



Bilkent University

Department of Computer Engineering

CS 353 - Database Systems

Final Report

Group No: 32

Online Flower Shopping System

Project Name: FlowerGarden

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1. System Description

In this project, we have proposed, designed, and implemented an online flower shopping system, FlowerGarden. We've provided a user-friendly interface for the users of our application: customers, sellers, couriers, and customer services. We tried to design a complete system that is suitable to adopt as a real system to be able to see the challenges of designing a system that considers the different needs of different types of users. We think that we achieved our goal because we provided all the essentials required by our users to use our application as they wish. The sellers of the application choose the districts they serve and when they serve in those districts. Then, they can add custom flower arrangements based on the flowers they select to add. The customers can buy these arrangements if they want to send a flower arrangement to a district where that seller serves. To make it more real we added several options for customers in the order creation page, they can customize their deliveries by selecting the desired delivery type & date and even message for the seller if they want something special. The sellers can assign couriers to their orders if the couriers work in the corresponding district and timeslot.

The customers are welcome to add comments and complaints about their orders. The rating of each flower arrangement is calculated by the rating part of the comments they add. Moreover, their complaints are answered by the customer service employees of our application. The customers of our system, along with the sellers, the couriers and the customer service are notified by the application for each of the actions made by other users of the application that interests them. For example, a customer is notified when a courier is assigned to his/her order.

Finally, we have put a lot of effort into designing a good looking UI for our users which includes a comprehensive feedback system. We believe that the most problematic part of a lot of websites is the lack of a response system when an error occurs. We tried to provide a clear response on each failing request to make the application easy to use. We also provided a report facility for our sellers to see their order statistics to ease their job in deciding which districts to serve to maximize their profits.

2. Final E/R

2.1. Modifications

- We have removed the relation `service_working_time`, since we realized that their working time is not custom in our application so the relation is not needed.
- `Validation_status` attribute of seller and courier entities are removed also because they didn't add functionality in our system.
- For the saved addresses of the customer we needed to store `district_id` because all the shipments and deliveries are conducted based on districts. If a customer wants to buy an arrangement of a seller, that seller should serve in the district the customer wants to send an arrangement. Since we needed a relation between customer and district entities to be able to add `district_id` into `saved_addresses`, we converted `saved_addresses` into a relation. Each saved address, however, contains also a description of the address. To be able to have the description also we added an attribute to the relation `saved_addresses` named as `address_description`.
- Similarly, we need the address information of the seller's store since couriers are going to take the order from the sellers' stores and deliver it to the receiver address. Similarly, we needed to store the address as a `district_id` and `address_description` tuple. We added a similar relation as explained above but this time we made the relation many to one since each seller has only 1 store address.
- Similar additions were made to the order entity to store receiver addresses.
- The primary keys of comment and timeslot entities were missing, they are added to correct the diagram.
- Based on feedback for the design report, the relationships between seller-timeslot and courier-timeslot are updated. In the updated version, the seller and courier make total participation in the relationships.
- Finally, the relationship shipping and the entity order is revised. The attributes added to the order entity `seller_status` and `courier_status` are removed and added as the attributes of the shipping relationship.

