

Banking Management System

Requirements:

1. Customer Registration and Management:

- Create a form to register new customers.
- Fields: First Name, Last Name, Email, Password, Confirm Password, Date of Birth, Address, Phone Number, Social Security Number (SSN), and Occupation.
- The form should validate all fields and provide real-time validation feedback.

2. Account Management:

- Create different types of accounts such as Savings, Checking, and Fixed Deposit.
- Fields: Account Type, Account Number, Customer ID, Balance, Interest Rate, and Opening Date.

3. Transaction Management:

- Enable customers to perform various transactions such as deposits, withdrawals, and transfers.
- Fields: Transaction ID, Account Number, Transaction Type (Deposit, Withdrawal, Transfer), Amount, Date, and Description.
- Implement real-time balance update and transaction history tracking.

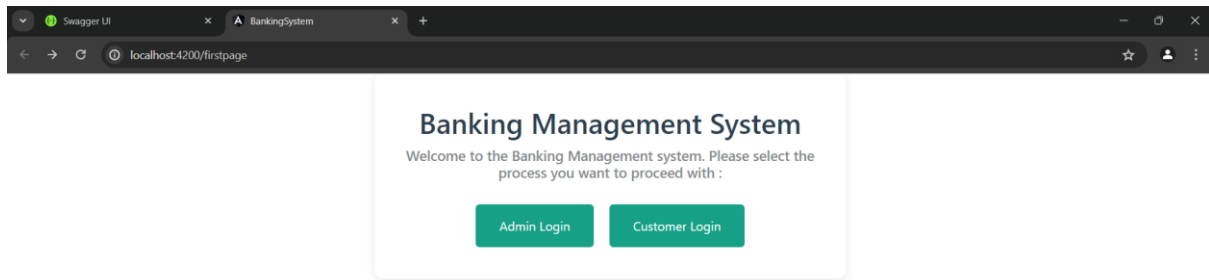
4. Customer Support:

- Implement a customer support system to handle queries and complaints.
- Fields: Customer ID, Query/Complaint.
- Allow customers to submit queries.

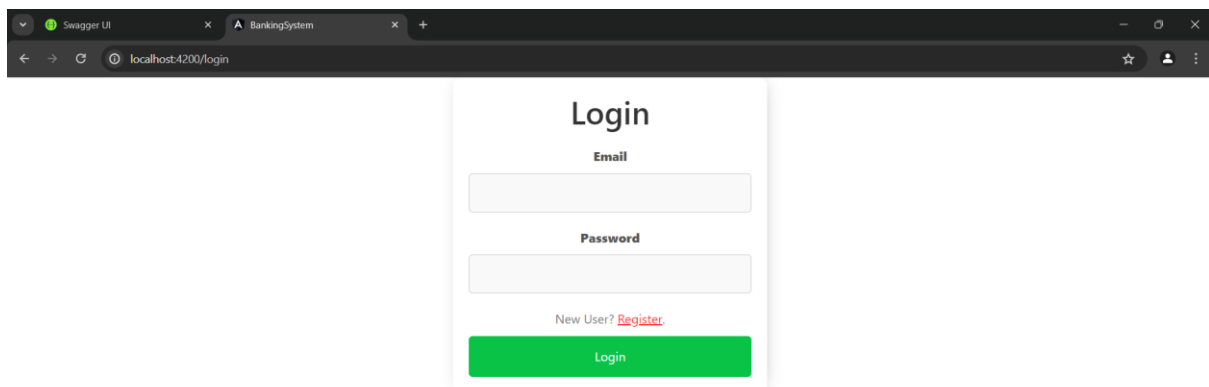
5. Feedback:

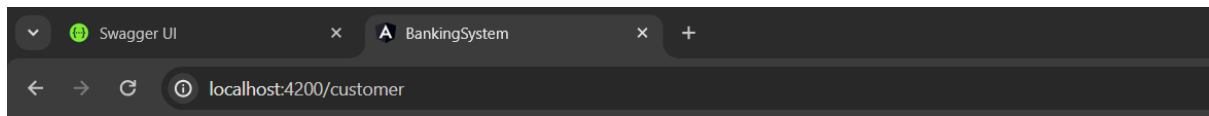
- Implement a customer support system to know their feedback.
- Fields: Customer ID, Comments, Rating, Date.
- Allow customers to submit feedback and rate their banking experience.

My project Banking Management System starting with a first page that has two buttons: one for Admin login and another for Customer login. When the customer login button is clicked, it redirects to the customer login page where the login details need to be entered. Similarly, clicking the admin login button redirects to the admin login page for admin credentials.



When I click on the customer login button, the following picture will be displayed. If you are new to this page, you need to register, otherwise, you can log in.





