

Task - A retailer offers a rewards program to its customers, awarding points based on each recorded purchase.

A customer receives 2 points for every dollar spent over \$100 in each transaction, plus 1 point for every dollar spent over \$50 in each transaction (e.g. a \$120 purchase = $2 \times \$20 + 1 \times \$50 = 90$ points).

Given a record of every transaction during a three month period, calculate the reward points earned for each customer per month and total.

- Use Angular/SQL
- Simulate an asynchronous API call to fetch data
- Make up a data set to best demonstrate your solution
- Check solution into GitHub

Plan -

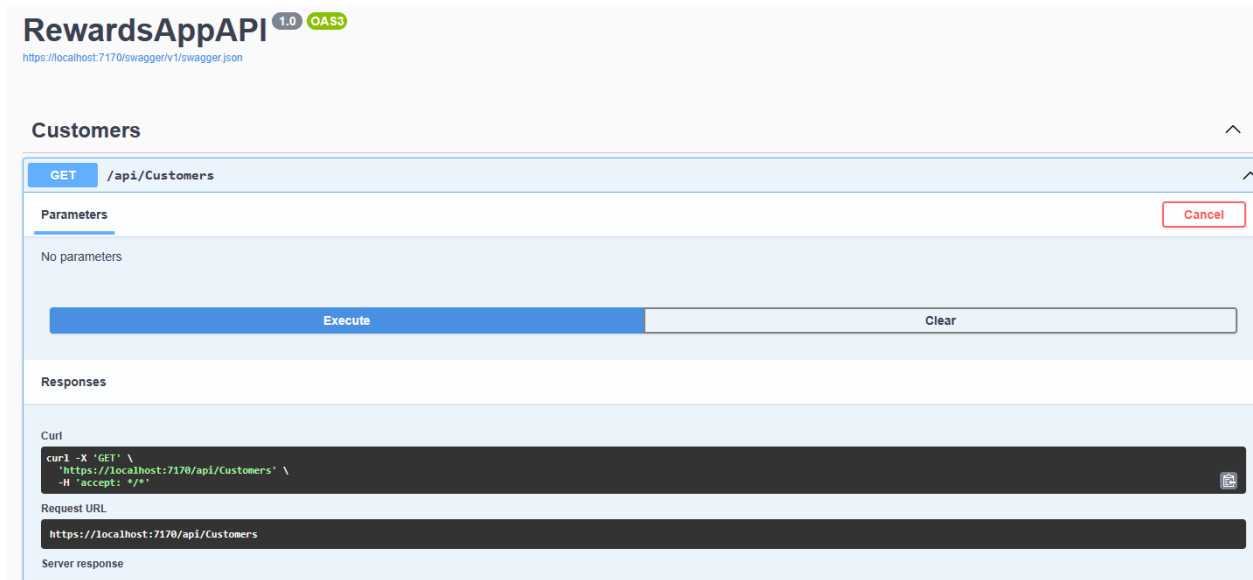
- 1) Set up Web API backend using .net 6.0 and migrate models to sql server
- 2) Create front end using angular and display interpolated information
- 3) Connect Angular to the web api and manipulate data to calculate reward points and totals

Final results -

Final UI - This is a subsection of results async fetched from the API

Rewards App Customer Information				
Customers				
Transaction Id	Name	Transaction(\$)	Reward points	Total for Quarter
e83cc8cd-9da2-48c0-8eaa-3e649ae6b338	ishan	43244	129482	155929
e4f563d5-1b34-4c70-9372-472c0b8a2739	may	98848	296294	296911
be7c3458-7e15-4694-bcd8-5662e50f5804	john	49	0	0
0d63207d-89ef-409f-a561-6e21267bdf00	may	289	617	296911
d334653d-36aa-4eb7-bf21-adbfc1fa6568	kaaveri	4756	14018	247417
256c45c6-77f7-4b29-bfbd-aeadee105cea	kaaveri	77883	233399	247417
893c1c9b-c85c-487c-8d54-c6f1be38c1ea	Adhiraj	3424	10022	39772
544a26aa-51e6-49c2-a9ec-cb5674ab0405	Adhiraj	10000	29750	39772
103b7e3a-902d-4c70-913d-ea7e3922c3b9	Alexander	9999	29747	29747
23c1cdb0-f94f-48bc-8b29-fa00a96b6892	ishan	8899	26447	155929

API interface -



What could have been done differently -

- Separate database for each month - separate routes - separate api calls
- Separate totals for each month
- UI/UX - padding + color palettes