2.2. Revised E/R Diagram

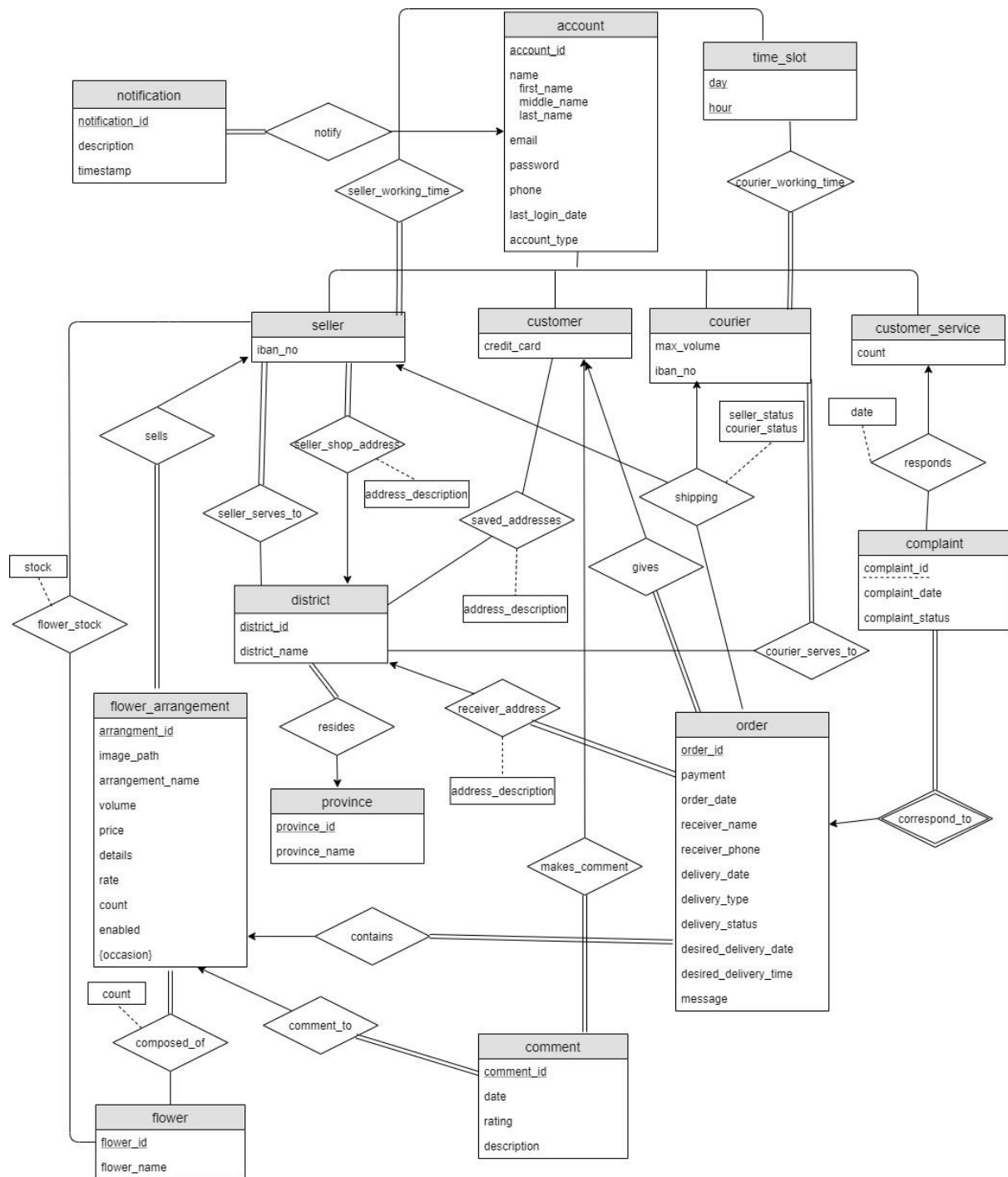


Figure 1: ER Diagram

3. Table Schemas

3.1. Account

Relational Model: account(account_id, first_name, middle_name, last_name, email, password, phone, last_login_date, account_type)
Unique(email)

3.2. Timeslot

Relational Model: timeslot(hour,day)

3.3. Seller

Relational Model: seller(account_id, district_id, address_text, iban_no)
Foreign Key account_id References account
Foreign Key district_id References district

3.4. Customer

Relational Model: customer(account_id, credit_card)
Foreign Key account_id References account

3.5. Saved_addresses

Relational Model: saved_addresses(customer_id, district_id, address)
Foreign Key customer_id References account(account_id)
Foreign Key district_id References district

3.6. Courier

Relational Model: courier(account_id, max_volume, iban_no)
Foreign Key account_id References account

3.7. Customer_service

Relational Model: customer_service(account_id, count)
Foreign Key account_id References account

3.8. Complaint

Relational Model: complaint(order_id, complaint_id, complaint_date, complaint_status, customer_service_id, response_date)
Foreign Key order_id References order
Foreign Key customer_service_id References customer_service(account_id)

3.9. Order

Relational Model: order(order_id, payment, order_date, receiver_name, receiver_phone, district_id, address_text, delivery_date, delivery_type, delivery_status, desired_delivery_date, desired_delivery_time, message, seller_status, courier_status, seller_id, courier_id, customer_id, arrangement_id)
Foreign Key seller_id References seller(account_id)
Foreign Key courier_id References courier(account_id)
Foreign Key customer_id References customer(account_id)
Foreign Key district_id References district
Foreign Key arrangement_id References flower_arrangement

3.10. District

Relational Model: district(district_id, district_name, province_id)
Foreign Key province_id References province

3.11. Province

Relational Model: province(province_id, province_name)

3.12. Flower

Relational Model: flower(flower_id, flower_name)

3.13. Flower_arrangement

Relational Model: flower_arrangement(arrangement_id, image_path, arrangement_name, volume, price, details, rate, count, seller_id, enabled)
Foreign Key seller_id References seller(account_id)

3.14. Occasion

Relational Model: occasion(arrangement_id, occasion_name)
Foreign Key arrangement_id References flower_arrangement

3.15. Comment

Relational Model: comment(comment_id, description, customer_id, date, rating, arrangement_id)
Foreign Key customer_id References customer(account_id)
Foreign Key arrangement_id References flower_arrangement

3.16. Notification

Relational Model: notification(notification_id, account_id, description, timestamp)
Foreign Key account_id References account

3.17. Seller_serves_to

Relational Model: seller_serves_to(district_id, seller_id)

Foreign Key seller_id References seller(account_id)

Foreign Key district_id References district

3.18. Courier_serves_to

Relational Model: courier_serves_to(district_id, courier_id)

Foreign Key courier_id References courier(account_id)

Foreign Key district_id References district

3.19. Flower_stock

Relational Model: flower_stock(stock, flower_id, seller_id)

Foreign Key seller_id References seller(account_id)

Foreign Key flower_id References flower

3.20. Composed_of

Relational Model: composed_of(count, flower_id, arrangement_id)

Foreign Key flower_id References flower

Foreign Key arrangement_id References flower_arrangement

3.21. Seller_working_time

Relational Model: seller_working_time(seller_id, day, hour)

Foreign Key seller_id References seller(account_id)

Foreign Key day References timeslot

Foreign Key hour References timeslot

3.22. Courier_working_time

Relational Model: courier_working_time(courier_id, day, hour)

Foreign Key courier_id References courier(account_id)

Foreign Key day References timeslot

Foreign Key hour References timeslot

4. Implementation Details

4.1. Environment, Framework, Languages

In the FlowerGarden application, the MySQL database is chosen. The MySQL Workbench application is used to manipulate the database easily instead of the MySQL command line application.

The frontend of the application is built using React.js library with JavaScript. In order to initialize the project “npm create-react-app” is used. With this command needed libraries and files are created. For building beautiful forms and guaranteeing intuitive user experience we have used Bootstrap 4.