Customer Registration


First Name:

Last Name:

Email:

Password:

Date of Birth:

Address:

Phone Number:

Social Security Number (SSN):

Occupation:

Register

If I don't fill in all the details in the input fields, it doesn't allow me to click the register button. Once I fill in all the details correctly, the register button will be activated.

Customer Registration

First Name:

Last Name:

Email:

Password:

Date of Birth:



Address:

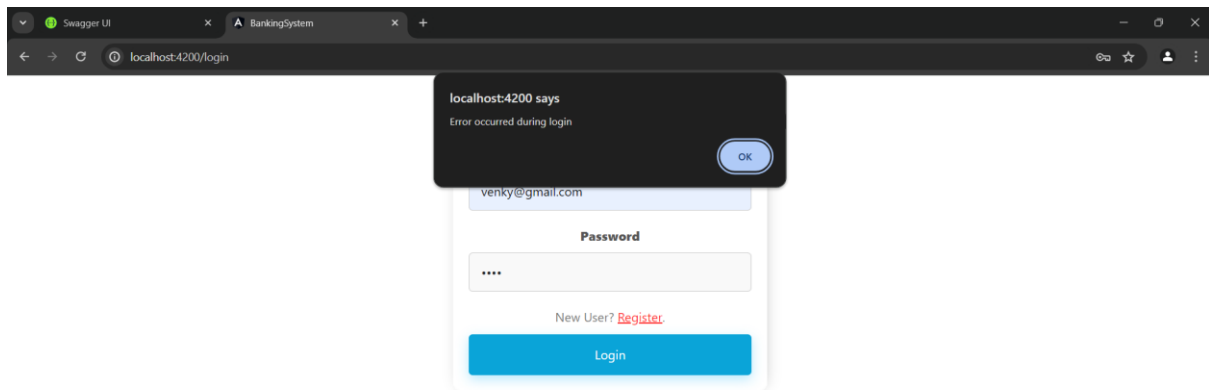
Phone Number:

Social Security Number (SSN):

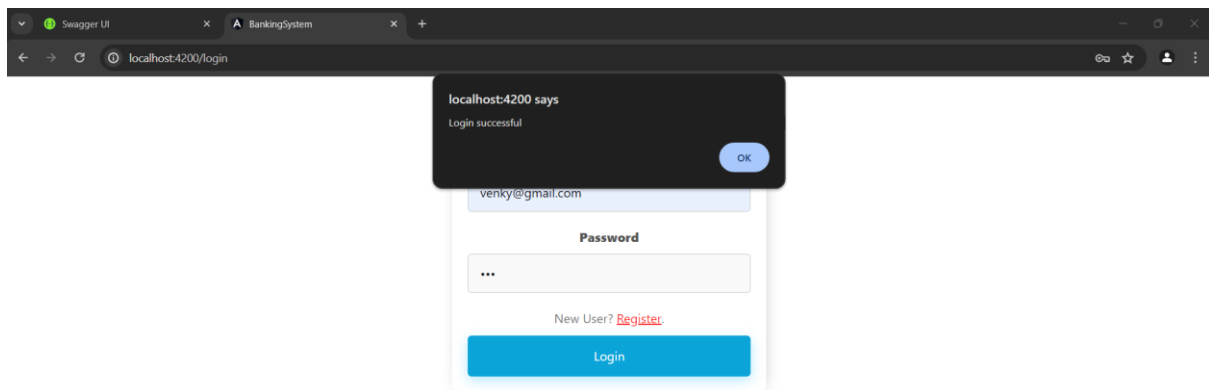
Occupation:

After, it will again redirect back to the login page.

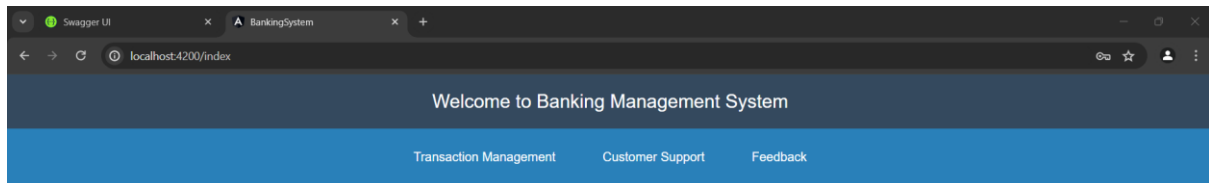
If incorrect password is given or If I try to log in with an account that is not in the database or not registered before, it will show an error. Only registered accounts will be allowed to log in.



If I provide the correct login credentials, it will show a successful login message.

