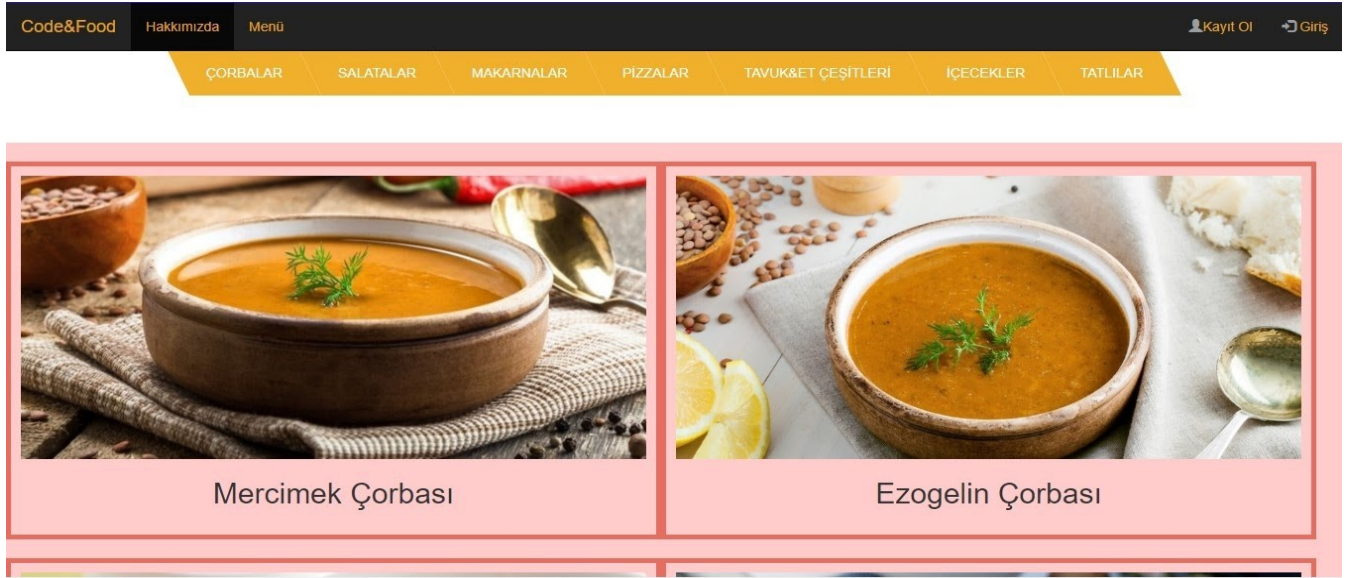
If a customer doesn't logged in to system, he can not see the product's prices and the add cart button