The backend of the application is built using JavaScript with the Node.js runtime environment. For accessing the MySQL Database, the MySQL2 driver is installed. The Express framework is also installed for handling the HTTP requests of the server. The Body Parser middleware module is used to handle the body of the POST requests in JSON format. Also, the CORS package is used to skip the same-origin policy of the browsers and get the requests correctly.

4.2. Problems

- While sending requests to the backend, the same-origin error is encountered at the frontend. The frontend of the application sends requests to the backend which is at the different IP or port. In order to skip this policy, the CORS package is used for managing the cross-origin resource sharing (CORS) requests.
- In the backend side of the application, the successive queries should be sent to the database and the current thread should wait for the response of the former query before sending later. To solve this problem, the MySQL2 driver that offers Promise Wrapper is chosen for asynchronous programming instead of MySQL driver that offers just callbacks.

4.3. Contribution

We have prepared the proposal and design documents together with equal contribution.

- Munib Emre Sevilgen: The backend of the application is built.
- Esra Nur Deniz: The GUI of the application is built with Burak İntişah.
- Meryem Banu Cavlak: I have updated the SQLs, created the database and wrote the final report.
- Osman Burak İntişah: The GUI of the application is built with Esra Deniz.

5. Advanced DB Features

5.1. Reports

1st Report: The report finds the order statistics of a seller based on districts of the orders. This information is useful for sellers (and displayed to them) as the sellers can choose the districts they serve based on this statistic.

```
SELECT district_id, district_name, min(order_date) as first_order, count(order_id) as
number_of_orders, sum(price) as total_revenue, avg(price) as average_revenue, avg(rate)
as average_rate
FROM flowergarden.order NATURAL JOIN district NATURAL JOIN flower_arrangement
WHERE seller_id = 1
GROUP BY district_id
ORDER BY average_revenue
```

district_id	district_name	first_order	number_of_orders	total_revenue	average_revenue	average_rate
13	Çukurova	2008-01-01 00:00:01.00	1	10.00	10.000000	5.00000
15	Kozan	2008-01-01 00:00:01.00	3	51.49	17.163333	5.00000
17	Beypazarı	2008-01-01 00:00:01.00	4	93.47	23.367500	5.00000
18	Çankaya	2008-01-01 00:00:01.00	5	119.46	23.892000	5.00000

2nd Report: The report finds the statistics of all the orders made by customers. It finds the number of arrangements, and their average price in each district for a specific occasion name. This information is useful for application managers to understand customer behaviour in different districts.

```
SELECT district_id, district_name, occasion_name, count(order_id) AS arrangement_count,
avg(price) AS average_price
FROM flowergarden.order NATURAL JOIN enabled_arrangements NATURAL JOIN
occasion NATURAL JOIN district
GROUP BY district_id, occasion_name
ORDER BY district_id
```

district_id	district_name	occasion_name	arrangement_count	average_price
11	Aladağ	Anniversary	4	17.995000
11	Aladağ	Congratulations	4	17.995000
15	Kozan	Birthday	1	15.500000
15	Kozan	Congratulations	1	15.500000
18	Çankaya	Anniversary	1	10.000000
18	Çankaya	Congratulations	1	10.000000
19	Yenimahalle	Birthday	1	15.500000
19	Yenimahalle	Anniversary	3	10.000000
19	Yenimahalle	Congratulations	4	11.375000

5.2. Views

1st View: The view is going to be used by all pages of seller, courier and customer except login, sign up and account settings pages. It will contain the account information except

password and last_login_date for security purposes and will be used mainly for finding names of people registered in the system.

```
CREATE VIEW secure_account AS
SELECT account_id, first_name, middle_name, last_name, email, account_type
FROM account
```

2nd View: To be able to give detailed information about past orders to customers we disallowed sellers to delete their flower arrangements but they can disable them. However, the disabled ones cannot be bought so they are not listed in the home page of the customer where the customer sees the flower arrangements he/she can buy. The view is going to be used to display flower_arrangements to the customers.

```
CREATE VIEW enabled_arrangements AS
SELECT *
FROM flower_arrangement
WHERE enabled <> 0
```

5.3. Trigger

This trigger is executed after an insertion to the order table and if the seller's stock is not sufficient to prepare the arrangement, deletes the order from the order table and inserts a notification to the notification table to notify the user about cancellation of his/her order.

5.4. Stored Procedure

In the proposal we add a limitation for the number of responses a customer service can make in a day. This stored procedure will return the number of responses each customer service will make in a day. It will use the attribute response_date of the complaint table to filter responses and then group the table by customer_service_id and count the number of complaints.

5.5. Constraint

To be able differentiate between user types consistently we added an attribute to the account table, account_type. This constraint is an assertion that checks whether each entry in seller, customer, courier and customer_service tables contains an entry in the account table with correct account_type value.

