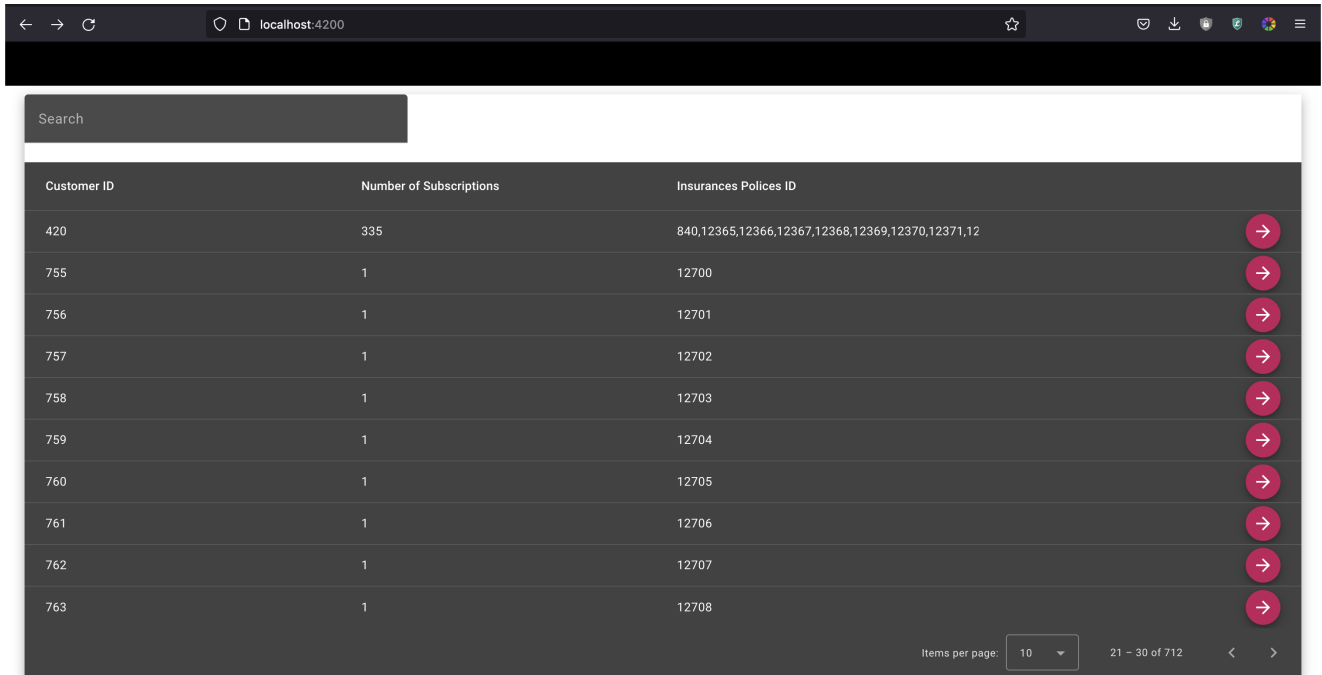


Mapersive Tech Assessment

In this article, we are going to present the developed solution and then discuss the obstacles and difficulties, decisions we made, and finally, some to-dos to enhance the solution further.

Results

- Main Screen.



Customer ID	Number of Subscriptions	Insurances Polices ID	
420	335	840,12365,12366,12367,12368,12369,12370,12371,12	→
755	1	12700	→
756	1	12701	→
757	1	12702	→
758	1	12703	→
759	1	12704	→
760	1	12705	→
761	1	12706	→
762	1	12707	→
763	1	12708	→

Items per page: 10 21 - 30 of 712 < >

On this screen, we present the customers registered in our system, along with their number of subscriptions (the count of policies they have), thier insurance policy IDs, and finally, a button to access more information.

To improve loading times, we have implemented progressive loading, which means that data is loaded only when the customer navigates through the pages.

- Search by Customer ID

Customer ID	Number of Subscriptions	Insurances Polices ID
400	1	12345
401	1	12346
402	1	12347
403	1	12348
404	1	12349
405	1	12350
406	1	12351
407	1	12352
408	1	12353
409	1	12354

We can search for customer. This functionality allows us to perform a search using a string, and the table will display all customers whose IDs start with the provided string

- Customer Details Screen.

Customer Details

Customer Gender : Male
 Customer_Region : North
 Customer_Marital_status : Yes
 Customer_Income_group : \$25-\$70K

Customer Insurance Subscriptions

Filter

Policy_id	Date_of_Purchase	Fuel	comprehensive	property_damage_liability	personal_injury_protection	bodily_injury_liability	VEHICLE_SEGMENT	Premium
840	1/4/2018	CNG	No	No	Yes	No	A	2089
12365	1/23/2018	CNG	No	No	No	Yes	A	1493
12366	1/2/2018	CNG	No	Yes	Yes	No	A	661
12367	1/3/2018	CNG	No	No	Yes	Yes	A	685
12368	1/8/2018	CNG	Yes	Yes	Yes	Yes	A	1006
12369	1/16/2018	CNG	Yes	No	No	Yes	A	1160

This screen displays two sections.

The first section contains customer details.

The second section is a table that provides more information about the insurance policies to which the customer has subscribed.

Challenges

- The requirements aren't clear.
- The provided data isn't clean.

Decisions.

1. Remove Duplicate Items:
Remove the items with the same policy_id (3 in total).
2. Divide the Data into Separate Entities:
Divide the provided data into separate entities: Customer and Insurance, each with its own columns.
3. Implement Progressive Loading:
Implement progressive loading to reduce the loading time for customers.
4. Insurance Subscriptions:
In the customer details view, we loaded the insurance subscriptions all at once (without implementing progressive loading) because a customer can typically be subscribed to only a few hundred insurances at most.

Todos

- Implement a Caching System to Cache Customer Data.
- Improve the Responsiveness of the Solution.