After logged-in to system menu will be seen like that.
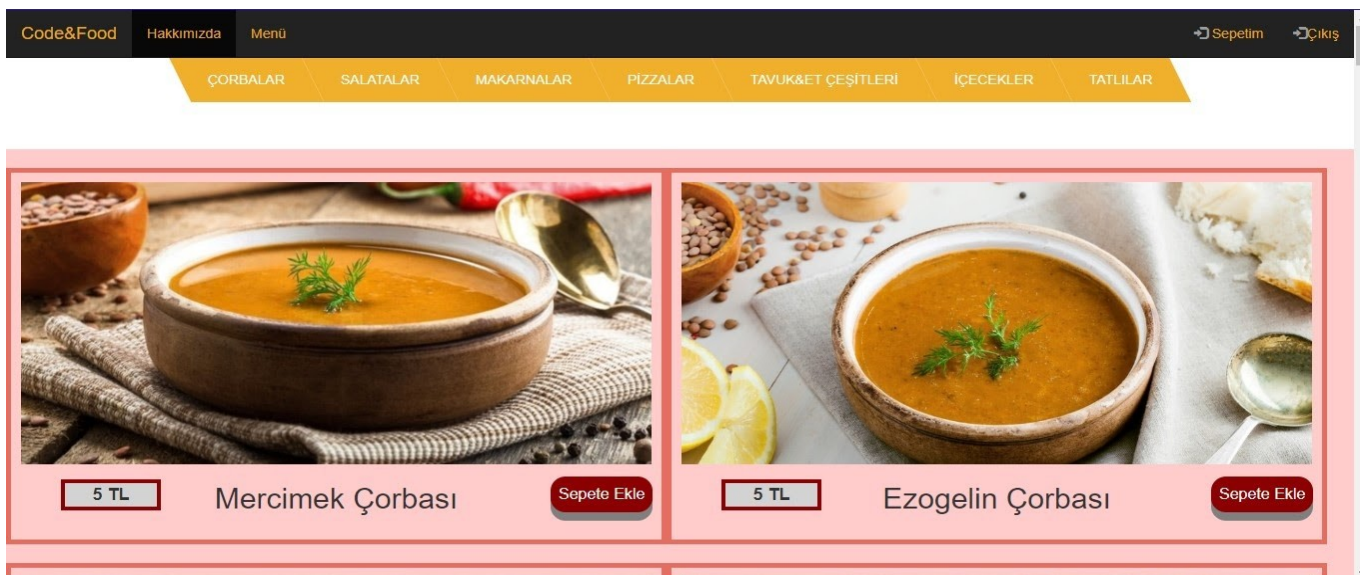
When a customer push the Sepete Ekle button, ProductId of the product goes to the menu function. Then, in the function,product attributes are added to cart.

```python
def menu ():
    if request.method == "POST":
        cursor = mysql.connection.cursor()
        post_id = request.form['product']
        sorgu= "Select CustomerId From customer Where CEmail = %s"
        cursor.execute(sorgu,(session["email"],))
        customer_ID = cursor.fetchone()
        c1=customer_ID["CustomerId"]
        customer = "INSERT INTO orderdetail(Emails,orderdetail.OrderID,P
        cursor.execute(customer,(session["email"],c1,post_id))
        mysql.connection.commit()
        cursor.close()
        return redirect(url_for("menu"))
    else:
        return render_template("menu.html")
```

Menu function where the products are added to database .

```python
def delete():
    if request.method == "POST":
        cursor = mysql.connection.cursor()
        post_id = request.form['deleteproduct']
        sorgu= "Select OrderdId From orderdetail Where ProductID = %s"
        cursor.execute(sorgu,(post_id,))
        food = cursor.fetchone()
        food1=food["OrderdId"]
        customer = "DELETE FROM orderdetail WHERE OrderdId=%s"
        cursor.execute(customer,(food1,))

        mysql.connection.commit()
        cursor.close()
        return cart()
```