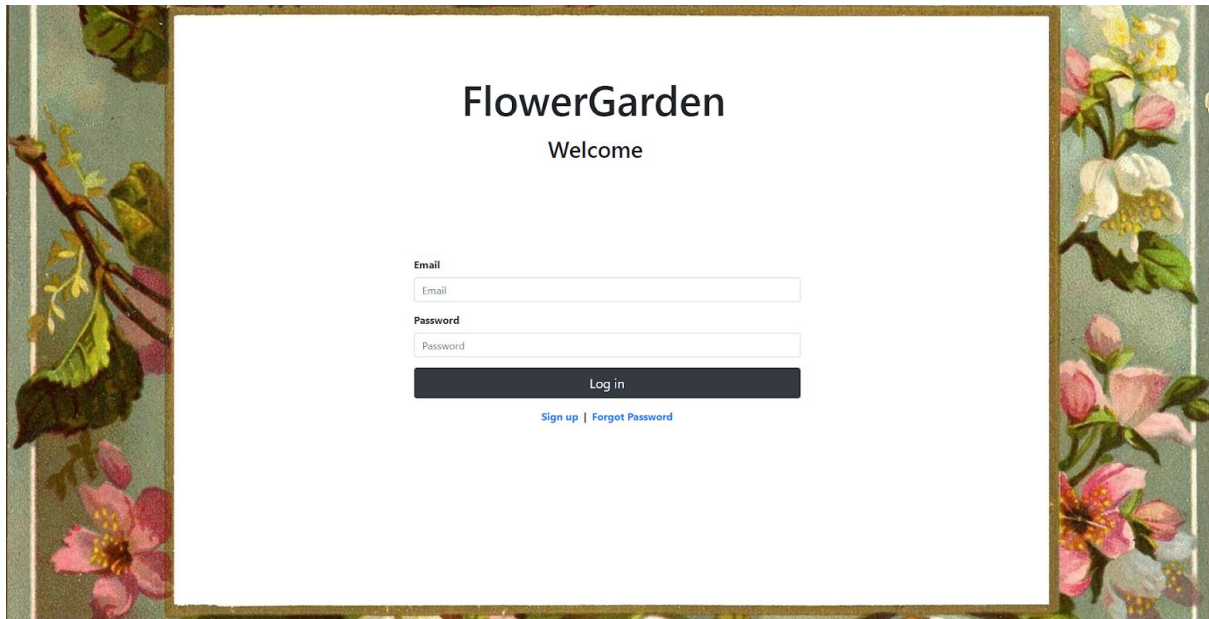
5.6. Secondary Indices

Three secondary indices are added to the system to increase the performance of the query that displays the flower arrangements to the customer on the main page. These attributes are selected because some of the filters are based on these attributes.

- CREATE INDEX filter_occasion USING BTREE ON occasion(occasion_name)
- CREATE INDEX filter_seller USING BTREE ON flower_arrangement(seller_id)
- CREATE INDEX filter_price USING BTREE ON flower_arrangement(price)

6. User Manual

6.1. Sign Up & Login

The image shows the 'FlowerGarden' login page. It features a central white box with the title 'FlowerGarden' and the word 'Welcome' below it. The login form includes fields for 'Email' and 'Password', a 'Log in' button, and links for 'Sign up' and 'Forgot Password'. The page is decorated with floral illustrations on the left and right sides.

FlowerGarden
Welcome

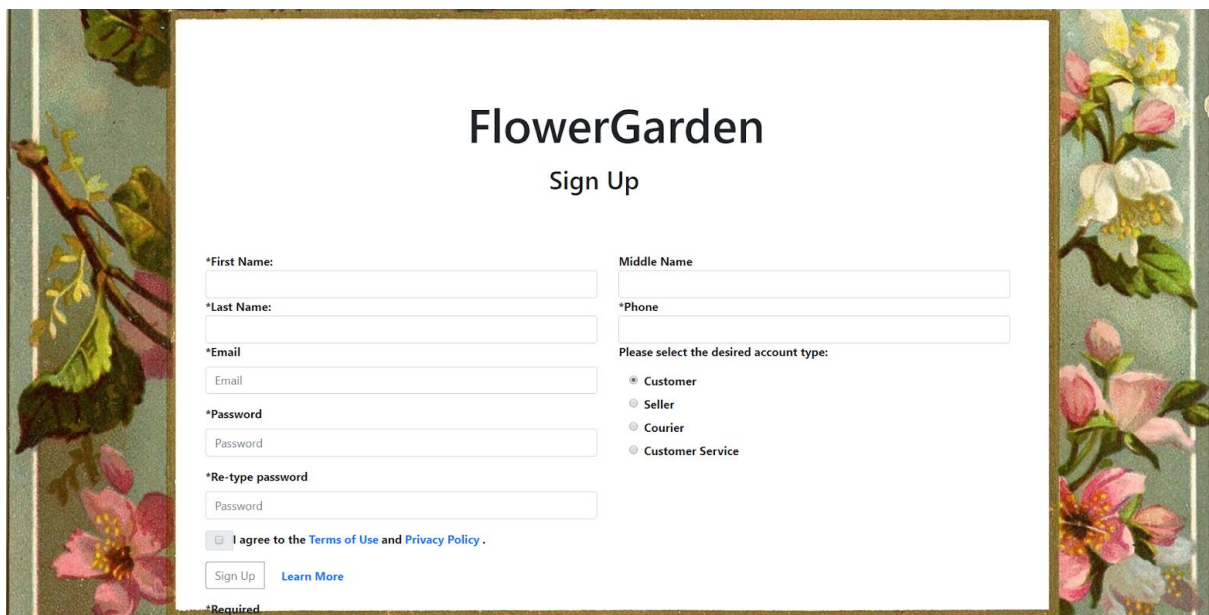
Email

Password

[Log in](#)

[Sign up](#) | [Forgot Password](#)

This is the login page for customers, sellers, couriers and customer service.

The image shows the 'FlowerGarden' sign-up page. It features a central white box with the title 'FlowerGarden' and the text 'Sign Up' below it. The sign-up form includes fields for '*First Name:', '*Last Name:', '*Email', '*Password', and '*Re-type password'. There are also fields for 'Middle Name' and '*Phone'. A section titled 'Please select the desired account type:' offers radio button options for 'Customer', 'Seller', 'Courier', and 'Customer Service'. At the bottom, there is a checkbox for 'I agree to the Terms of Use and Privacy Policy', a 'Sign Up' button, and a 'Learn More' link. A '*Required' label is at the bottom left.

