

# CSP 584 - Enterprise Web Applications

## Homehub Project

### Team 7

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## Home Page:

[Cleaning](#)[Pool Services](#)[Carpenting](#)[Electrical](#)[Windows & Roof Services](#)[Others](#)[Handyman](#)[Interior Design](#)[Trending](#)

[ViewOrder](#)[Login](#)[Cart\(0\)](#)

Search Service:

search here..

[Cleaning](#)

[Home Cleaning](#)[Carpet Cleaning](#)

[Pool Services](#)

[Pool Cleaners](#)[Swimming Pools](#)

[Carpenting](#)

[Cabinetry](#)[Flooring](#)

[Electrical](#)

[Insulation Installation](#)[Security Systems](#)

[Windows & Roof Services](#)

[Home Window Tinting](#)

[Windows & Roof Services](#)

[Home Window Tinting](#)[Roofing](#)

[Others](#)

[Gardeners](#)[Plumbing](#)

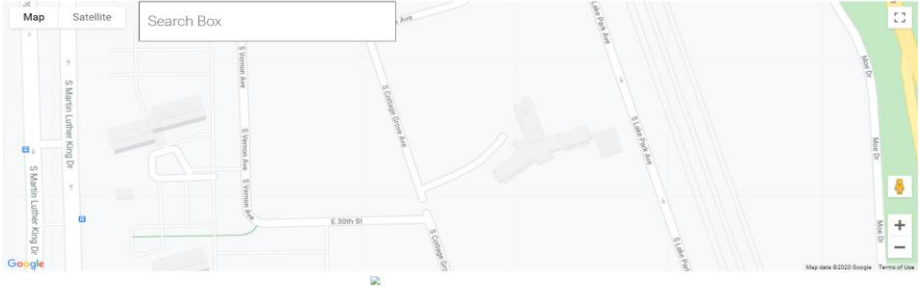
[Handyman](#)

[Interior Design](#)


[Trending](#)

### Welcome to HOME HUB

Tired of calling management office for repair service? Try with our providers who work 24\*7.



WE BEAT OUR COMPETITORS IN ALL ASPECTS. PRICE MATCH GUARANTEED




WE BEAT OUR COMPETITORS IN ALL ASPECTS. PRICE-MATCH GUARANTEED

Keep an eye on the home front anytime, anywhere with XFINITY Home. Our total home security starts at \$40/mo.  
<http://t.co/6v5X5ZTGeg>

The latest Verizon Residential Coupons have been added. <http://t.co/QpNgS2j7V> #fios

XFINITY


\$63.05



[Book Now](#)[Write Review](#)[View Service](#)

Verizon


\$75.05



[Book Now](#)[Write Review](#)[View Service](#)

Prices and offers are subject to change. Homehub Web Store. All rights reserved.  
For inquire contact us : 123-456-7890.  
Enjoy Shopping

## Cleaning Service Tab:

[Cleaning](#)[Pool Services](#)[Carpenting](#)[Electrical](#)[Windows & Roof Services](#)[Others](#)[Handyman](#)[Interior Design](#)[Trending](#)

Home Cleaning

Solar Panel Cleaning

Air Duct Cleaning

Carpet Cleaning

Pressure Washers

ViewOrder

Login

Cart(0)

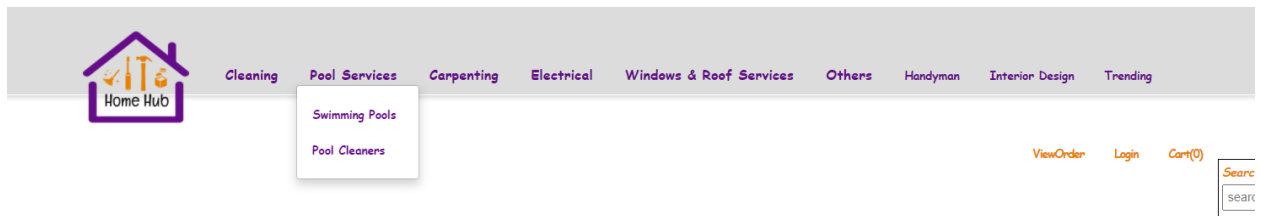
Search Service:

search here..

