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.

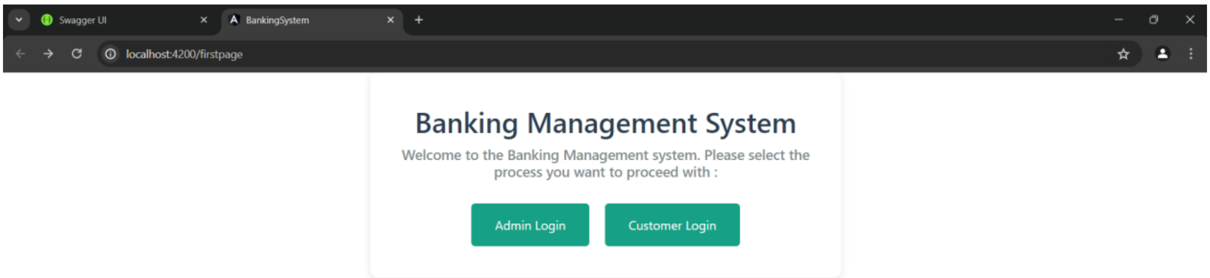
4. Customer Support:

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

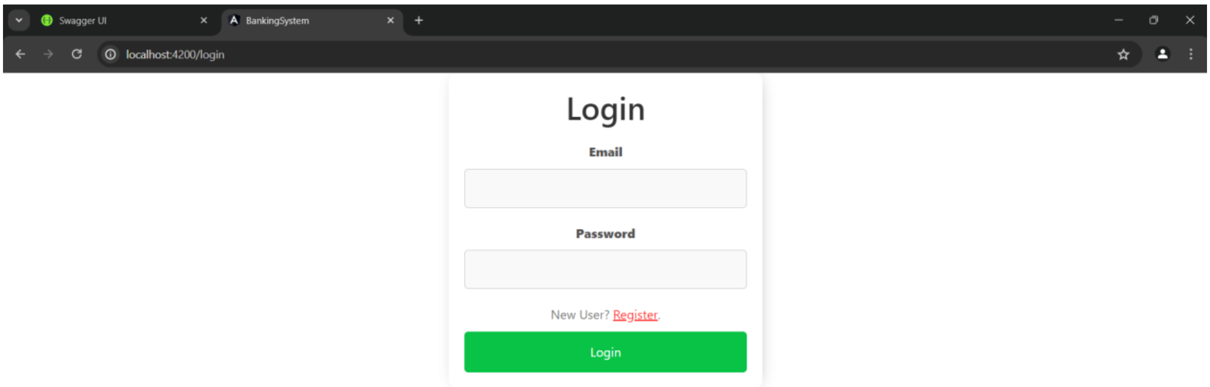
5. Feedback:

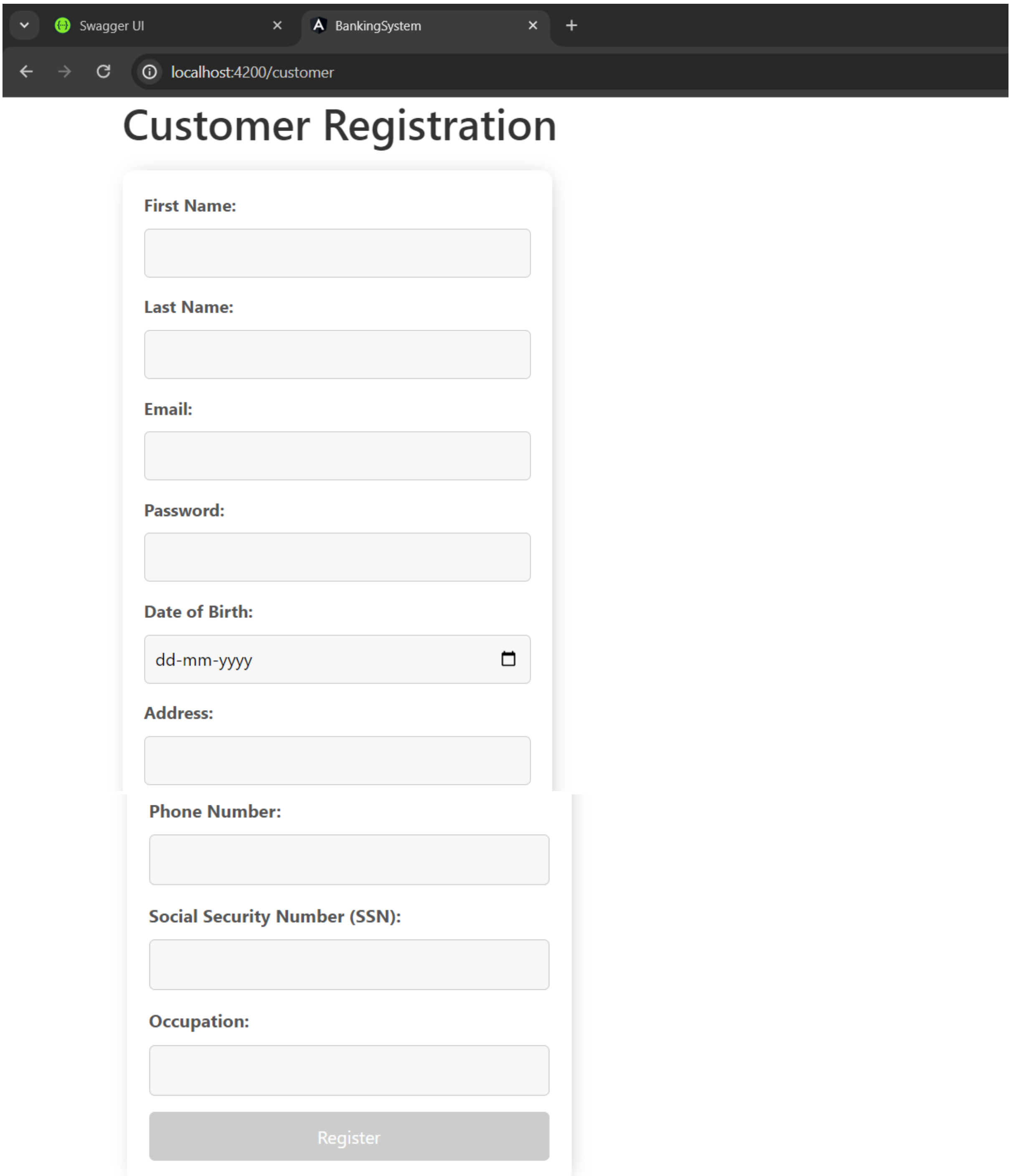
- Implement a customer support system to know their feedback.
- Fields: Customer ID, Comments, Rating, Date.
- Allow customers to submit feedback and rate their banking experience.

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.