FlowerGarden
Sign Up

*First Name:

*Last Name:

*Email

*Password

*Re-type password

☐ I agree to the [Terms of Use](#) and [Privacy Policy](#).

[Sign Up](#) [Learn More](#)

*Required

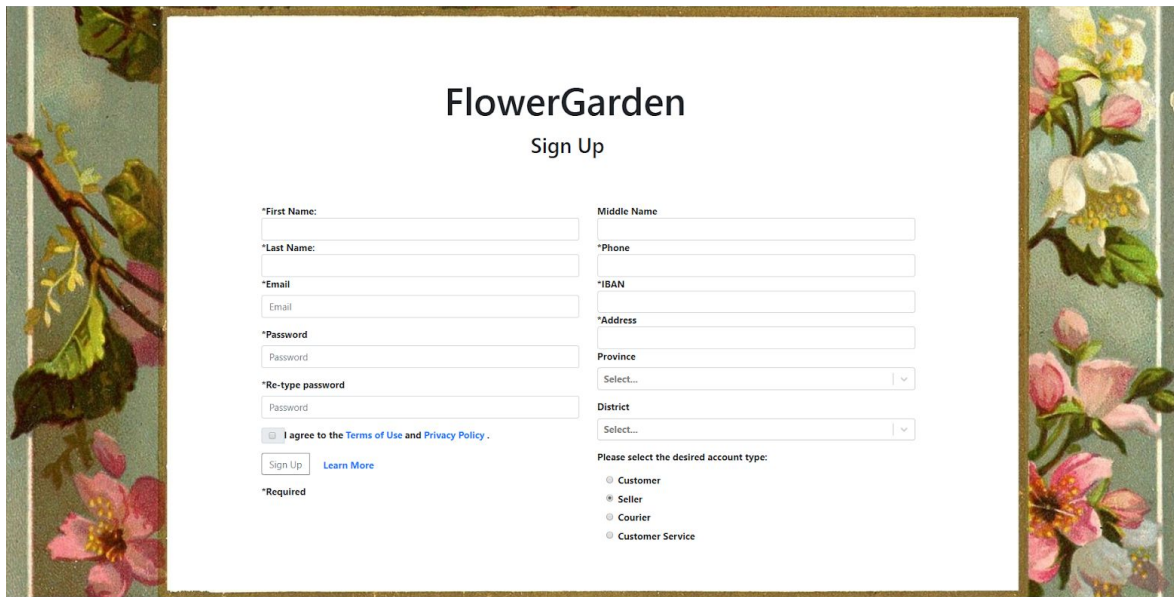
Middle Name

*Phone

Please select the desired account type:

- ☒ Customer
- ☐ Seller
- ☐ Courier
- ☐ Customer Service

For customer and customer service this is the required information for sign up. They can register to the system after entering all the required information.



FlowerGarden
Sign Up

*First Name:

*Last Name:

*Email:

*Password:

*Re-type password:

☐ I agree to the [Terms of Use](#) and [Privacy Policy](#).

[Learn More](#)

*Required

Middle Name:

*Phone:

*IBAN:

*Address:

Province:

District:

Please select the desired account type:

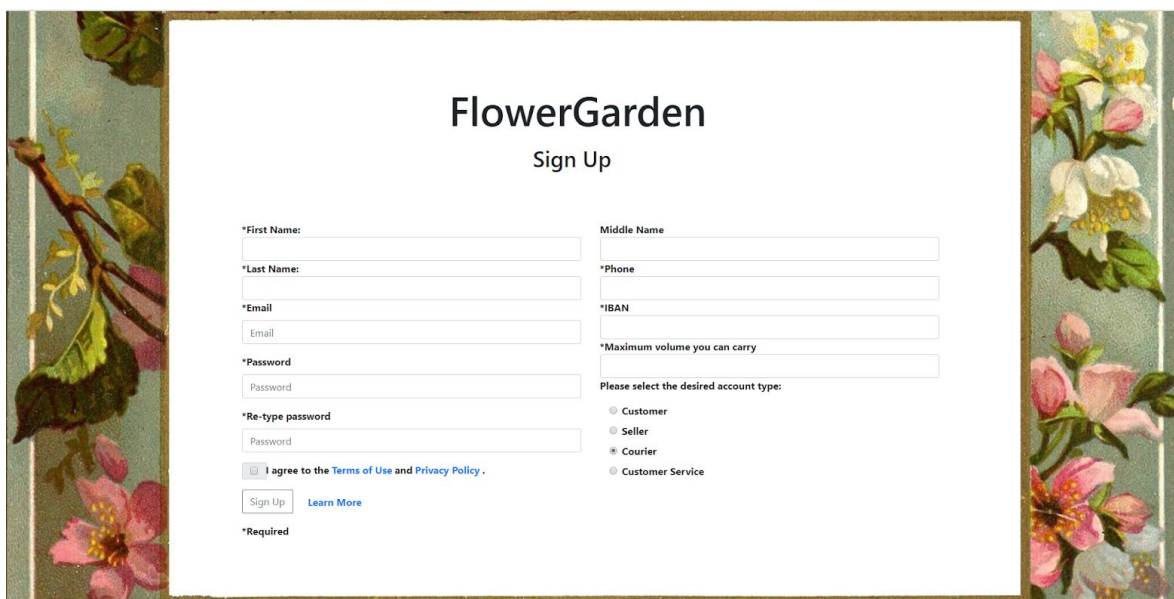
☐ Customer

☒ Seller

☐ Courier

☐ Customer Service

This is the sign up page for sellers. The sellers need to enter the address of their shops and their IBAN numbers to sign up, in addition to the information required for the customer and customer service.