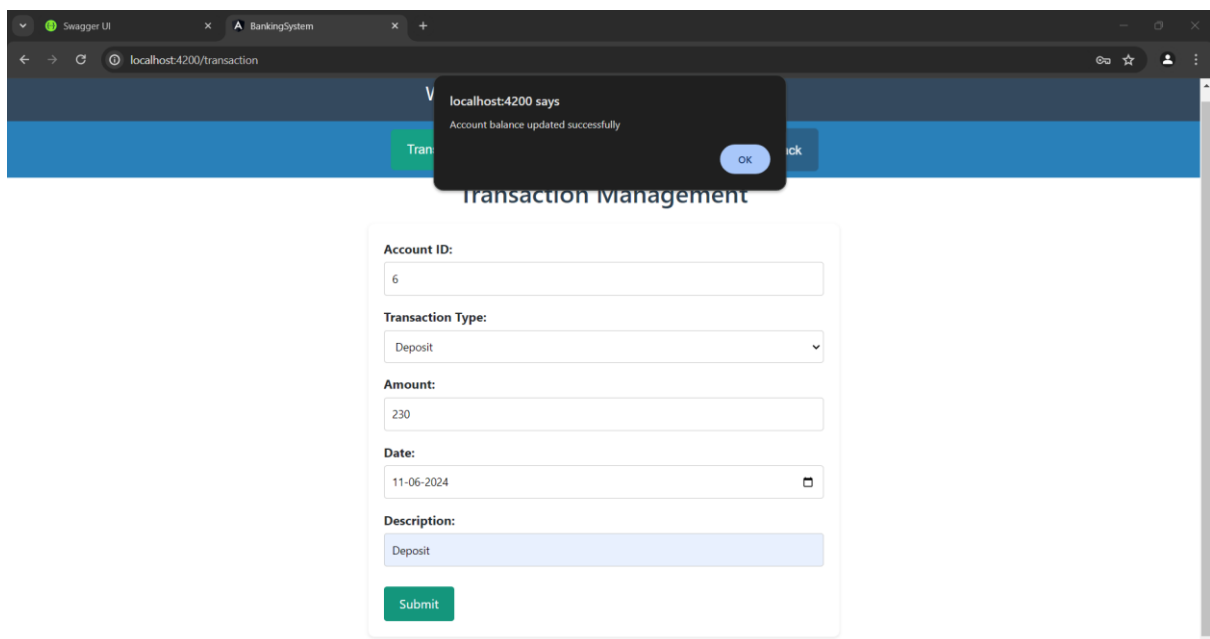
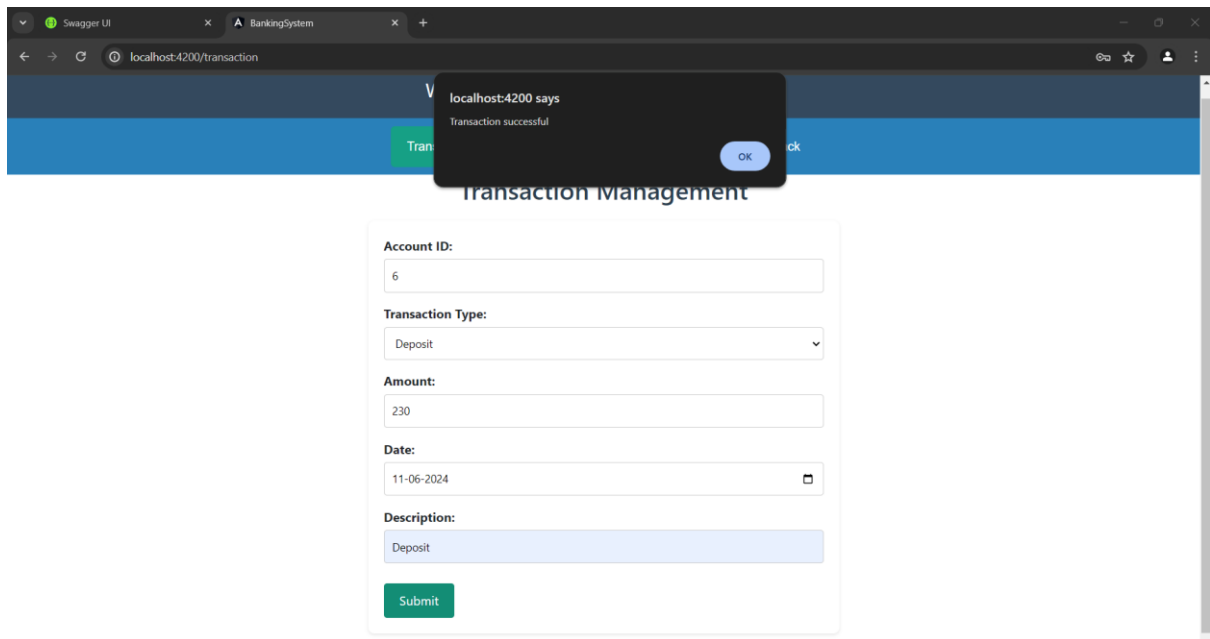


After a successful login, it will take us to the index page where we will have three options: one for Transaction Management and other for Customer support and Feedback.