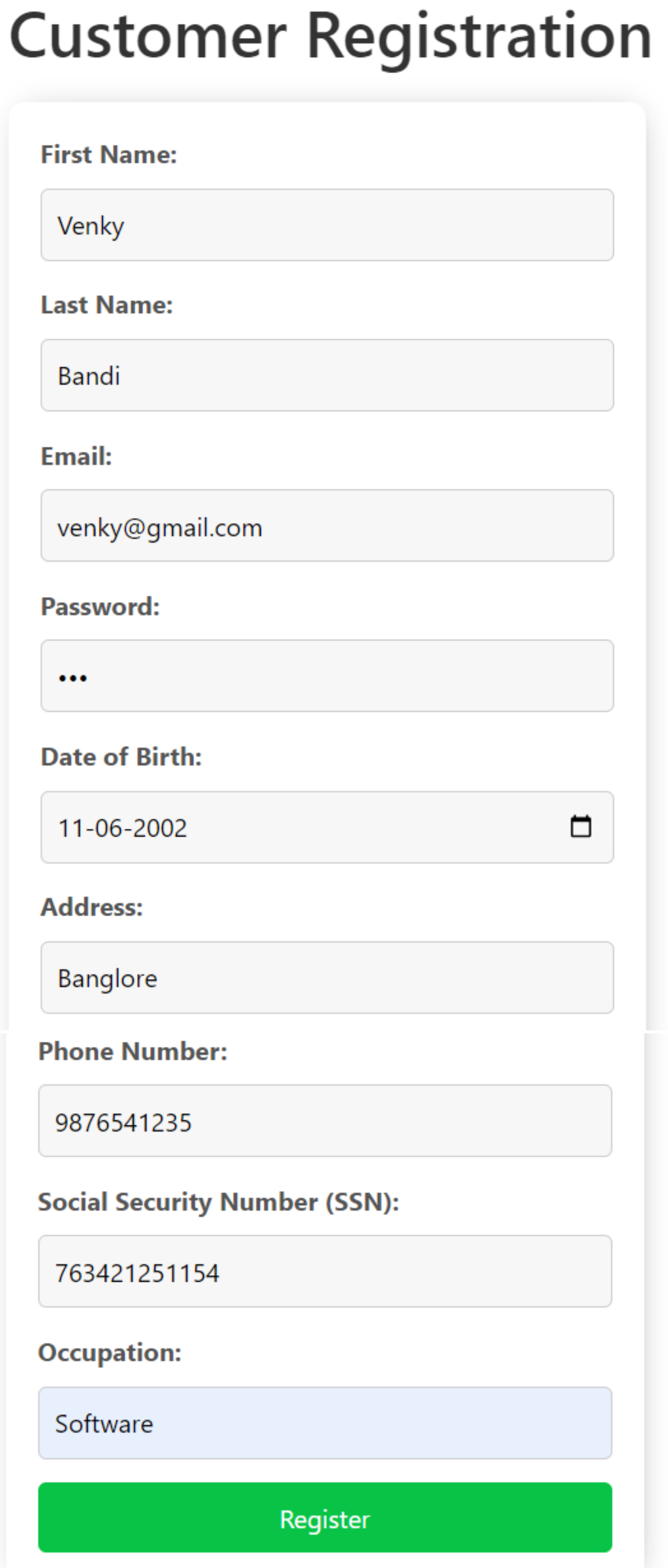


When I click on the customer login button, the following picture will be displayed. If you are new to this page, you need to register, otherwise, you can log in.



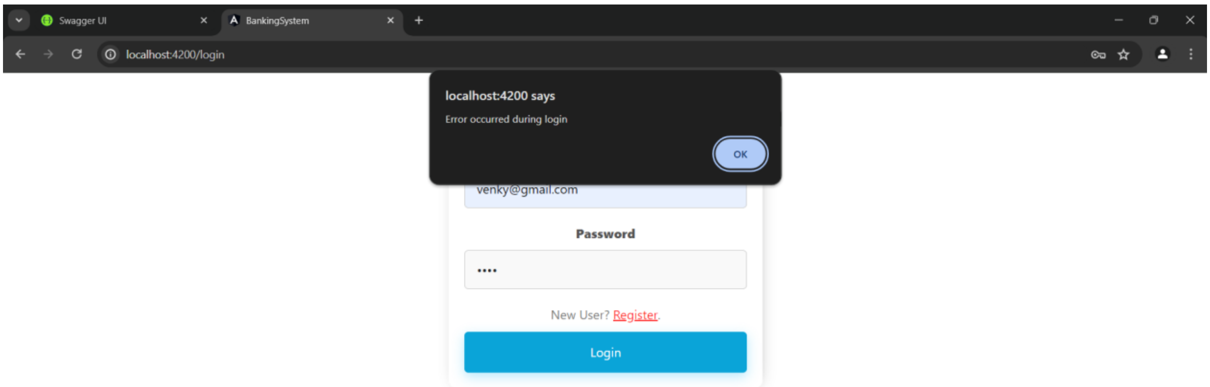

Swagger UI
BankingSystem
localhost:4200/customer
Customer Registration
First Name:
Last Name:
Email:
Password:
Date of Birth:
dd-mm-yyyy
Address:
Phone Number:
Social Security Number (SSN):
Occupation:
Register

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.

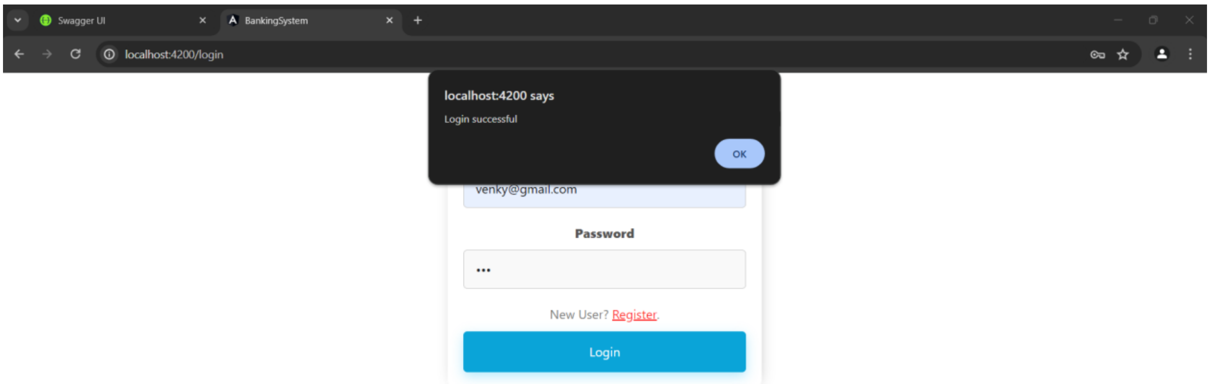


After, it will again redirect back to the login page.

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.