FlowerGarden
Sign Up

*First Name:

*Last Name:

*Email:

*Password:

*Re-type password:

☐ I agree to the [Terms of Use](#) and [Privacy Policy](#).

[Learn More](#)

*Required

Middle Name:

*Phone:

*IBAN:

*Maximum volume you can carry:

Please select the desired account type:

☐ Customer

☐ Seller

☒ Courier

☐ Customer Service

This is the sign up page for the couriers, they need to enter their IBAN numbers and the maximum volume they can carry in the sign up additionally.

6.2. Customer Manual

FlowerGarden

NOTIFICATIONS

CHANGE DESTINATION

ORDER TRACKING

With FlowerGarden, your flower is just a few clicks away! Choose the destination district and order.

Province

Select...

District

Select...

Continue

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This is the first page a customer sees when he/she has logged in to the FlowerGarden. Here the customer is required to select the province and district information for the receiver address they are going to send a flower arrangement.

FlowerGarden

Search

NOTIFICATIONS

CHANGE DESTINATION

ORDER TRACKING

Price

Select...

Flowers Contained

Select...

Occasions

Select...


Hour

Select...


Day

22.5.2020


Filter




ARRANGEMENT1
Seller: Seller Sel1
Details: This is a beautiful arrangement, you should by it.
☆☆☆☆☆
Price: 10.00
Details







ARRANGEMENT2
Seller: Seller Sel1
Details: This is a beautiful arrangement, you should by it.
☆☆☆☆☆
Price: 15.50
Details



ARRANGEMENT3
Seller: Seller Sel1
Details: This is a beautiful arrangement, you should by it.
☆☆☆☆☆
Price: 25.99
Details




ARRANGEMENT4
Seller: Seller Sel1
Details: This is a beautiful arrangement, you should by it.
★★★★☆
Price: 25.99
Details



This page is the next page that displays the flower arrangements based on the district selected by the customer in the previous page. Here only the arrangements of the sellers that serve in the district chosen are displayed. The search button and the filter options can be used to filter the displayed flower arrangements further.

FlowerGarden

NOTIFICATIONS
CHANGE DESTINATION
ORDER TRACKING



Arrangement1

\$10.00 ☆☆☆☆☆

Occasions: Anniversary, Congratulations

Time:

Date: 22.5.2020 × □

Timeslot: Select...

Order

Arrangement Description:

Contained Flowers:
5 Rose, 5 Lily, 5 Tulip

Volume: 60

This is a beautiful arrangement, you should by it.

Seller:

Seller name: Seller 1 Sel1

Average rating: ★☆☆☆☆


Comments

This is the page displayed if the customer presses the details button in the previous page. Here, the customer can choose date and time information to give an order. Also, the customer can see the details of the arrangement before deciding on whether or not to give the order.

FlowerGarden

NOTIFICATIONS
CHANGE DESTINATION
ORDER TRACKING

Your Order

Flower Arrangement	Price
 <div> <h4>Arrangement1</h4> <p>Seller: Seller Sel1</p> <p>Details: This is a beautiful arrangement, you should by it.</p> </div>	\$10.00

Summary

Subtotal	\$10.00
Delivery	-
Tax	-

Total	\$10.00

Order

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In this page the customer sees the preview of the order he/she will make.

Receiver Information

Receiver Name and Surname

Receiver Phone

Address

Choose from saved address:

Delivery Type:

Message

Summary

Subtotal	\$10.00
Delivery	-
Tax	-

Total	\$10.00

Continue Payment

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In this page, the customer enters the necessary information to create an order.

FlowerGarden

NOTIFICATIONS

CHANGE DESTINATION

ORDER TRACKING

Receiver Address: info

Payment Method

Credit Card

Credit Card Number

Name on Card

MM / YY

CCV

☐ Save credit card number

Remember Receiver

☐ Save the receiver adress for a faster checkout

Summary

Subtotal

Delivery

Tax

Total

\$10.00

-


-


\$10.00


Order


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This is the final page before giving the order. The customer should enter the payment method and information in here.



FlowerGarden

NOTIFICATIONS

CHANGE DESTINATION

ORDER TRACKING






ORDER TRACKING

	ID	Flower Arrangement Name	Price	Desired Delivery Date	Delivery Status	Seller	Courier
	68	Best Arrangement	45.00	2020-05-25	Preparing	Assigned to Courier	Pending

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Order Details

Here the customer can see complete list of his/her orders.

FlowerGarden 		NOTIFICATIONS 		CHANGE DESTINATION 	ORDER TRACKING 				
Your Order						Summary			
Flower Arrangement			Price						
			Best Arrangement						
Date: 2020-05-25			\$45.00						
TimeSlot: 07:00:00									
Receiver Information						Subtotal \$45.00			
Receiver Name: Rec1						Delivery -			
Receiver Phone: 5465467896						Tax -			
Address: Second address of Customer 1						-----			
Delivery Type: ring_the_bell						Total \$45.00			
Message: Message						Order Status: Preparing			
<input type="text" value="Comment"/>						Seller: Seller 1 Sell1			
<input type="text" value="Select..."/>						Courier: Courier 1 Cou1			
<input type="button" value="Comment"/>									
<input type="text" value="Complaint"/>									
<input type="button" value="Complaint"/>									

This page displays the detailed information of one of the customer's orders. Here the customer can add a comment or complaint for the order.