Every time the function is called after deleting the product, cart function is returned and the products will listed in the cart.
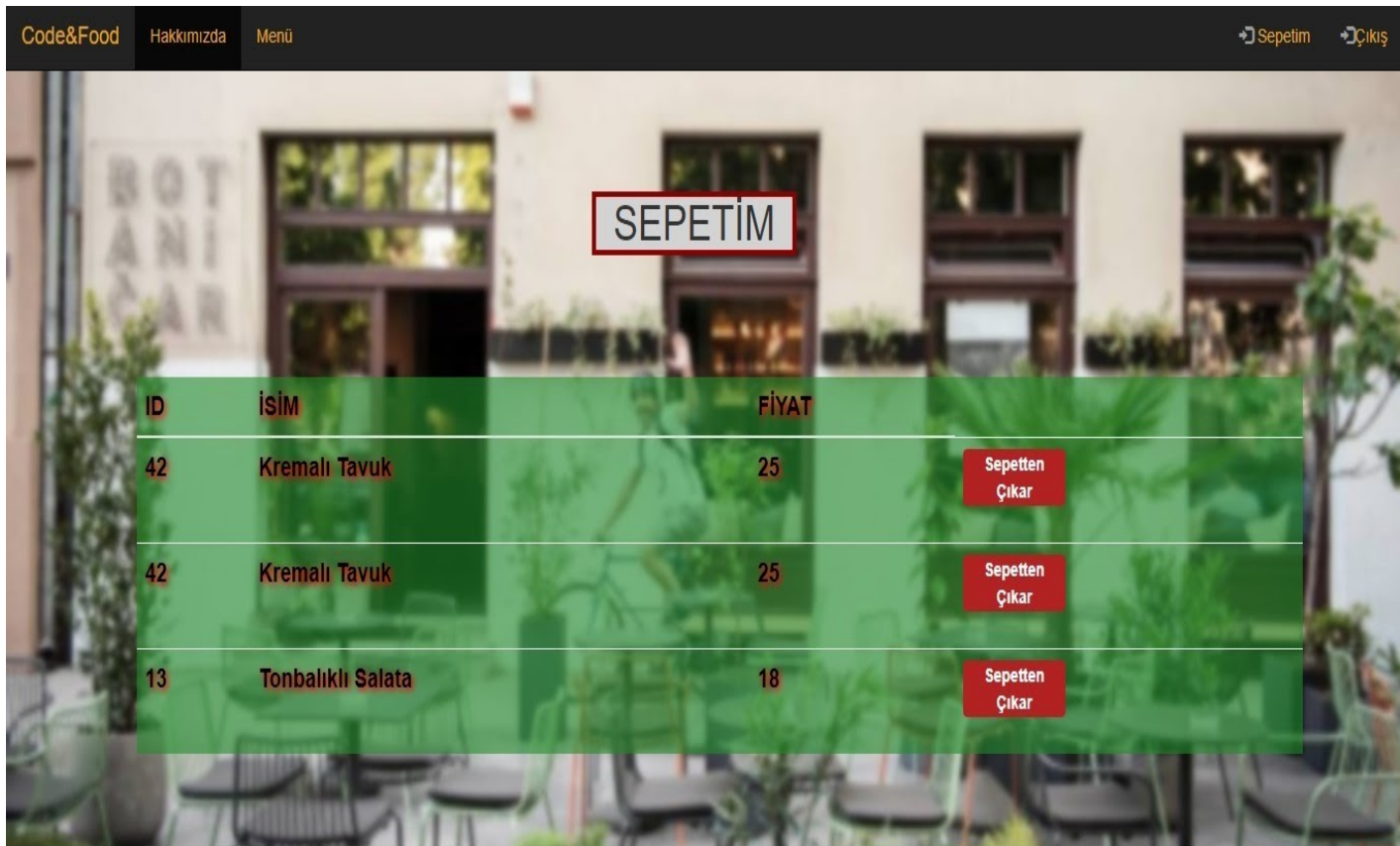
Customer also can delete the products as the same way. ProductID will be gone to delete function and with SELECT query, OrderID will be selected. The deleting operation will done with OrderID not ProductID in DELETE query. Because if the product is deleted with ProductID, all products that have same ids will be deleted which is not wanted situation.

8.2 REGISTER

There are 2 methods: GET and POST.

If the user does GET, refresh this page or go to that page, so we only return the address of that page in our function.

But if we do the POST method.Since there will be a redirect here, we need to write some more code.

The POST method for register is an if block, by connecting with mysql, and it saves the entered information to our database.It seems in localhost ... "/register"

ⓘ localhost:5000/register

Sha_256 that we included the libraries;

Encrypts the incoming password and stores it in the database (for reliability)

When it is necessary and when we pull the password from the database, it decrypts it and sends it back.

CustomerId	CustomerName	CEmail	Password
1	Bernur Ançel	bernurancell@gmail.com	5rounds=535000$Q8u6lxJauYlBlOBp$eW4v9GlRD2LCRcGy...

8.3 LOGIN

There are 2 methods: GET and POST.

If the user does GET, refresh this page or go to that page, so we only return the address of that page in our function.

But if we do the POST method.Since there will be a redirect here, we need to write some more code.

The POST method for login is an if block, by connecting with mysql, checking a user's presence in our database with a query.

