

Floward

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FLOWERS Project

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1 Lecture 1: FLOWERS Project Introduction

1.1 Abstract

Flowers is an application that aims to facilitate the purchase and delivery of gifts in a modern way. It features a simple user interface through which users can choose gifts and flowers as they wish. They can also add various gifts other than flowers such as plants, chocolates, cakes, coffee, balloons, jewelry and men's gifts. They can customize gifts with personal messages from their addition and can set flexible dates. Flowers is the perfect solution for those who want to send gifts on special occasions or to express their feelings easily.

1.2 Introduction

Floward is a sophisticated solution for delivering flowers and gifts in a sophisticated and sophisticated way, providing a sophisticated and sophisticated experience that helps the sophisticated customer express his feelings in a sophisticated way with an easy interface with the finest details that make it the ideal choice for any user looking for a unique way to express his feelings and communicate with his loved ones on special occasions, as the application offers a wide range of luxurious flower bouquets and elegant gifts suitable for our sophisticated customers, ensuring the user a wonderful experience whether it is a gift or a celebration. One of the features of the Floward application is that it allows users to design their gifts from the idea to the final product, and add a special touch with the option to include a barcode containing a video or audio message from the user. Based on user reviews, 87.9% of users found the application reliable and fast, while 78.8 found it to work very well, 60.6 of users rated the gift customization feature as excellent, 21% liked the voice and multimedia feature, which helped enhance the personal experience, and 72.7 found the fast delivery service. 84 expressed their satisfaction with the smooth payment process, and the provision of high-quality services from gift selection to delivery. Flowers help make gift shopping a pleasant experience. ...

1.3 The Purpos of Floward

The purpose of Flowered is to facilitate sending gifts to users and help them express their feelings in a luxurious, sophisticated and modern way. The application combines elegance, comfort and high quality service.

1.4 Advantages and Disadvantages of Bleems Application

Advantages	Disadvantages
Customer support	Limited customization
Simple and easy user interface	Delivery in remote areas
Wide geographical coverage	Problems with tracking and notifications
Multiple payment options	High prices
Multilingual application	Unclear return policy

1.5 Our Program

Flowered app features include:

- Comfort and ease: The Flowered application provides comfort and ease, as you can shop from anywhere and at any time without having to leave the house.
- Express Delivery: Flowered offers same-day gift delivery, helping users send their gifts at the right times.
- Diversity of options: Flowered offers a wide range of flowers and various gifts, allowing users to choose what suits their different occasions and tastes.
- High quality: The Flowered app guarantees the quality of the products provided, whether flowers or gifts.
- Reminder of occasions: The Flowered app provides a reminder feature for occasions

1.6

Conclusion In conclusion, the Flowered app is a valuable technological tool that greatly contributes to improving the flower shopping experience for users by facilitating the process of browsing and purchasing flowers. Thanks to its easy-to-use interface, users can explore a variety of flower arrangements, making it easy to find the perfect option for any occasion. Despite some limitations that may exist in other flower delivery apps, Flowered is keen to provide a smooth and efficient experience that makes it an excellent choice for those looking for convenience and quality in purchasing flowers.

2 Lecture 2: Analysis

2.1 Introduction

The functional and non-functional application requirements of the flower delivery application play an important role in the design and development of the application.

2.2 Functional Requirements

The functional requirements that must be considered when developing the Flowers app include:

- **Registration and Login:** Users should start by creating a new account using their email, and they should be able to log in using their credentials (email/password or social media login).
- **Account Management:** Users should manage their data such as name, email, and address.
- **Product Review:** Search for products, provide filtered search results according to criteria such as price, items, colors, and gift types.
- **Ordering System:** The ordering system must facilitate adding products to the shopping cart, choosing delivery type, and customizing orders (e.g., writing a message on the gift card).
- **Payment System:** The application should support multiple payment methods (credit card, PayPal, installment via Tamara, Apple Pay).
- **Delivery and Tracking:** The app should allow tracking the order status, with instant notifications about order progress (e.g., order confirmed, in preparation, on the way).
- **Reminder of Occasions:** Users should be able to enter important dates like anniversaries for reminders.
- **Customer Service:** The app should have technical support via live chat or email.