FlowerGarden

NOTIFICATIONS
CHANGE DESTINATION
ORDER TRACKING

NOTIFICATIONS

Notification	Date - Time
Your order with id 65 is accepted by the seller.	2020-05-22 11:28:46.00
Your order with id 65 is on delivery.	2020-05-22 11:36:16.00
Your order with id 65 is delivered.	2020-05-22 11:36:49.00
Your order is rejected.	2020-05-22 11:41:26.00
Your order with id 68 is accepted by the seller.	2020-05-22 11:43:29.00

Delete

This is the notification page of the customer. Here the customer is informed on the actions made on his/her orders. A similar notification page exists for all user types but excluded in the report for clarity.

6.3. Seller Manual

FlowerGarden

NOTIFICATIONS
CHANGE DISTRICT/HOURS
SALES
ARRANGEMENTS
STOCK UPDATE
STATISTICS

SALES

Arrangement Name	Sale Date	Delivery Status	Courier Status	Desired Delivery Date	Desired Delivery Time	Message
Arrangement1	2008-01-01 00:00...	On Delivery	Pending	2008-05-01	09:34:21	asdasd
Arrangement1	2008-01-01 00:00...	Preparing	Not Assigned	2008-05-01	09:34:21	asdasd
Arrangement1	2008-01-01 00:00...	Preparing	Not Assigned	2008-05-01	09:34:21	asdasd
Arrangement1	2008-01-01 00:00...	Preparing	Not Assigned	2008-05-01	09:34:21	asdasd
Arrangement1	2008-01-01 00:00...	Preparing	Pending	2008-05-01	09:34:21	asdasd
Arrangement2	2008-01-01 00:00...	Preparing	Not Assigned	2008-05-01	09:34:21	asdasd
Arrangement3	2008-01-01 00:00...	Preparing	Pending	2008-05-01	09:34:21	asdasd
Arrangement3	2008-01-01 00:00...	On Delivery	Accepted	2008-05-01	09:34:21	asdasd
Arrangement4	2020-05-21 00:00...	Preparing	Pending	2020-05-25	13:00:00	Message
Best Arrangement	2020-05-22 00:00...	Preparing	Pending	2020-05-25	07:00:00	Message
BestA	2020-05-22 00:00...	Delivered	Accepted	2020-05-25	07:00:00	This is my message

Sale Detail

Here is the main page of the seller. Here the seller can see the complete list of his/her sales.

FlowerGarden

NOTIFICATIONS

CHANGE DISTRICT/HOURS

SALES

ARRANGEMENTS

STOCK UPDATE

STATISTICS

Sale ID:69

Arrangement Name:BestA

Customer Name:Osman Intisah

Customer Phone:5069306965

Sale Date:2020-05-22 00:00:01.00

Delivery Date:2020-05-22

Desired Delivery Time:07:00:00

Message:This is my message

Order Staus:Delivered

Courier Name:Courier 1 Cou1

Courier Phone:5074565855

Acceptance Status:Assigned to Courier

Courier Status:Accepted

Delivered to Courier

Reject Sale

Accept Sale

Assign to Courier

This page explains one sale of the seller. In this page the seller can perform multiple operations on the sale such as accepting or rejecting it.

FlowerGarden

NOTIFICATIONS

CHANGE DISTRICT/HOURS

SALES

ARRANGEMENTS

STOCK UPDATE

STATISTICS

Sale ID:71

Arrangement Name:Arrangement1

Delivery Date:2020-05-22

Desired Delivery Time:07:00:00

Courier:

Courier 1 Cou1

Back

Assign

This page comes if the seller clicks assign to the courier button in the previous page. Here the seller can choose one of the couriers to assign the order.

FlowerGarden

NOTIFICATIONS

CHANGE DISTRICT/HOURS

SALES

ARRANGEMENTS

STOCK UPDATE

STATISTICS

Choose the district you will serve:

Provinces:
Select...

Districts:
Select
Current selected districts:Ankara-Çankaya,Bursa-Büyükorhan,

Choose the working hours you will serve:

Monday:
Select

Tuesday:
Select

Wednesday:
Select

Thursday:
Select

Friday:
Select

Saturday:
Select

Sunday:
Select

Current selected hours:
mon : 7 , tue : 7 , wed : 7 , tue : 9 , wed : 9 ,

Save All

The orders can be given if the seller is serving in the district of the order and in the time the order is going to be delivered. Here, the seller can arrange the districts he/she will serve and the timeslot.

FlowerGarden

NOTIFICATIONS

CHANGE DISTRICT/HOURS

SALES

ARRANGEMENTS

STOCK UPDATE

STATISTICS

ID	Flower Arrangement Name	Occasion	Volume	Price
5	Arrangement1	Anniversary, Congratulations	60	10.00
6	Arrangement2	Birthday, Congratulations	100	15.50
7	Arrangement3	Anniversary, Congratulations	60	25.99
8	Arrangement4	Birthday, Congratulations	50	25.99
9	Arrangement5	Anniversary, Congratulations	60	10.00
40	Best Arrangement	Anniversary	21	45.00
53	BestA	Congratulations	54	15.00

Arrangement Details

Create Arrangement

This page lists the flower arrangements the seller has.

FlowerGarden

NOTIFICATIONS

CHANGE DISTRICT/HOURS

SALES

ARRANGEMENTS

STOCK UPDATE

STATISTICS

BestA

\$15.00

★★★★☆

Volume: 54

Occasions: Congratulations

Arrangement Description:

Contained Flowers:
5 Rose, 7 Lily

Stock:
2

This is my description

Delete

Comments

CommentTAB

2020-05-22 00:00:01.00

★★★★☆

CommentABC

2020-05-22 00:00:01.00

★★★☆☆

The arrangement details button navigates the seller to here and in here the seller can examine his/her arrangement.