It seems in localhost ..."/login"
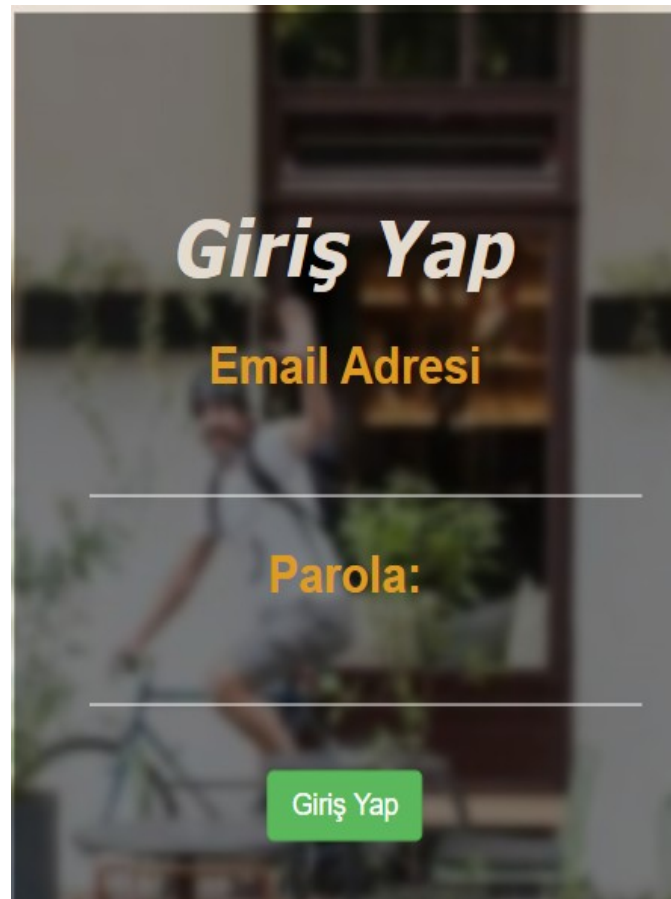
8.4 LOGOUT

In this section, the session content is emptied. The reason for doing this is that in our navbar section, if the user has logged out, the option to 'Kayıt Ol' and 'giriş' at the top right.

```
84    # Logout İşlemi
85    @app.route("/logout")
86  ∨ def logout():
87        session.clear()
88        flash("Başarıyla Çıkış Yapıldı...","danger")
89        return redirect(url_for("index"))
90
```
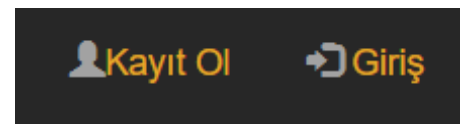

 If the session is not cleared, logged_in will return true and in the control of the navbar, there will be 'sepetim' and 'çıkış' at the top right.
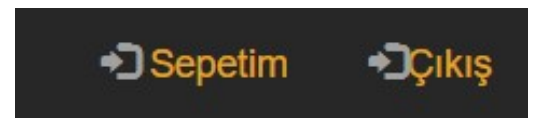
9.DATABASE

We used MySQL because it is free and open-source software.

We used Xampp as a Control Panel.

Also used phpMyAdmin, it is a free and open source administration tool for MySQL.As a portable web application written primarily in PHP, it has become one of the most popular MySQL administration tools, especially for web hosting services.

We used flask , it is a micro web framework written in Python.