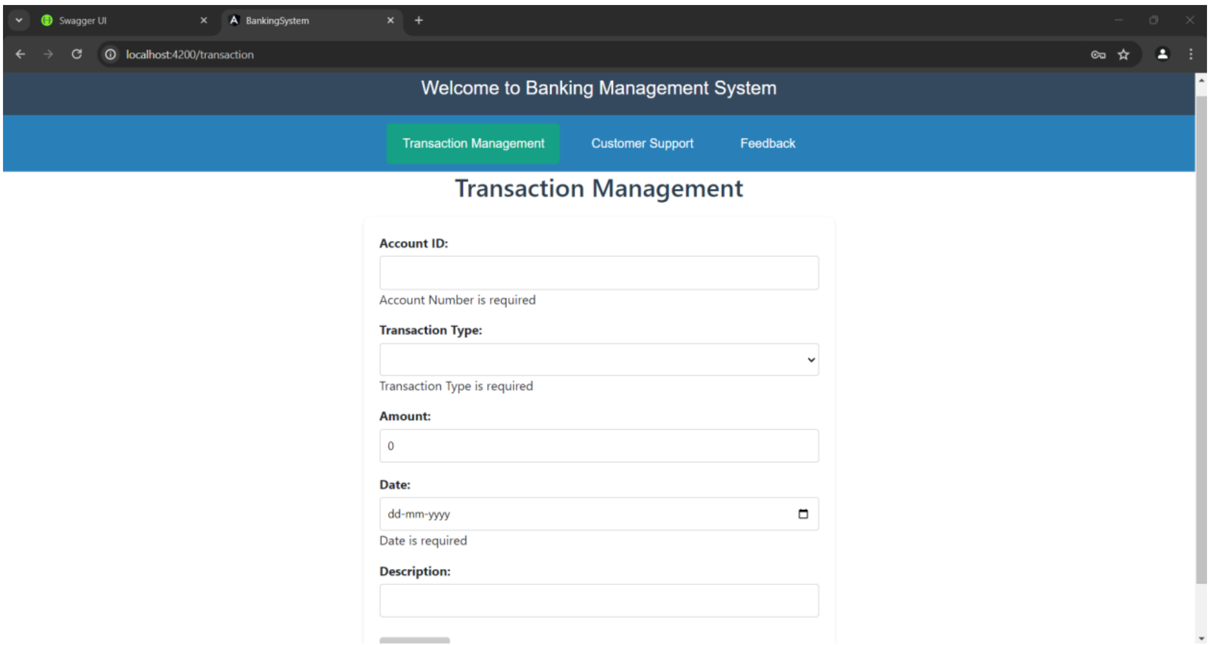


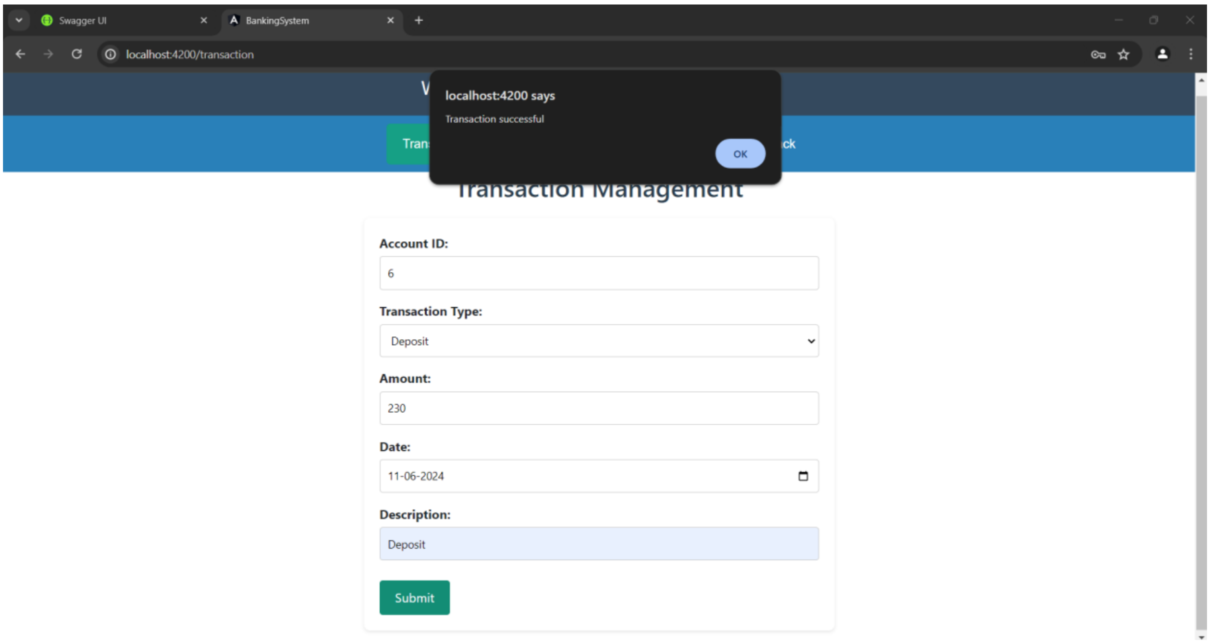
If I provide the correct login credentials, it will show a successful login message.

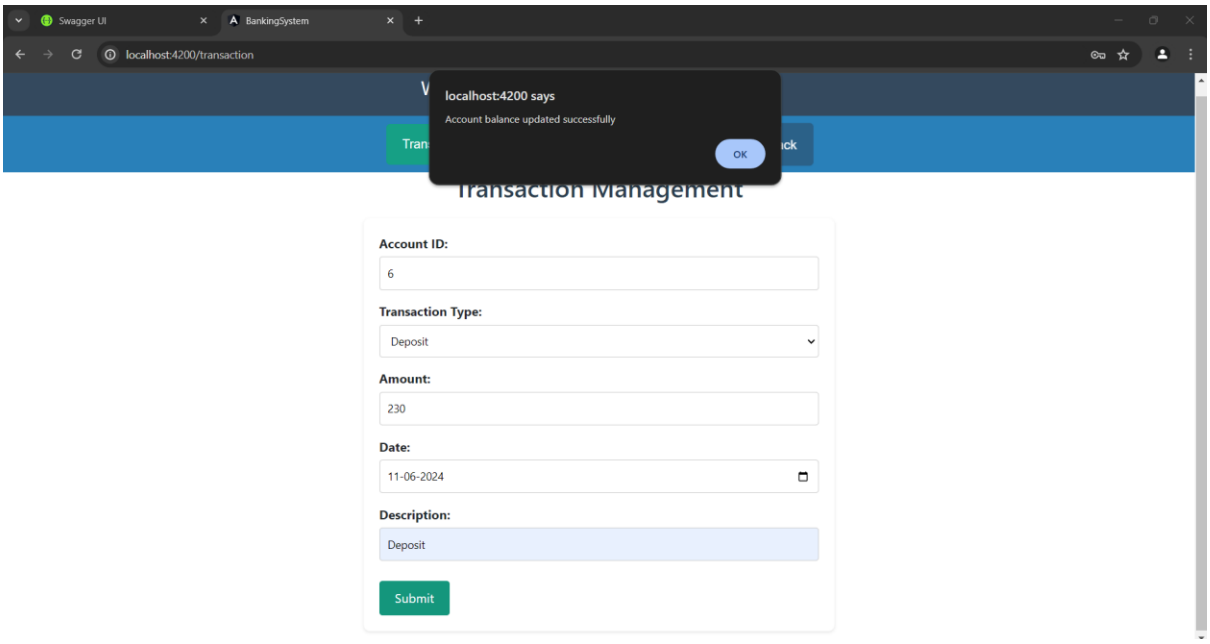


After a successful login, it will take us to the index page where we will have three options: one for Transaction Management and other for Customer support and Feedback.