FlowerGarden

NOTIFICATIONS

CHANGE DISTRICT/HOURS

SALES

ARRANGEMENTS

STOCK UPDATE

STATISTICS

*Flower Arrangement Name:

*Price:

*Volume:

*Description:

Upload an image

Choose file

Browse

Delete Selected Image

Upload New Photo

Flowers:

Select...

Select...

Select...

Select...

Select...

Select...

Count:

Occasions:


Select

Create

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This is the create arrangement page of the seller.

Flowers:

Select... 

Enter the flower stock:

Stock...

Update


Here the seller can update his/her stock after choosing the flower's name and the new stock of that flower.


SALES


District ID	First Order	Number of Orders	Total Revenue	Average Revenue	Average Rate
19	2008-01-01 00:00:01.00	3	30.00	10.000000	0.000000
15	2008-01-01 00:00:01.00	1	15.50	15.500000	0.000000
11	2008-01-01 00:00:01.00	3	61.98	20.660000	0.000000
18	2008-01-01 00:00:01.00	3	70.00	23.333333	1.000000
20	2020-05-21 00:00:01.00	1	25.99	25.990000	4.000000

Here the seller can see the statistics about his/her sales based on the districts of the sales.







6.4. Courier Manual

FlowerGarden

NOTIFICATIONS

CHANGE SERVICE DISTRICT

DELIVERY LIST

	ID	Delivery Date	Delivery Timeslot	Volume	Seller Name	Receiver Address	Acceptance Status	Delivery Status
	31	2008-05-01	09:34:21	60	Seller 1 Sel1	okul	Pending	On Delivery
	39	2008-05-01	09:34:21	60	Seller 1 Sel1	okul	Pending	Preparing
	40	2008-05-01	09:34:21	60	Seller 1 Sel1	okul	Accepted	On Delivery
	68	2020-05-25	07:00:00	21	Seller 1 Sel1	Second address...	Pending	Preparing
	69	2020-05-25	07:00:00	54	Seller 1 Sel1	This is my addr...	Accepted	Delivered

Delivery Details

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This is the main page of the courier. This page gives the complete list of the deliveries the courier has.

FlowerGarden		NOTIFICATIONS	CHANGE SERVICE DISTRICT
Delivery Information		Seller Information	
Delivery ID:	69	Seller Name:	Seller 1 Sel1
Delivery Date:	2020-05-25	Seller Phone:	5425068932
Timeslot:	07:00:00	Seller Email Address:	sel1@gmail.com
Volume:	54	Receiver Information	
Delivery Type:	ring_the_bell	Receiver Name:	Receiver1
		Receiver Phone:	5465465263
		Receiver Address:	This is my address
Reject Delivery		Accept Delivery	
Delivered to Receiver		You have delivered the order!	
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This page gives the detailed information of one of the deliveries selected in the previous page.

FlowerGarden

NOTIFICATIONS

CHANGE SERVICE DISTRICT

Choose the district you will serve:

Provinces:
Select...

Districts:
Select
Current selected districts:Ankara-Çankaya,

Choose the working hours you will serve:

Monday:
Select

Tuesday:
Select

Wednesday:
Select

Thursday:
Select

Friday:
Select

Saturday:
Select

Sunday:
Select

Current selected hours:
mon : 7 ,

Save All

This page is equivalent to the one given in the seller pages. In this page the courier can select the districts and the timeslots he/she is going to serve.

6.5. Customer Service Manual

FlowerGarden


NOTIFICATIONS

COMPLAINTS

COMPLAINTS						
	Complaint ID	Status	Order ID	Customer Email	Seller Email	Complaint Date
	6	Solved	31	cus3@gmail.com	sel1@gmail.com	2020-01-01
	7	Solved	31	cus3@gmail.com	sel1@gmail.com	2020-01-01
	9	Solved	68	cus1@gmail.com	sel1@gmail.com	2020-05-22
	10	Solved	69	bur1@gmail.com	sel1@gmail.com	2020-05-22

See Complaint Detail

This is the main page of the customer service. Here the customer service can see the complete list of the complaints he/she should reply and solve.

FlowerGarden


NOTIFICATIONS
COMPLAINTS

Complaint Information

Complaint ID:10
Complaint Date:2020-05-22
Complaint Status:Solved

Seller Information

Acceptance Status:
Seller Name:seller 1 Sel1
Seller Phone:5425068932
Seller Email:sel1@gmail.com
Seller Address:i am a seller from Adana

Customer Information

Customer Name:Osman null Intisah
Customer Phone:5069306965
Customer Email:baur1@gmail.com

Order Information

Order Date:2020-05-22 00:00:01.00
Expected Delivery Date:2020-05-25
Expected Delivery Timeslot:07:00:00
Delivery Date:2020-05-22
Arrangement Name:BestA
Price:15.00
Payment Method:card
Volume:54
Delivery Type:ring_the_bell
Arrangement Message:This is my message

Courier Information

Acceptance Status:Accepted
Courier Name:Courier 1 Cou1
Courier Phone:5074565855
Courier Email:cou1@gmail.com

Receiver Information

Receiver Name:Receiver1
Receiver Phone:5465465263

Solved

Replied

This is the description page of a complaint selected in the previous page. Here the customer service can see the detailed information and change the status of a complaint as replied or solved.