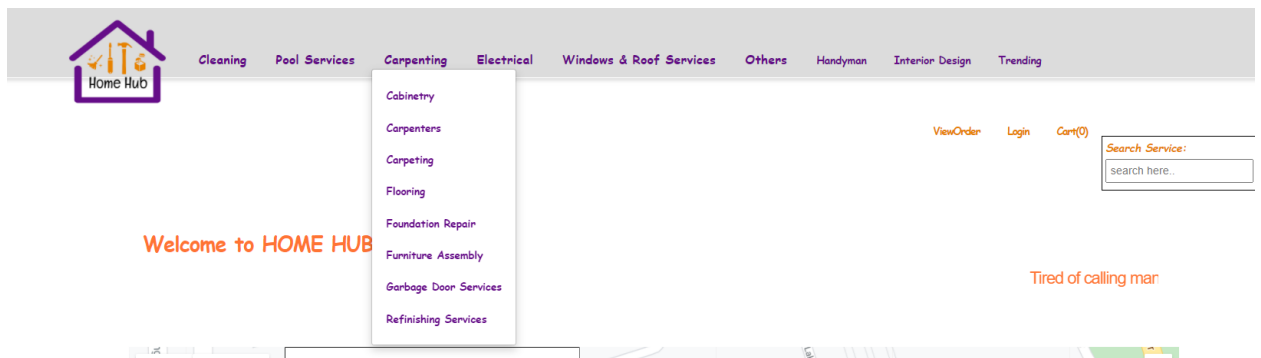
### Welcome to HOME HUB

Tired of calling management office for repair service? Try with our providers

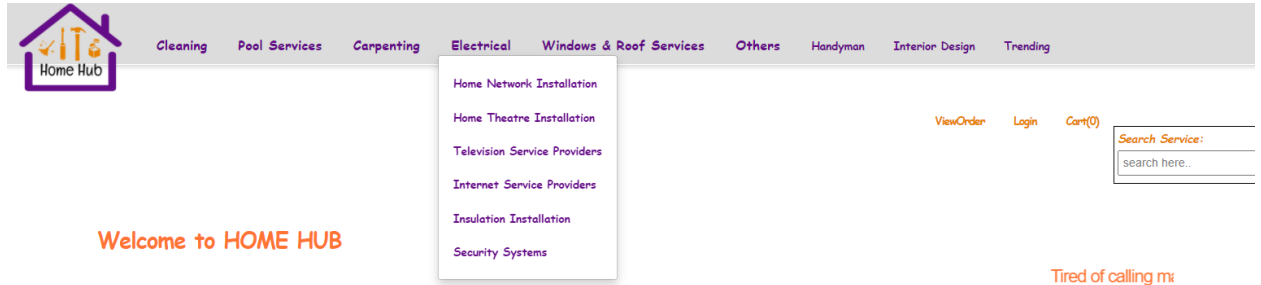
## Pool Services Tab:



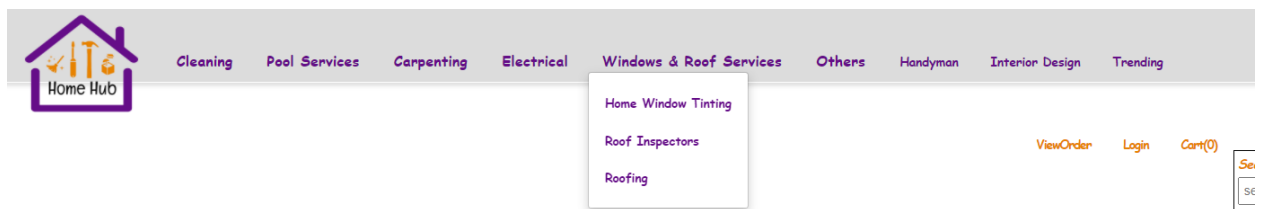
## Carpeting Services Tab:



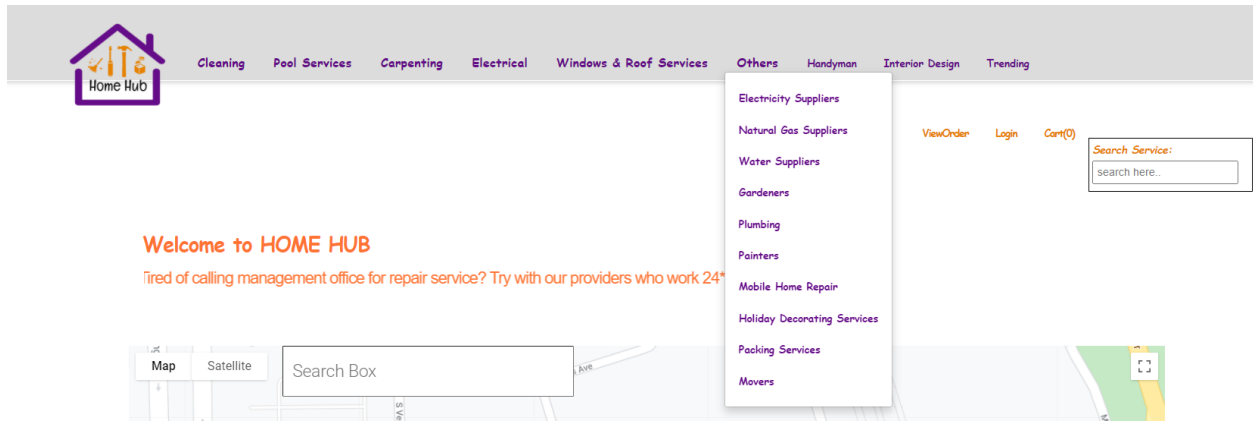
## Electrical Service Tab:



## Window and roof Services tab:



## Other Services Tab:



## Login Page:

### Login

YOUR CUSTOMER ACCOUNT HAS BEEN  
CREATED. PLEASE LOGIN


Username	<input type="text" value="screenshot_user"/>
Password	<input type="password" value="•"/>
User Type	<div>Customer ▼<div>CustomerStore ManagerSalesman</div></div>

## Registration Page:

### Registration

Full Name	<input type="text" value="Manish"/>
Username	<input type="text" value="screenshot_user"/>
Password	<input type="password" value="•"/>
Re-Password	<input type="password" value="•"/>
User Type	<div>Customer ▼<div>CustomerStore ManagerSalesman</div></div>

## User Home:

[Cleaning](#)[Pool Services](#)[Carpenting](#)[Electrical](#)[Windows & Roof Services](#)[Others](#)[Handyman](#)[Interior Design](#)[Trending](#)

[Hello, Screenshot\\_user](#)[Account](#)[Orders](#)[Logout](#)[Cart\(0\)](#)

**Search Service:**

[Cleaning](#)[Home Cleaning](#)[Carpet Cleaning](#)[Pool Services](#)[Pool Cleaners](#)[Swimming Pools](#)[Carpenting](#)[Cabinetry](#)[Flooring](#)[Electrical](#)[Insulation Installation](#)[Security Systems](#)[Windows & Roof Services](#)[Home Window Tinting](#)

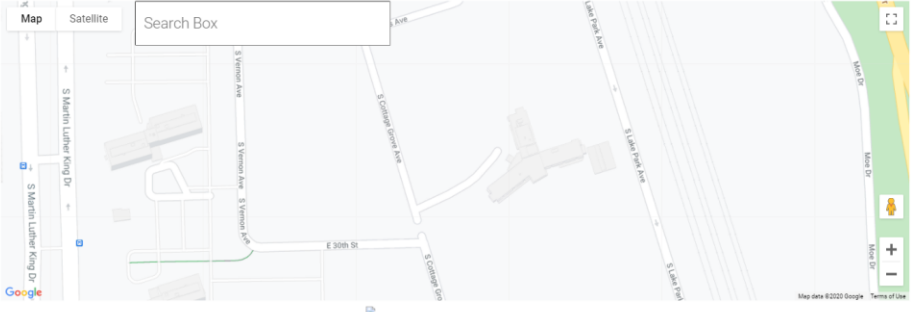
### Welcome to HOME HUB

Tired of calling management office for rep

Map

Satellite

Search Box



Map data ©2020 Google

WE BEAT OUR COMPETITORS IN ALL ASPECTS. PRICE-MATCH GUARANTEED

## Auto Complete Search functionality:

[Cleaning](#)[Pool Services](#)[Carpenting](#)[Electrical](#)[Windows & Roof Services](#)[Others](#)[Handyman](#)[Interior Design](#)[Trending](#)

[Hello, Screenshot\\_user](#)[Account](#)[Orders](#)[Logout](#)[Cart\(0\)](#)

**Search Service:**


[Trusted](#)[Trusted](#)[Trusted](#)[Trusted](#)

[Cleaning](#)[Home Cleaning](#)[Carpet Cleaning](#)[Pool Services](#)[Pool Cleaners](#)[Swimming Pools](#)[Carpenting](#)[Cabinetry](#)[Flooring](#)[Electrical](#)[Insulation Installation](#)[Security Systems](#)[Windows & Roof Services](#)[Home Window Tinting](#)

### Welcome to HOME HUB

Tired of calling management office for repair service? Try with our |

## AutoComplete Selected service:

[Cleaning](#)[Pool Services](#)[Carpenting](#)[Electrical](#)[Windows & Roof Services](#)[Others](#)[Handyman](#)[Interior Design](#)[Trending](#)

[Hello, Screenshot\\_user](#)[Account](#)[Orders](#)[Logout](#)[Cart\(0\)](#)

**Search Service:**

[Cleaning](#)[Home Cleaning](#)[Carpet Cleaning](#)[Pool Services](#)[Pool Cleaners](#)[Swimming Pools](#)[Carpenting](#)[Cabinetry](#)[Flooring](#)[Electrical](#)[Insulation Installation](#)[Security Systems](#)[Windows & Roof Services](#)[Home Window Tinting](#)

### Trustedworthy Cleaning Services

\$210.0

Before

After

Book Now

Watch Video

View Reviews

Account Before update:

Account

Username

screenshot\_user

UserType

Customer

Name

Manish

Password

a

Age

20

Balance

0.0

Home Address

Apartment No

Street Number

Street Name

City

State

Zip

Credit Card Number

Update

Search Service:

search here.