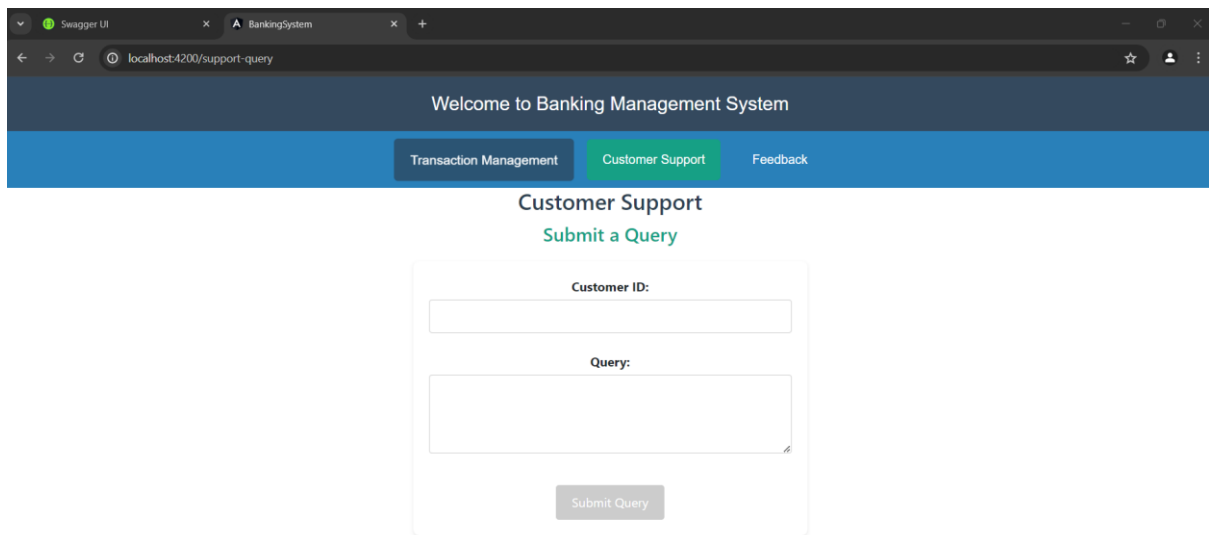


When I click on Transaction Management it will show us transaction form where we can do transactions for an already existing account created by an admin in the database. Here, we can perform transactions like withdrawal, deposit and transfer where it will credit or debit balance amount in the customer account.

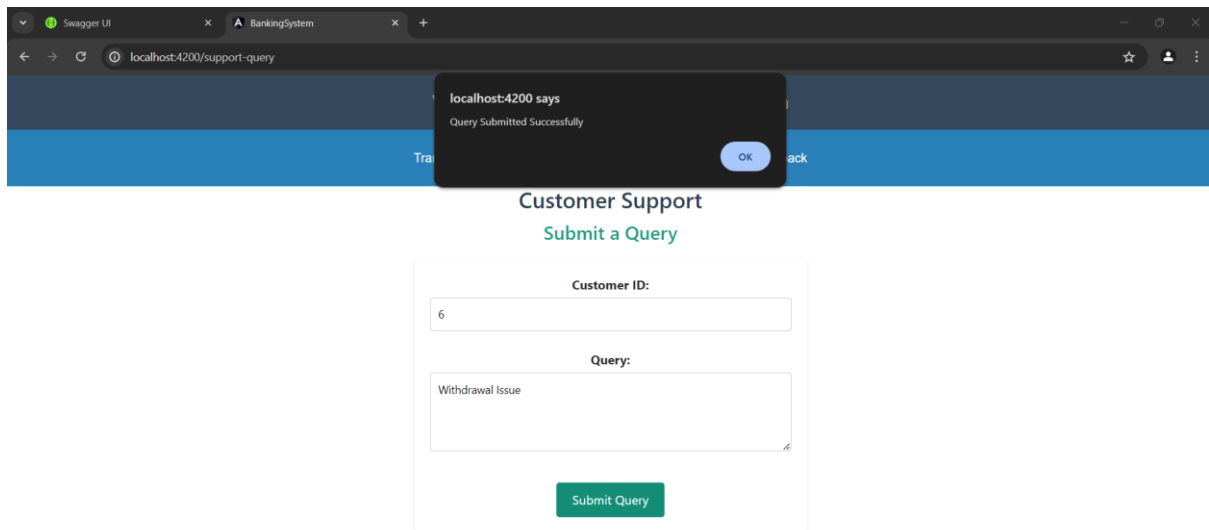
A screenshot of the 'Transaction Management' page in the Banking Management System. The browser's address bar shows 'localhost:4200/transaction'. The page has a dark blue header with 'Welcome to Banking Management System' and a blue navigation bar with 'Transaction Management', 'Customer Support', and 'Feedback'. The 'Transaction Management' link is highlighted. Below the navigation bar, the title 'Transaction Management' is centered. A form is displayed with the following fields: 'Account ID:' with a text input and a red error message 'Account Number is required'; 'Transaction Type:' with a dropdown menu and a red error message 'Transaction Type is required'; 'Amount:' with a text input containing '0'; 'Date:' with a date picker showing 'dd-mm-yyyy' and a red error message 'Date is required'; and 'Description:' with a text input.