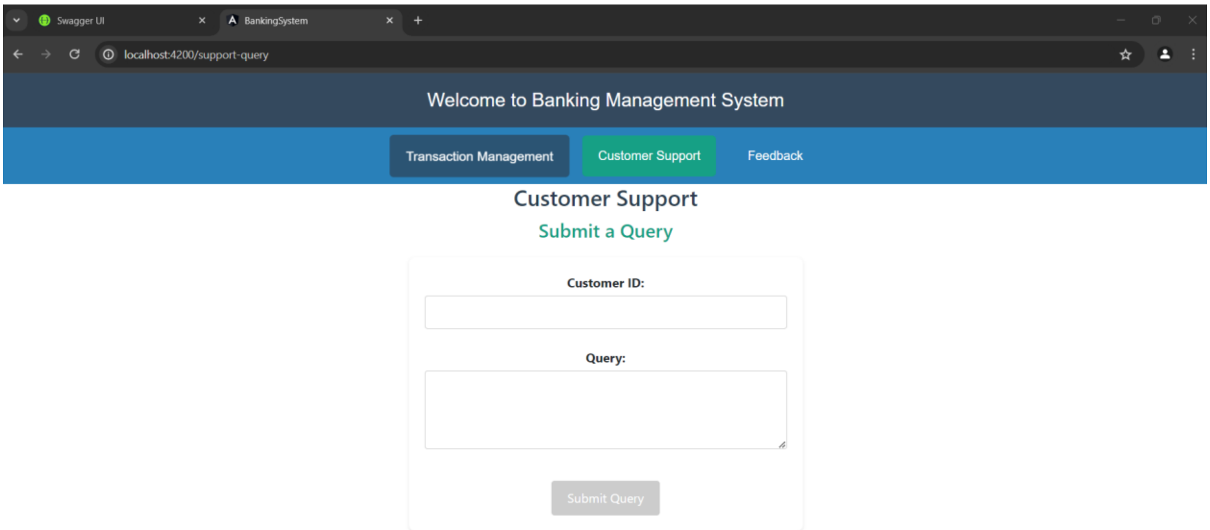
When I click on Transaction Management it will show us transaction form where we can do transactions for an already existing account created by an admin in the database. Here, we can perform transactions like withdrawal, deposit and transfer where it will credit or debit balance amount in the customer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

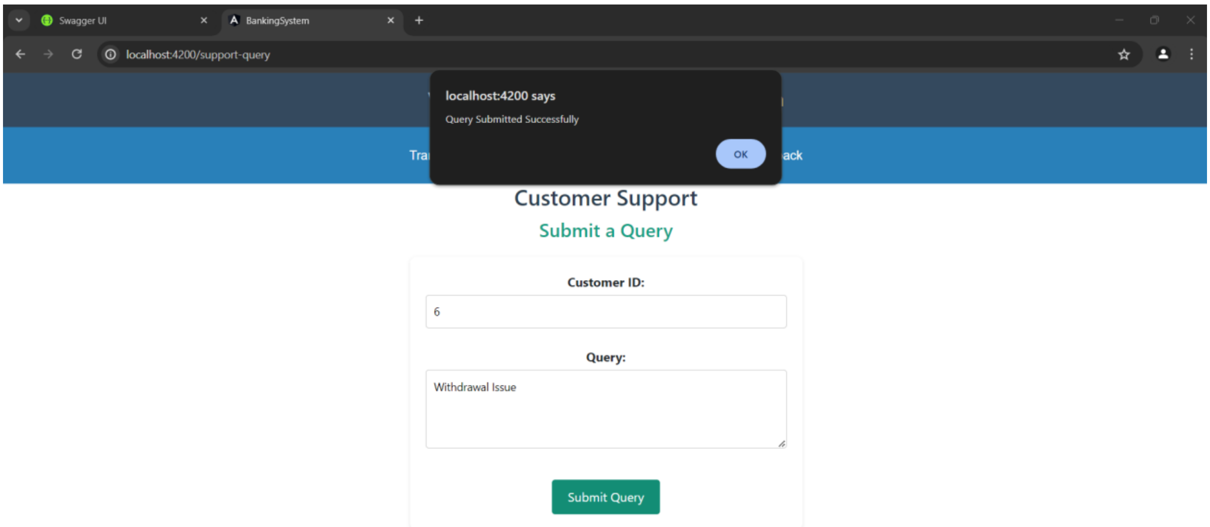



Swagger UI
BankingSystem
localhost:4200/transaction
localhost:4200 says
Transaction successful
OK
Transaction Management
Account ID:
6
Transaction Type:
Deposit
Amount:
230
Date:
11-06-2024
Description:
Deposit
Submit

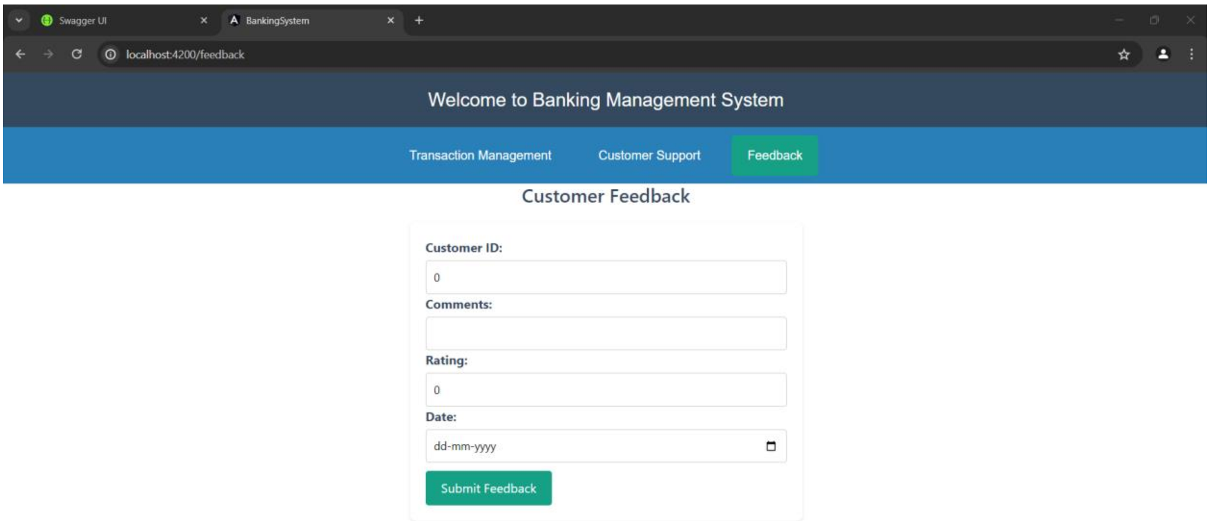

Swagger UI
BankingSystem
localhost:4200/transaction
localhost:4200 says
Account balance updated successfully
OK
Transaction Management
Account ID:
6
Transaction Type:
Deposit
Amount:
230
Date:
11-06-2024
Description:
Deposit
Submit