We created a database named *mycafe*

It has 8 entity ;
- category
- customer
- employee
- orderdetail
- orders
- product
- tables
- feedback
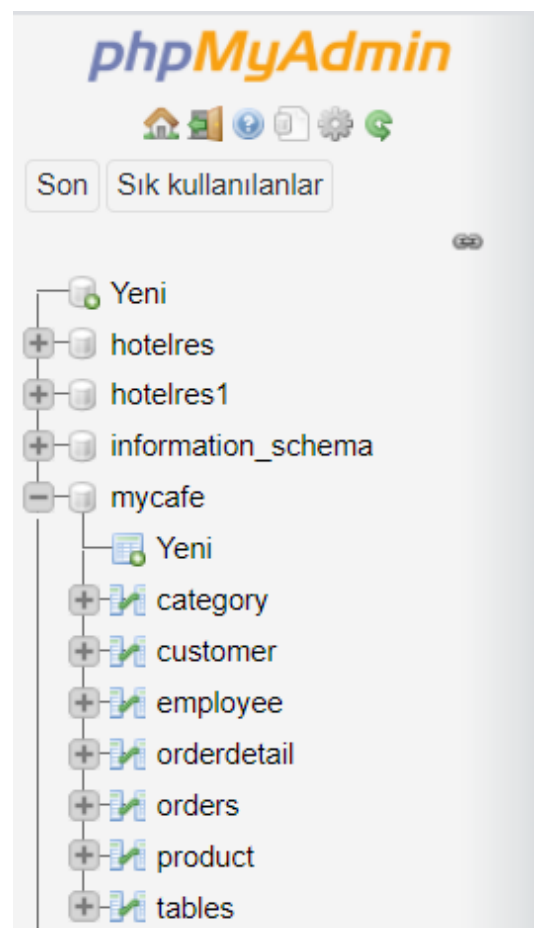
9.1 Tables

1.Category Table

	CategoryId	CategoryName
Düzenle Kopyala Sil	0	Çorbalar
Düzenle Kopyala Sil	1	Salatalar
Düzenle Kopyala Sil	2	Makarnalar
Düzenle Kopyala Sil	3	Pizzalar
Düzenle Kopyala Sil	4	Et/Tavuk Yemekleri
Düzenle Kopyala Sil	5	İçecekler
Düzenle Kopyala Sil	6	Tatlılar

2.Product Table

CategoryId is foreign key for product.

	ProductID	ProductName	ProductPrice	CategoryId
Düzenle Kopyala Sil	1	Mercimek Çorbası	5	0
Düzenle Kopyala Sil	2	Ezogelin Çorbası	5	0
Düzenle Kopyala Sil	3	Yayla Çorbası	7	0
Düzenle Kopyala Sil	4	Kremalı Mantar Çorbası	7	0
Düzenle Kopyala Sil	11	Sezar Salata	15	1
Düzenle Kopyala Sil	12	Tavuklu Salata	18	1
Düzenle Kopyala Sil	13	Tonbalıklı Salata	18	1
Düzenle Kopyala Sil	14	Izgara Biftekli Salata	25	1
Düzenle Kopyala Sil	21	Pesto Soslu Tortelini	18	2
Düzenle Kopyala Sil	22	Kremalı Mantarlı Makarna	18	2
Düzenle Kopyala Sil	23	Köri Soslu Makarna	18	2
Düzenle Kopyala Sil	24	Mac&Cheese	18	2
Düzenle Kopyala Sil	31	Vejeteryan Pizza	18	3
Düzenle Kopyala Sil	32	Ton Balıklı Pizza	18	3
Düzenle Kopyala Sil	33	Margarita	18	3
Düzenle Kopyala Sil	34	Karışık Peynirli Pizza	18	3
Düzenle Kopyala Sil	41	Izgara Tavuk	22	4
Düzenle Kopyala Sil	42	Kremalı Tavuk	25	4
Düzenle Kopyala Sil	43	Tavuk Fajita	25	4
Düzenle Kopyala Sil	44	Tavuk Şinitzel	25	4