After, when we click on Customer Support it will show us Customer Support Form to submit any queries/problems and if we enter wrong details of a customer it will not submit our query. If we enter all correct details then it shows query submitted successfully.

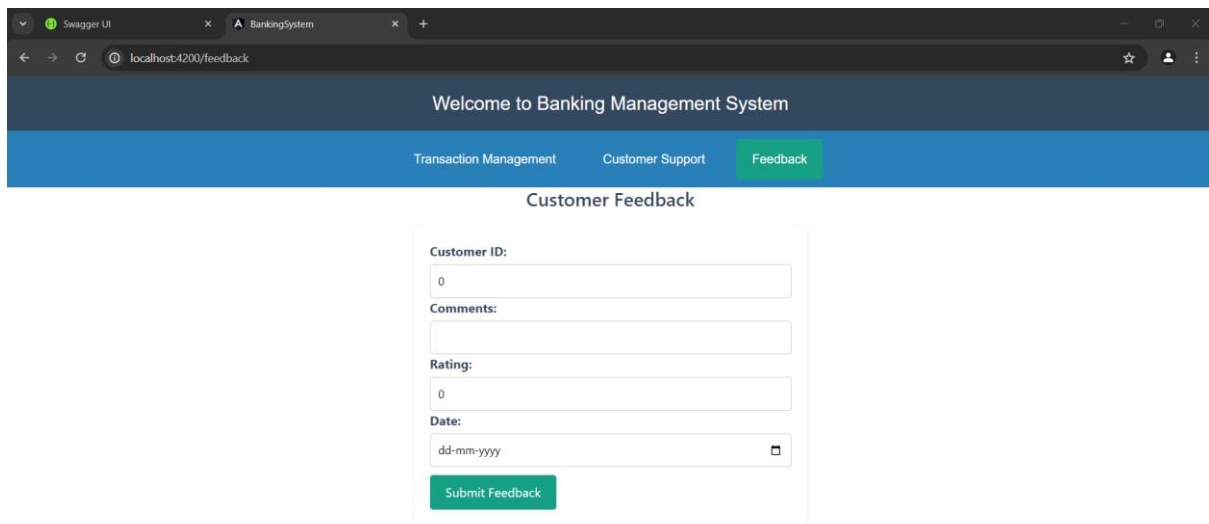


The screenshot shows a web browser window with the URL `localhost:4200/support-query`. The page has a dark blue header with the text "Welcome to Banking Management System". Below the header is a navigation bar with three buttons: "Transaction Management", "Customer Support" (highlighted in green), and "Feedback". The main content area is titled "Customer Support" and "Submit a Query". It contains a form with two input fields: "Customer ID:" and "Query:". The "Submit Query" button is disabled (grayed out).