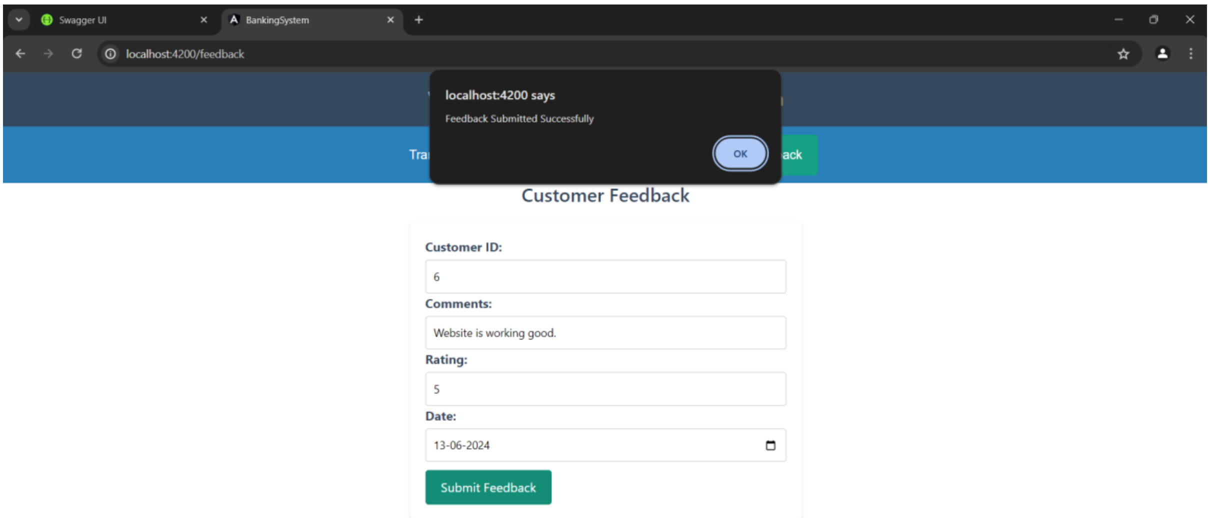
After, when we click on Customer Support it will show us Customer Support Form to submit any queries/problems and if we enter wrong details of a customer it will not submit our query. If we enter all correct details then it shows query submitted successfully.



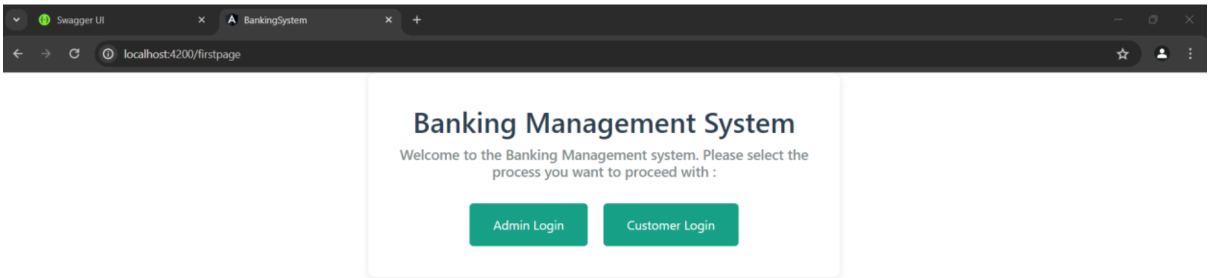


After, when we click on Feedback it will show us Feedback Form to submit customer feedback and if we enter wrong details of a customer it will not submit the feedback. If we enter all correct details then it shows Feedback submitted successfully.

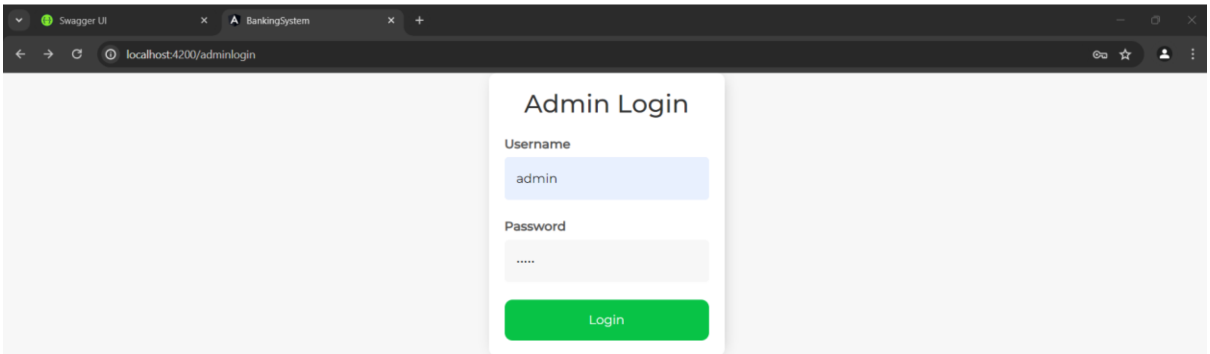




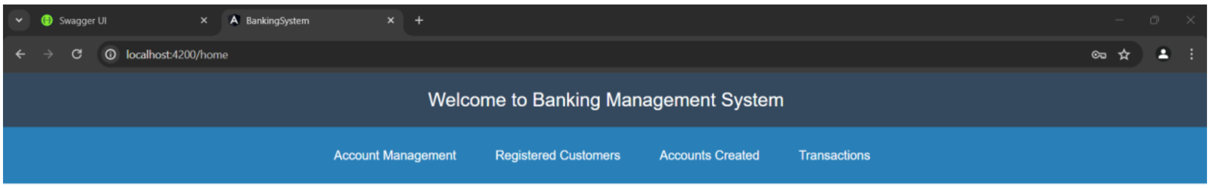
Now go to the first page for Admin part.