☐	🖉 Düzenle	≩⁺ᵢ Kopyala	⊝ Sil	45	Çökertme Kebabı	30	4
☐	🖉 Düzenle	≩⁺ᵢ Kopyala	⊝ Sil	46	Dana Antrikot	50	4
☐	🖉 Düzenle	≩⁺ᵢ Kopyala	⊝ Sil	47	Kaşarlı Köfte	30	4
☐	🖉 Düzenle	≩⁺ᵢ Kopyala	⊝ Sil	48	Et Sote	30	4
☐	🖉 Düzenle	≩⁺ᵢ Kopyala	⊝ Sil	51	Limonata	12	5
☐	🖉 Düzenle	≩⁺ᵢ Kopyala	⊝ Sil	52	Coca Cola	6	5
☐	🖉 Düzenle	≩⁺ᵢ Kopyala	⊝ Sil	53	Fanta	6	5
☐	🖉 Düzenle	≩⁺ᵢ Kopyala	⊝ Sil	54	Sprite	6	5
☐	🖉 Düzenle	≩⁺ᵢ Kopyala	⊝ Sil	55	Ayran	6	5
☐	🖉 Düzenle	≩⁺ᵢ Kopyala	⊝ Sil	56	Türk Kahvesi	8	5
☐	🖉 Düzenle	≩⁺ᵢ Kopyala	⊝ Sil	57	Latte	12	5
☐	🖉 Düzenle	≩⁺ᵢ Kopyala	⊝ Sil	58	Milk Shake	12	5
☐	🖉 Düzenle	≩⁺ᵢ Kopyala	⊝ Sil	61	Sufle	15	6
☐	🖉 Düzenle	≩⁺ᵢ Kopyala	⊝ Sil	62	Tiramisu	15	6
☐	🖉 Düzenle	≩⁺ᵢ Kopyala	⊝ Sil	63	San Sebastian	18	6
☐	🖉 Düzenle	≩⁺ᵢ Kopyala	⊝ Sil	64	Karadutlu Orman Rüyası	18	6
☐	🖉 Düzenle	≩⁺ᵢ Kopyala	⊝ Sil	65	Limonlu Cheesecake	18	6

3.Employee Table

+ Seçenekler

←T→			▽	EmployeeID	FName	LName	Salary	PhoneNo
☐	🖉 Düzenle	≩⁺ᵢ Kopyala	⊝ Sil	28	Ayşe	Yıldız	5000	1234
☐	🖉 Düzenle	≩⁺ᵢ Kopyala	⊝ Sil	29	Merve	Gök	3500	1235
☐	🖉 Düzenle	≩⁺ᵢ Kopyala	⊝ Sil	30	Fatma	Altın	3000	1236
☐	🖉 Düzenle	≩⁺ᵢ Kopyala	⊝ Sil	31	Ali	Taş	3500	1237
☐	🖉 Düzenle	≩⁺ᵢ Kopyala	⊝ Sil	32	Berk	Toprak	5000	1238
☐	🖉 Düzenle	≩⁺ᵢ Kopyala	⊝ Sil	33	Mehmet	Bağcı	3000	1239
☐	🖉 Düzenle	≩⁺ᵢ Kopyala	⊝ Sil	34	Murat	Arıcı	3000	1230

4.Customer Table

←T→				CustomerId	CustomerName	CEmail	Password	OrderId
☐	🖉 Düzenle	🏛 Kopyala	🚫 Sil	4	Mehmet	Mehmet@gmail.com	5rounds=535000$lenL7W3RqM0cglam$/xXY6CGnf2vLsGsV...	NULL
☐	🖉 Düzenle	🏛 Kopyala	🚫 Sil	5	Büşra Durak	baleynad@gmail.com	5rounds=535000$le4tRrtytMZvr.0L$ZyOYS/DqBdUCpmGT...	NULL
☐	🖉 Düzenle	🏛 Kopyala	🚫 Sil	6	Bernur Ançel	bernurancell@gmail.com	5rounds=535000$XT8w4Hbl5fyANdDu$Ma/cB7iw8f7wS55S...	NULL
☐	🖉 Düzenle	🏛 Kopyala	🚫 Sil	7	Berfin Gökmen	berfingokmen@gmail.com	5rounds=535000$kzS3D8Aw7WoQzwU9$Xg8x4bqUWj0e9Lp/...	NULL