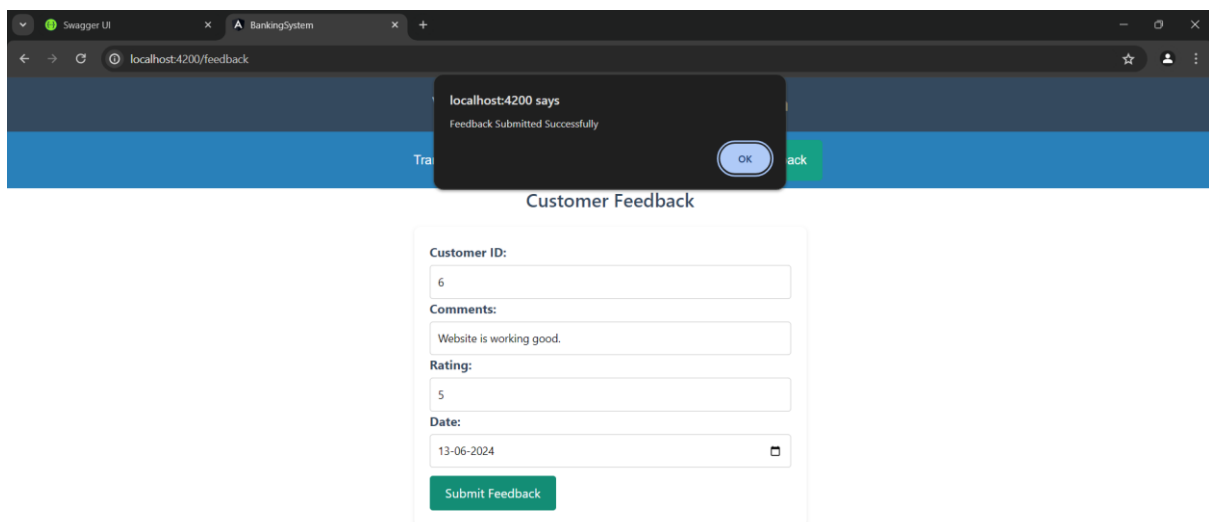


The screenshot shows the same web browser window, but now a dark blue toast notification is displayed in the center of the screen. The notification text reads: "localhost:4200 says" and "Query Submitted Successfully". There is an "OK" button on the right side of the notification. The form below the notification now has the "Customer ID:" field filled with the number "6" and the "Query:" field filled with the text "Withdrawal Issue". The "Submit Query" button is now active (green).

After, when we click on Feedback it will show us Feedback Form to submit customer feedback and if we enter wrong details of a customer it will not submit the feedback. If we enter all correct details then it shows Feedback submitted successfully.

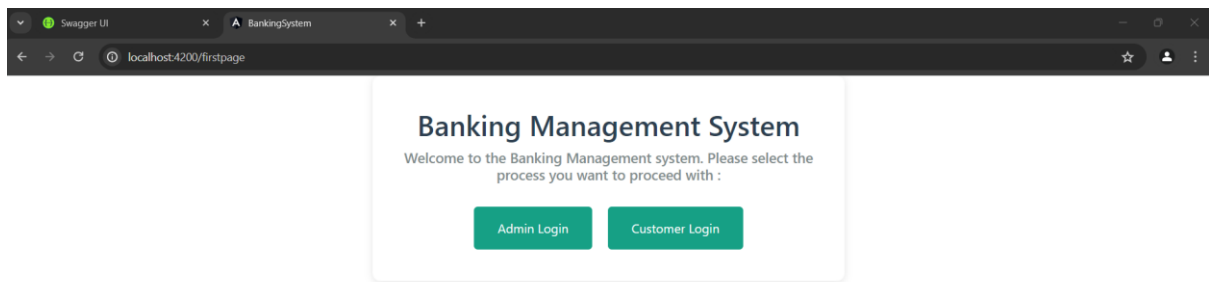


The screenshot shows a web browser window with the address bar displaying 'localhost:4200/feedback'. The page has a dark blue header with the text 'Welcome to Banking Management System'. Below the header is a navigation bar with three links: 'Transaction Management', 'Customer Support', and 'Feedback' (highlighted in green). The main content area is titled 'Customer Feedback' and contains a form with the following fields: 'Customer ID:' (text input with value '0'), 'Comments:' (text input), 'Rating:' (text input with value '0'), 'Date:' (text input with value 'dd-mm-yyyy' and a calendar icon), and a green 'Submit Feedback' button.

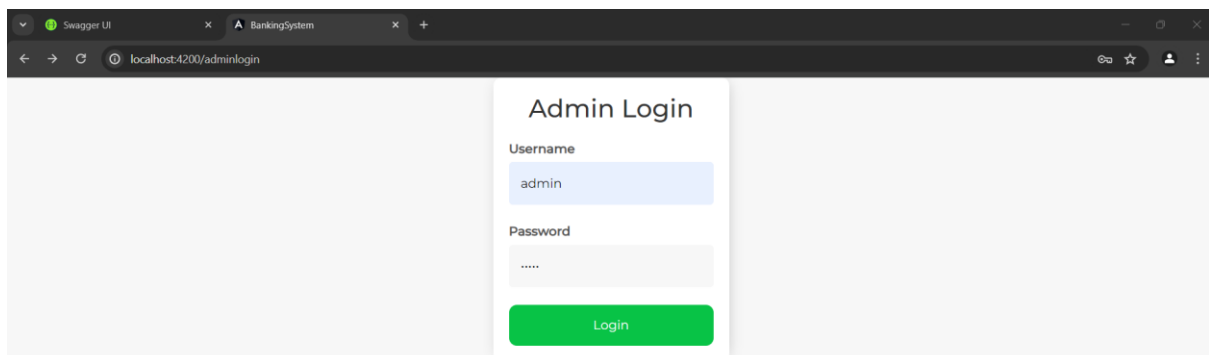


The screenshot shows the same web browser window as the previous one, but with a dark blue modal box overlaying the form. The modal box contains the text 'localhost:4200 says' and 'Feedback Submitted Successfully' with an 'OK' button. The form below the modal box is filled with the following data: 'Customer ID:' (text input with value '6'), 'Comments:' (text input with value 'Website is working good.'), 'Rating:' (text input with value '5'), 'Date:' (text input with value '13-06-2024' and a calendar icon), and a green 'Submit Feedback' button.