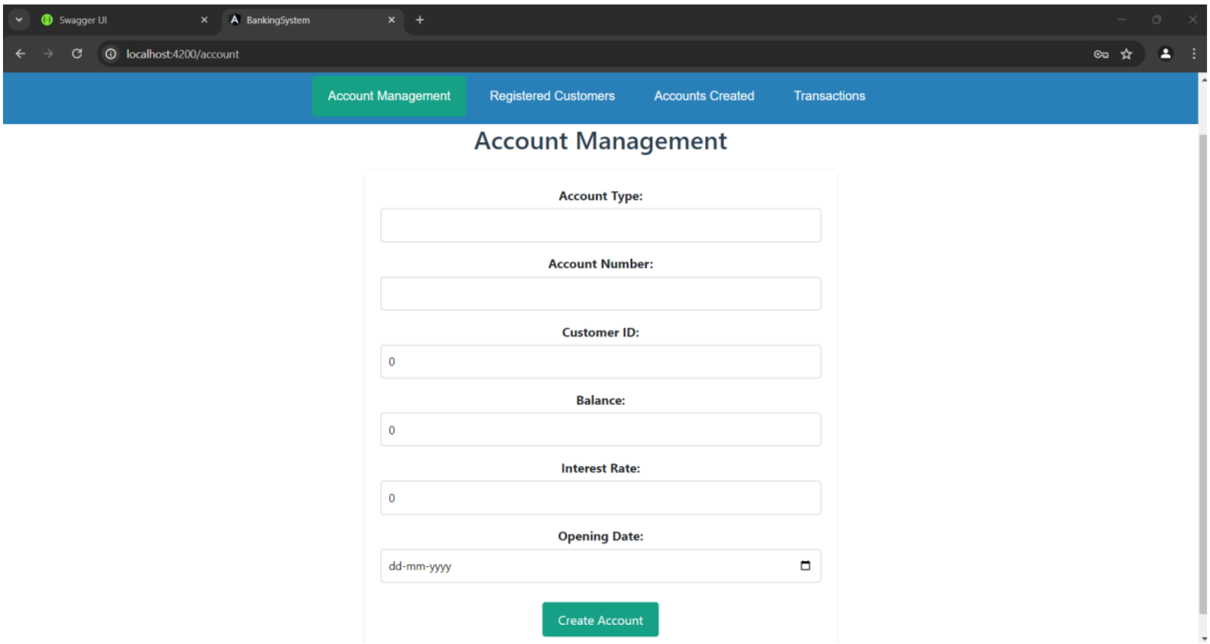
For the admin login, the username and password are hardcoded as "admin" and the password is also "admin."

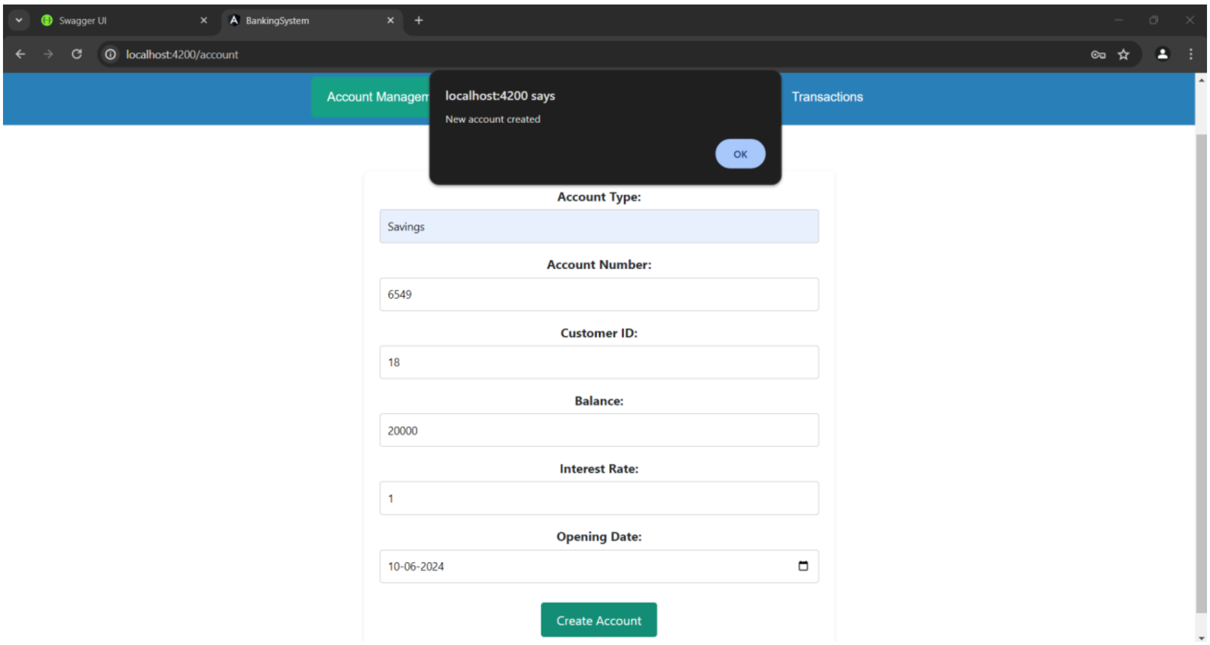


After a successful login, it will take us to the home page where we will have four options: one for Account Management and others for viewing Registered customers, Accounts Created and Transactions.