5.Order Table

←T→				OrderID	OrderDate	Orderstatus ▽ 1	TableID
☐	🖉 Düzenle	🏛 Kopyala	🚫 Sil	4	2020-06-23 15:02:11	0	NULL
☐	🖉 Düzenle	🏛 Kopyala	🚫 Sil	5	2020-06-23 15:19:48	0	NULL
☐	🖉 Düzenle	🏛 Kopyala	🚫 Sil	6	2020-06-23 22:41:41	0	NULL
☐	🖉 Düzenle	🏛 Kopyala	🚫 Sil	7	2020-06-23 22:42:20	0	NULL

6.Orderdetail Table

←T→				Emails	OrderdId	OrderID	ProductID	ProductsName	UnitPrice	Total
☐	🖉 Düzenle	🏛 Kopyala	🚫 Sil	baleynad@gmail.com	2	5	3	Yayla Çorbası	7	0
☐	🖉 Düzenle	🏛 Kopyala	🚫 Sil	baleynad@gmail.com	3	5	3	Yayla Çorbası	7	0
☐	🖉 Düzenle	🏛 Kopyala	🚫 Sil	baleynad@gmail.com	4	5	4	Kremalı Mantar Çorbası	7	0
☐	🖉 Düzenle	🏛 Kopyala	🚫 Sil	baleynad@gmail.com	5	5	53	Fanta	6	0
☐	🖉 Düzenle	🏛 Kopyala	🚫 Sil	baleynad@gmail.com	6	5	54	Sprite	6	0
☐	🖉 Düzenle	🏛 Kopyala	🚫 Sil	Mehmet@gmail.com	7	4	1	Mercimek Çorbası	5	0
☐	🖉 Düzenle	🏛 Kopyala	🚫 Sil	Mehmet@gmail.com	8	4	13	Tonbalıklı Salata	18	0
☐	🖉 Düzenle	🏛 Kopyala	🚫 Sil	Mehmet@gmail.com	9	4	44	Tavuk Şinitzel	25	0

7.Feedback Table

				FID	CID	Rate	FBack
☐	🖉 Düzenle	⯈⬝ Kopyala	⊖ Sil	1	4	4	Oldukça başarılıydı ve internetleri çok hızlı bu ş...
☐	🖉 Düzenle	⯈⬝ Kopyala	⊖ Sil	2	5	5	Başarılıydı.
☐	🖉 Düzenle	⯈⬝ Kopyala	⊖ Sil	3	6	3	Güzeldi ama klimaları bozuktu, bu sıcakta ortalama...

8.Tables Table

				TableID	TableName
☐	🖉 Düzenle	⯈⬝ Kopyala	⊖ Sil	1	Teras1
☐	🖉 Düzenle	⯈⬝ Kopyala	⊖ Sil	2	Teras2
☐	🖉 Düzenle	⯈⬝ Kopyala	⊖ Sil	3	Teras3
☐	🖉 Düzenle	⯈⬝ Kopyala	⊖ Sil	4	Teras4
☐	🖉 Düzenle	⯈⬝ Kopyala	⊖ Sil	5	Teras5
☐	🖉 Düzenle	⯈⬝ Kopyala	⊖ Sil	6	Bahçe1
☐	🖉 Düzenle	⯈⬝ Kopyala	⊖ Sil	7	Bahçe2
☐	🖉 Düzenle	⯈⬝ Kopyala	⊖ Sil	8	Bahçe3
☐	🖉 Düzenle	⯈⬝ Kopyala	⊖ Sil	9	Bahçe4
☐	🖉 Düzenle	⯈⬝ Kopyala	⊖ Sil	10	Bahçe5

10. TASK SHARING

Our project team is most suitable for democratic decentralized team organization. First of
all, although we have a defined leader she/he can be changed if it is necessary. Decision on
problems and approach are made by all of the group members. There is no hierarchy among
the team members.

Bernur Ançel(2016555005) : She wrote the functions of the program in general and made error checks(error and validator) . Also She searched and wrote some html codes.

Berfin Gökmen(20165550036) : She made a general view of the website and designed the menu. Also she searched and wrote some css codes.

Büşra Durak(2016555031) : She created the cafe automation database with MySQL. Also She researched and wrote some css codes.