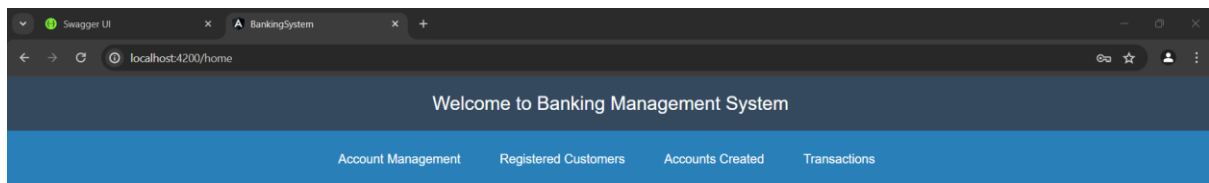
Now go to the first page for Admin part.



For the admin login, the username and password are hardcoded as "admin" and the password is also "admin."



After a successful login, it will take us to the home page where we will have four options: one for Account Management and others for viewing Registered customers, Accounts Created and Transactions.



When we click on Account Management it shows us a form for creating accounts. Admin will create the accounts for an existing customers only for doing transactions. Customer can only perform transactions with existing accounts present in database. After doing transactions the amount will be credited or debited from the account and updates the account balance.

A screenshot of the 'Account Management' form in the Banking Management System. The browser's address bar shows 'localhost:4200/account'. The navigation bar is the same as the previous screenshot, but 'Account Management' is highlighted in green. The form is titled 'Account Management' and contains several input fields: 'Account Type:', 'Account Number:', 'Customer ID:' (with a value of '0'), 'Balance:' (with a value of '0'), 'Interest Rate:' (with a value of '0'), and 'Opening Date:' (with a placeholder 'dd-mm-yyyy' and a calendar icon). At the bottom of the form is a green button labeled 'Create Account'.

Swagger UI BankingSystem localhost:4200/account

Account Manager Transactions

localhost:4200 says
New account created
OK

Account Type:
Savings

Account Number:
6549

Customer ID:
18

Balance:
20000

Interest Rate:
1

Opening Date:
10-06-2024

Create Account

Now customer can perform transactions for the above created account using Account ID.