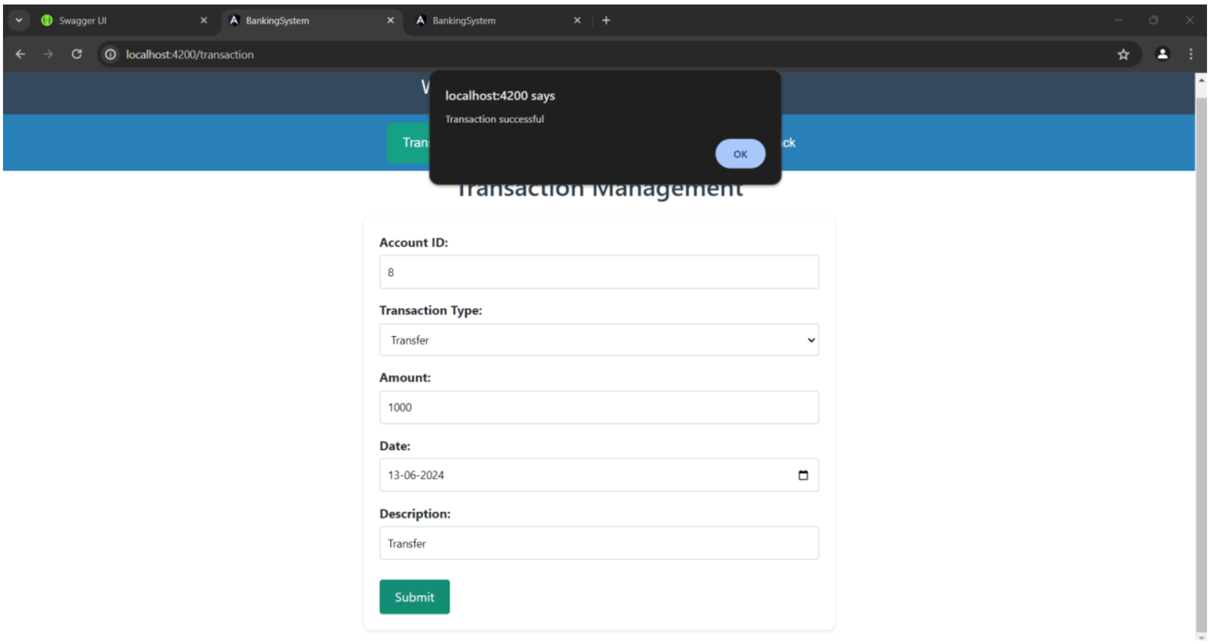


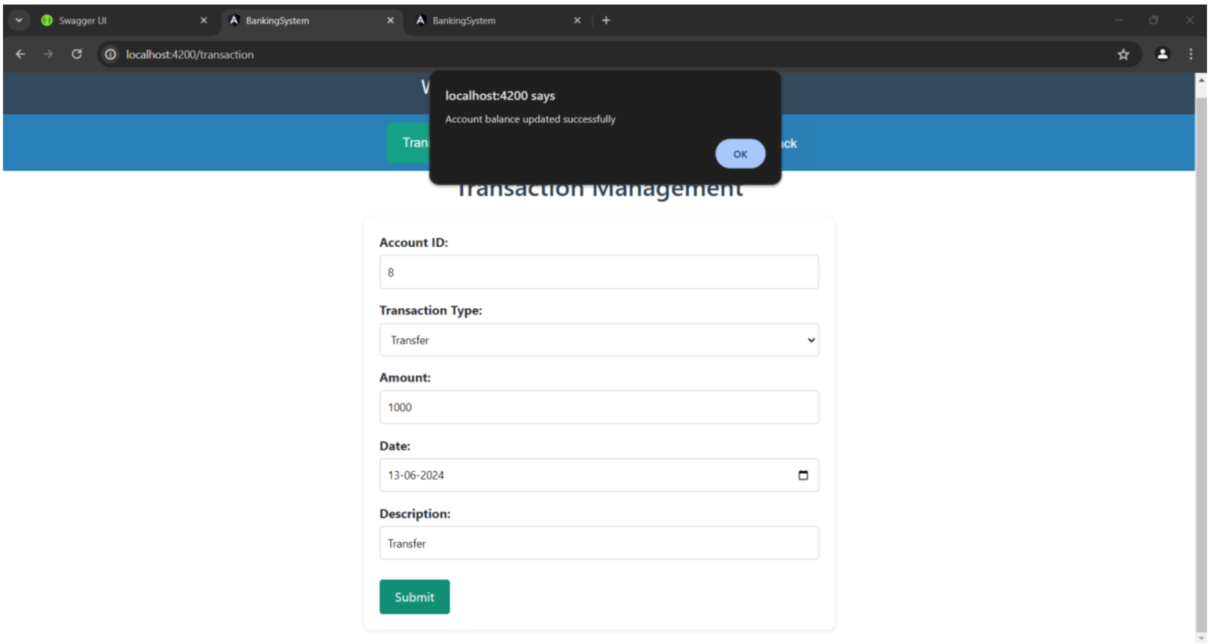
When we click on Account Management it shows us a form for creating accounts. Admin will create the accounts for an existing customers only for doing transactions. Customer can only perform transactions with existing accounts present in database. After doing transactions the amount will be credited or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





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

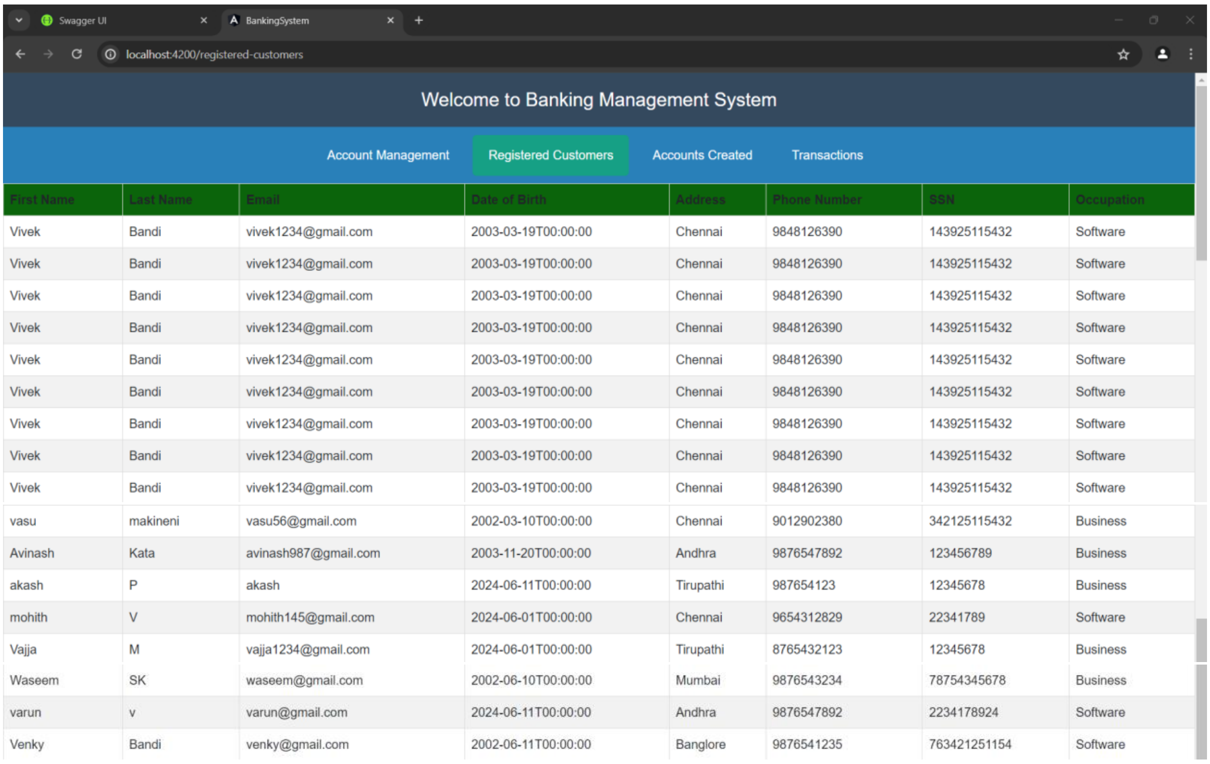




Now the balance in the account will be automatically updated. Initially the account balance is 20000 after transferring 1000 the account has 19000.