2.3 Non-Functional Requirements

Non-functional requirements include:

- **Performance:** The app must respond quickly to all requests, including page loads, searches, and order completion.
- **Scalability:** The system must scale to support more users, products, or orders without major infrastructure changes.
- **Security:** The app must ensure the protection of user data using encryption technologies like SSL.
- **Reliability:** The system must operate efficiently even during heavy usage periods.

2.4 Conclusion

functional requirements refer to the functions and features that the Flowers app must provide to meet the needs of users. These requirements include: searching for and ordering flowers, and managing delivery. Non-functional requirements refer to general features that affect the user experience but are not directly related to functionality, such as performance, security, and convenience. These requirements help ensure that the app effectively meets the needs of users and provides a good user experience. If you have any additional questions or need more detail

3 Lecture 3: Design

3.1 Introduction

The user interface of the Flowers app is the part that interacts with customers to browse flowers, make selections, and place orders. The database is the system that stores all the necessary information about available products, prices, delivery options, and customer data. The database is always designed for quick and efficient access to information, making it reusable for inventory, orders, and customer interaction. The success of the Flowers app depends on the integration between the user interface and the database to achieve a smooth user experience.

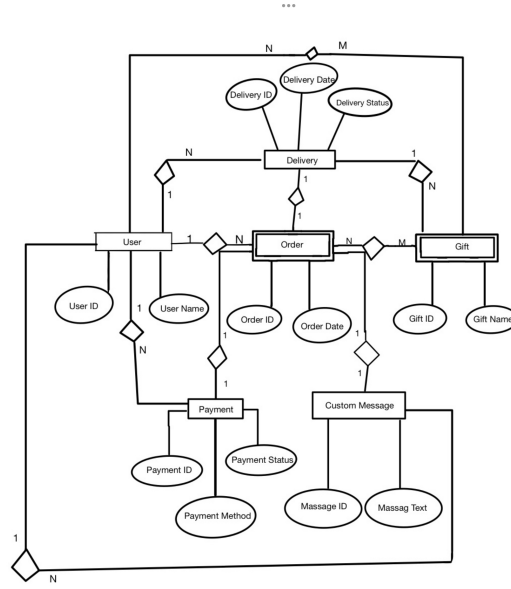


Figure 1: 1

3.2 ER diagrams

The ER diagrams in Floward aim to illustrate the overall structure of the different elements that interact with users within the app. They mainly focus on how orders, selections, payments, and deliveries are organized and managed, in addition to the personalized messages that can be provided with the selections. This will provide a clear understanding of the relationships between many different companies to improve the user experience and provide a smoother and more efficient service

3.3 Entities

1. User itemize
 - User
 - Name
 - Email
 - Address
2. Order
 - OrderID
 - Order Date
 - Status
3. Gift
 - itemize
 - GiftID
 - Name
 - Price
4. Delivery
 - Delivery ID
 - Delivery Date
 - Delivery Status
5. Payment
 - Payment ID
 - Payment Method
 - Amount
6. Custom Message
 - Message ID
 - Content

3.4 Relationships

- **Request:** Links users to gifts. Each user can make several requests, and each request is associated with one user.
- **Gifts:** Each request contains several gifts, but each gift belongs to only one request.
- **Delivery:** Links requests to deliveries. Each request can have one delivery operation, but the delivery may include several gifts.
- **Payment:** Links users to payments. Each user can make several payment operations, but each payment is associated with only one user.
- **Custom Messages:** Associated with requests. Each custom message can contain only one request, while each request can contain several custom messages.

Entity-Attribute Table

Entity	Attributes
User	User ID, Name, Email, Address
Order	Order ID, Order Date, Status
Gift	Gift ID, Name, Price
Delivery	Delivery ID, Delivery Date, Delivery Status
Payment	Payment ID, Payment Method, Amount
Custom Message	Message ID, Content

3.5 Database Design

The database stores flower product data, user data, and order records. Here are the main tables:

Table Name	Description
Flowers Table	Flower ID, Flower Name, Description, Price, Stock, Category
User Table	User Name, Email, Phone Number, Address, Password Hash
Order Table	Order ID, User ID, Order Date, Delivery Date, Total Price, Delivery Status
Order Details Table	Order Detail ID, Order ID, Flower ID, Quantity, Price
Delivery Table	Delivery ID, Order ID, Delivery Address, Delivery Time, Delivery Status
Payment Table	Payment ID, Order ID, Payment Method, Amount, Payment Date
Coupon Table	Coupon ID, Coupon Code, Discount Percentage, Expiry Date
Review Table	Review ID, User ID, Flower ID, Rating, Review Text

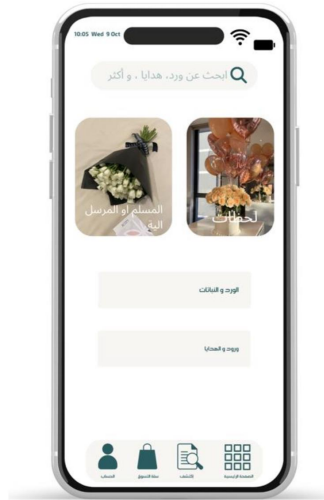


Figure 2: Caption

3.6 user Interfaces

- The first interface or the main page of the application, through which all the options for gifts and occasions appear to you

Figure 3:



- The second interface Moments is an icon that helps the customer choose the appropriate gift in terms of type or shape The sender or recipient, which helps the customer choose the appropriate gift for the person, whether it is a mother, father, brother, sister or friend The roses and plants icon contains bouquets of roses from our elegant designs and plants suitable for being a gift The roses and gifts icon contains a variety of gifts presented with roses

Figure 4:



- App shopping cart and purchases



Figure 5: Caption

- This is the interface that appears to the user before logging in or registering a new account. Through it, he can log in if he has a previous account or register a new account if he is a new user. He can also access the technical support page and can change the program language. The terms and conditions contain the order, cancellation and refund policies.



Figure 6: Caption

- Here is what the page looks like after logging in or opening a new account in the application. There are many ways to log in, including by email and phone number, or by registering via Google or iOS



Figure 7: Caption

- This page is for the new user who has not created an account in the application, through which you can create an account that enables you to use the application's services easily.



Figure 8: Caption

- The program profile contains the name of the account holder and his personal data such as the phone number and email. It also contains an icon for the requests in the program with a mention of their status if they have been delivered or cancelled. It also contains subscriptions, invoices, registered addresses, a history log containing the dates of the most important occasions for the user, and an icon for the favorite gift.



Figure 9: Caption

- Here the user is shown the delivery information and here the user enters the data of the person receiving the gift, including the person's name, phone number, and more data such as the delivery date and the sender's desire to hide or show his gift



Figure 10: Caption

Payment methods in the program:

- Apple Pay
- installment via Tamara app
- Visa and MasterCard
- PayPal

3.7 To design an application like Flowers for delivering flowers and gifts, the project requires several main steps such as designing the interface, creating a database, and writing the targeted steps codes as follows:

Interface design:

- The interface should be simple and easy to use. You can use tools such as Figma or Adobe XD to design the interface
- The main interface should include the following:
A search bar that allows users to search for flowers or gifts
A list of products (flowers or gifts) with a brief detail

Data base:

- You can use databases like MySQL and Firebase to store product data like (flowers and gifts), users and orders.
- The database should contain the following tables:
Products Table: Contains product ID, product name, classification (flowers, gifts), price and description.
Categories Table: Contains category ID, category name (flowers, gifts)
Orders Table: Contains order ID, customer ID, product ID, order date, and status (paid, in delivery).
Users Table: Contains user ID, user name, email, delivery address

Codes Used

- You can use the following programming languages: Java for Android app development and Swift for iOS development.

3.8 Conclusion

In conclusion, developing an app like Flowerdz is a multi-faceted process that requires attention to user experience, infrastructure, and backend. With an organized and efficient database, customer orders can be handled easily and smoothly. Flowerdz and its developers ensure that the user has a sophisticated, enjoyable, and unique shopping experience. The focus should be on both functionality and visual appeal, making shopping, browsing products, placing orders, and managing deliveries easier and more enjoyable for the users. The ultimate goal is to provide users with a user-friendly interface that helps facilitate the purchase process and choose the right gift for the customer.

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