Swagger UI BankingSystem BankingSystem localhost:4200/transaction

localhost:4200 says
Transaction successful
OK

Transaction Management

Account ID:
8

Transaction Type:
Transfer

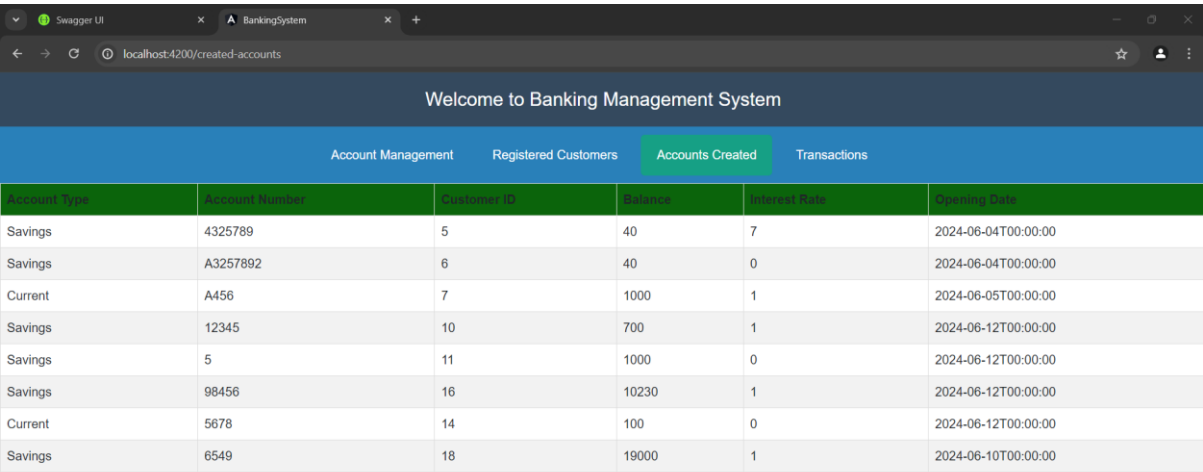
Amount:
1000

Date:
13-06-2024

Description:
Transfer

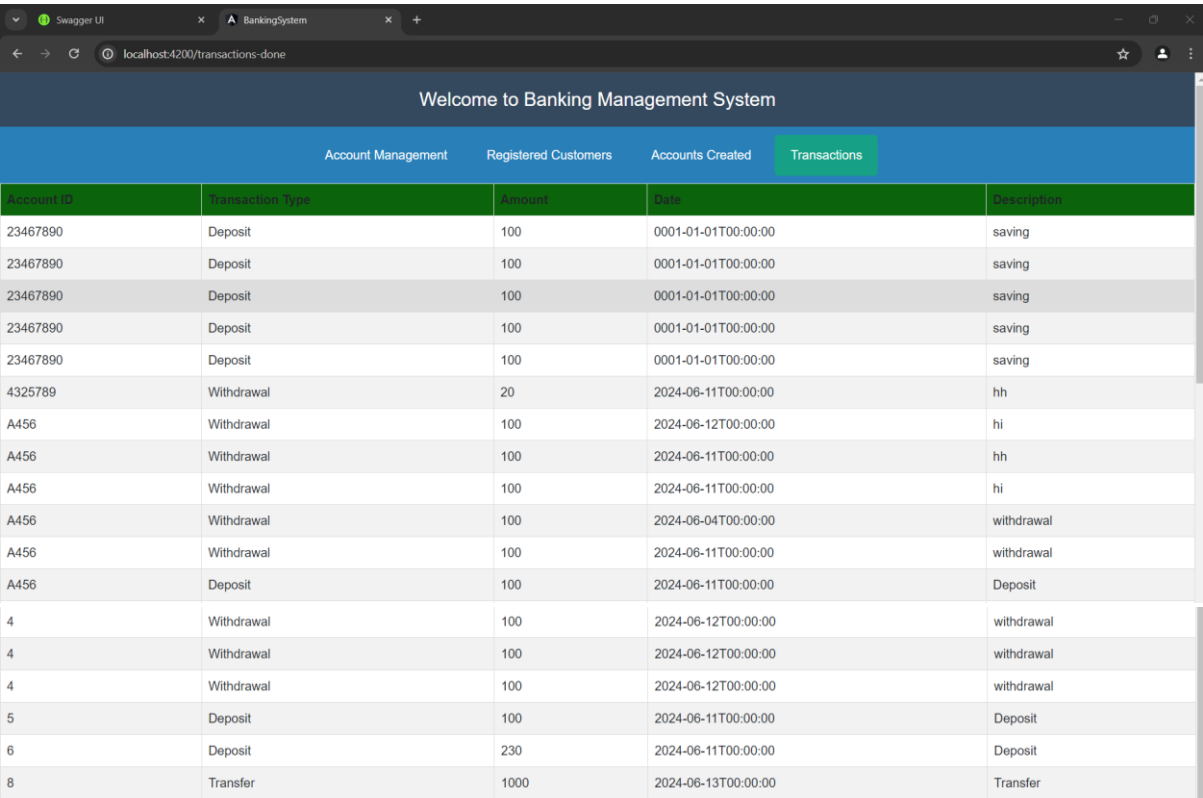
Submit

When we click on Accounts Created it shows us all the accounts that are created for an existing customer.



Welcome to Banking Management System					
Account Management Registered Customers Accounts Created Transactions					
Account Type	Account Number	Customer ID	Balance	Interest Rate	Opening Date
Savings	4325789	5	40	7	2024-06-04T00:00:00
Savings	A3257892	6	40	0	2024-06-04T00:00:00
Current	A456	7	1000	1	2024-06-05T00:00:00
Savings	12345	10	700	1	2024-06-12T00:00:00
Savings	5	11	1000	0	2024-06-12T00:00:00
Savings	98456	16	10230	1	2024-06-12T00:00:00
Current	5678	14	100	0	2024-06-12T00:00:00
Savings	6549	18	19000	1	2024-06-10T00:00:00

When we click on Transactions it shows all the transactions that are done by an existing customer.



Welcome to Banking Management System				
Account Management Registered Customers Accounts Created Transactions				
Account ID	Transaction Type	Amount	Date	Description
23467890	Deposit	100	0001-01-01T00:00:00	saving
23467890	Deposit	100	0001-01-01T00:00:00	saving
23467890	Deposit	100	0001-01-01T00:00:00	saving
23467890	Deposit	100	0001-01-01T00:00:00	saving
23467890	Deposit	100	0001-01-01T00:00:00	saving
4325789	Withdrawal	20	2024-06-11T00:00:00	hh
A456	Withdrawal	100	2024-06-12T00:00:00	hi
A456	Withdrawal	100	2024-06-11T00:00:00	hh
A456	Withdrawal	100	2024-06-11T00:00:00	hi
A456	Withdrawal	100	2024-06-04T00:00:00	withdrawal
A456	Withdrawal	100	2024-06-11T00:00:00	withdrawal
A456	Deposit	100	2024-06-11T00:00:00	Deposit
4	Withdrawal	100	2024-06-12T00:00:00	withdrawal
4	Withdrawal	100	2024-06-12T00:00:00	withdrawal
4	Withdrawal	100	2024-06-12T00:00:00	withdrawal
5	Deposit	100	2024-06-11T00:00:00	Deposit
6	Deposit	230	2024-06-11T00:00:00	Deposit
8	Transfer	1000	2024-06-13T00:00:00	Transfer