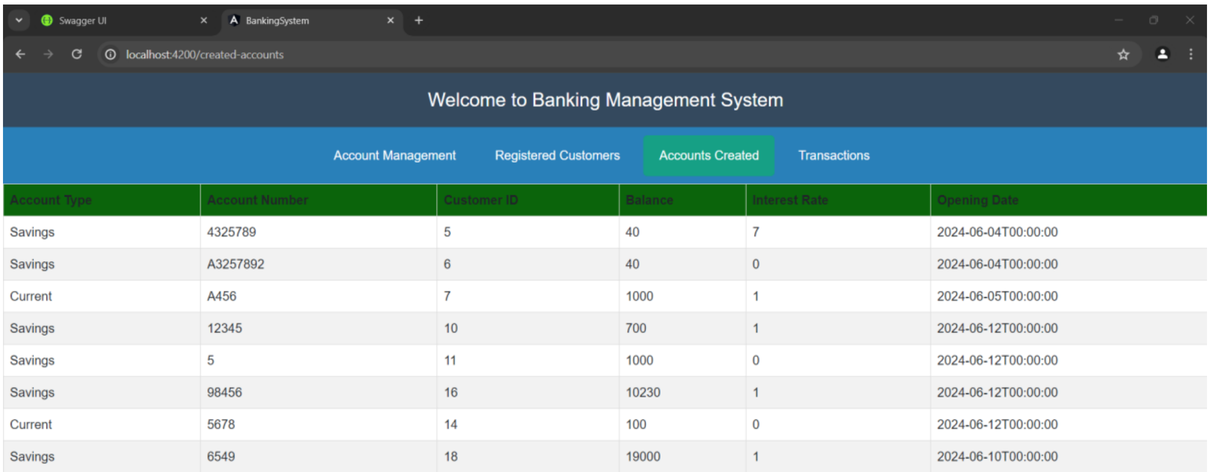
Savings	6549	18	19000	1	2024-06-10T00:00:00

In Admin Part, when we click Registered Customers it shows all the existing registered customers that is stored in our database.



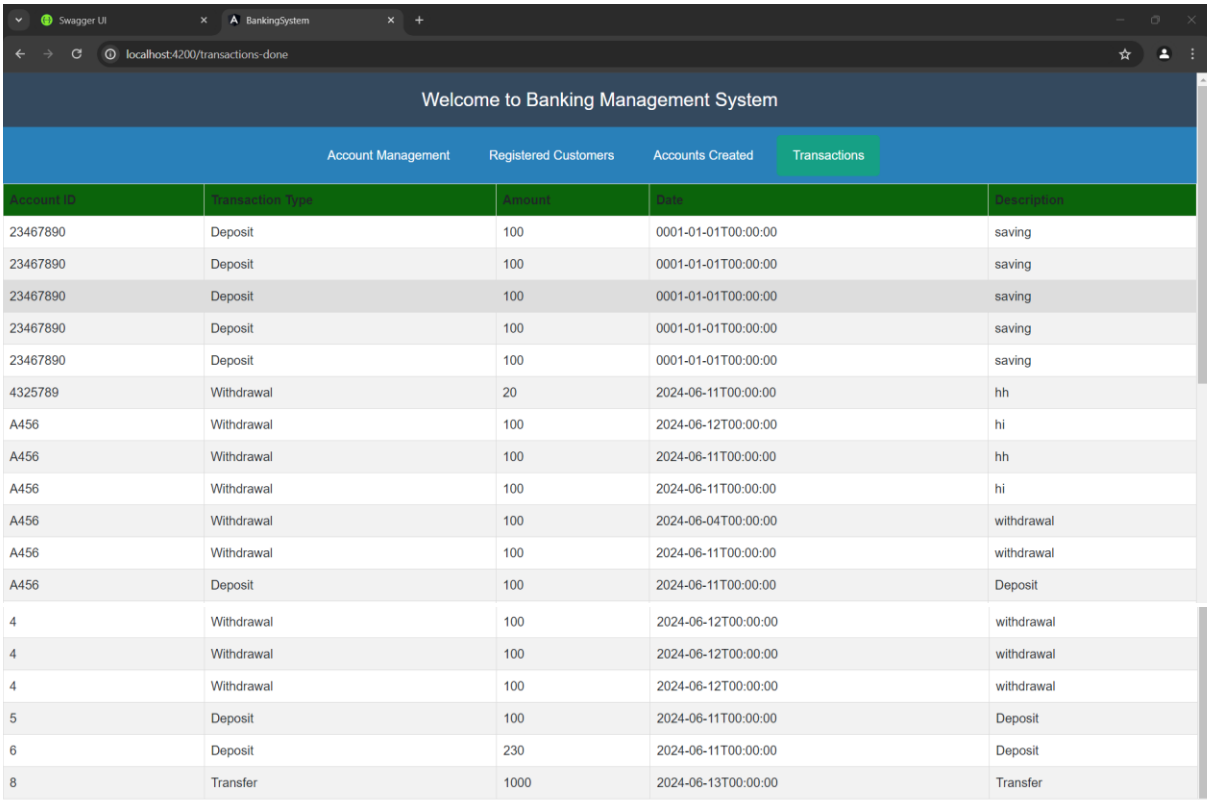
First Name	Last Name	Email	Date of Birth	Address	Phone Number	SSN	Occupation
Vivek	Bandi	vivek1234@gmail.com	2003-03-19T00:00:00	Chennai	9848126390	143925115432	Software
Vivek	Bandi	vivek1234@gmail.com	2003-03-19T00:00:00	Chennai	9848126390	143925115432	Software
Vivek	Bandi	vivek1234@gmail.com	2003-03-19T00:00:00	Chennai	9848126390	143925115432	Software
Vivek	Bandi	vivek1234@gmail.com	2003-03-19T00:00:00	Chennai	9848126390	143925115432	Software
Vivek	Bandi	vivek1234@gmail.com	2003-03-19T00:00:00	Chennai	9848126390	143925115432	Software
Vivek	Bandi	vivek1234@gmail.com	2003-03-19T00:00:00	Chennai	9848126390	143925115432	Software
Vivek	Bandi	vivek1234@gmail.com	2003-03-19T00:00:00	Chennai	9848126390	143925115432	Software
Vivek	Bandi	vivek1234@gmail.com	2003-03-19T00:00:00	Chennai	9848126390	143925115432	Software
Vivek	Bandi	vivek1234@gmail.com	2003-03-19T00:00:00	Chennai	9848126390	143925115432	Software
vasu	makineni	vasu56@gmail.com	2002-03-10T00:00:00	Chennai	9012902380	342125115432	Business
Avinash	Kata	avinash987@gmail.com	2003-11-20T00:00:00	Andhra	9876547892	123456789	Business
akash	P	akash	2024-06-11T00:00:00	Tirupathi	987654123	12345678	Business
mohith	V	mohith145@gmail.com	2024-06-01T00:00:00	Chennai	9654312829	22341789	Software
Vajja	M	vajja1234@gmail.com	2024-06-01T00:00:00	Tirupathi	8765432123	12345678	Business
Waseem	SK	waseem@gmail.com	2002-06-10T00:00:00	Mumbai	9876543234	78754345678	Business
varun	v	varun@gmail.com	2024-06-11T00:00:00	Andhra	9876547892	2234178924	Software
Venky	Bandi	venky@gmail.com	2002-06-11T00:00:00	Banglore	9876541235	763421251154	Software

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



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.



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