Account after update:

Account

Username

screenshot\_user

UserType

Customer

Name

Manish

Password

a

Age

20.0

Balance

0.0

Home Address

Apartment No

1917

Street Number

2951

Street Name

South King Drive

City

Chicago

State

IL

Zip

60616

Credit Card Number

231233112

Update

Search Service:

search here

Cart New user:

Cart(1)

Number_of_items	Product_Name	Quantity	price_per_unit	Remove
1	Trustworthy Cleaning Services	1.0	210.0	Remove
Total			210.0	
CheckOut				

search here..

Place order tab:

Order

Customer Name:	screenshot_user		
Product added for Purchase:	Trustworthy Cleaning Services		
Product Price:	210.0		
Total Order Cost	210.0		
Credit/AccountNo	231233112		
Customer Name	Manish		
Customer Age	20.0		
Customer Occupation			
Street	2951, South King Drive, apt		
City	Chicago		
State	IL		
Zipcode	60616		
<div>Submit</div>			

Order Confirmation:

Order

Your Order is stored.  
Thank you for picking Home Hub.

Order Summary:

Order Number :38.  
Customer Name :Manish.  
Total Price :210.0.  
The Estimated Arrival date is 20/12/2020.


Customer Orders Tab:

Orders

SERVICE ORDERS

order id	Service_Name	Price	Cancel
12	Woods Wizards	211	<div>Cancel</div>
13	Triple B Garage Doors And Gates	294	<div>Cancel</div>
14	Verizon	212	<div>Cancel</div>
15	Sunshine Communications	202	<div>Cancel</div>
16	The Tech Guyz	232	<div>Cancel</div>
17	Sunny HVAC & Appliance Repair	238	<div>Cancel</div>
18	Premium Plumbing	296	<div>Cancel</div>
19	Paint Studio SF	262	<div>Cancel</div>
20	Sound of Home	204	<div>Cancel</div>
21	Dyno Moving	211	<div>Cancel</div>
22	Holiday Lights	212	<div>Cancel</div>

## Products:













- Cleaning
- Pool Services
- Carpenting
- Electrical
- Windows & Roof Services
- Others
- Handyman
- Interior Design
- Trending

[Hello, Screenshot\\_user](#)
[Account](#)
[Orders](#)
[Logout](#)
[Cart\(1\)](#)

- Cleaning
  - Home Cleaning
  - Carpet Cleaning
- Pool Services
  - Pool Cleaners
  - Swimming Pools
- Carpenting
  - Cabinetry
  - Flooring
- Electrical
  - Insulation Installation
  - Security Systems
- Windows & Roof Services

### Home Cleaning

[Click here to sort](#)

<b>Trustworthy Cleaning Services</b> 254.0\$  <a href="#">Book Now</a> <a href="#">WriteReview</a> <a href="#">ViewReview</a>	<b>Rose Cleaning Service</b> 276.0\$  <a href="#">Book Now</a> <a href="#">WriteReview</a> <a href="#">ViewReview</a>	<b>Clearspace Cleaning Services</b> 278.0\$  <a href="#">Book Now</a> <a href="#">WriteReview</a> <a href="#">ViewReview</a>	<b>Moggy Maid</b> 235.0\$  <a href="#">Book Now</a> <a href="#">WriteReview</a> <a href="#">ViewReview</a>	<b>Maid Brigade of Tampa</b> 225.0\$  <a href="#">Book Now</a> <a href="#">WriteReview</a> <a href="#">ViewReview</a>
<b>Bright House Cleaning Services</b> 258.0\$ 	<b>MaidPro</b> 213.0\$ 	<b>MagiCleanMaid</b> 244.0\$ 	<b>Brauns Top Cleaning</b> 218.0\$ 	<b>Sportlesstaff</b> 254.0\$ 

## Detail View (with location pin):

### Trustworthy Cleaning Services

Address : 8011 Cameron Rd Austin TX 78754

Call us at : +15123509727

Price : 210.0\$



[Book Now](#)  
[WriteReview](#)  
[ViewReview](#)



### Trending Tab:

### Top 5 most liked products

Professional Tech Gurus	5
610 Handyman	5
Carrie Livingston Design	5
Popeyes Handyman Service	5
Optimal Biofuels	5

### Top 5 zip-codes where maximum number of products sold

### Top 5 most sold products regardless of the rating

Trustworthy Cleaning Services	5
Verizon	3
Aqua Blue Pool Service	2
Sunshine Communications	2
Maggie Maid	2

**Recommended Products (5 Products will be displaced):**



Cleaning   Pool Services   Carpentry   Electrical   Windows & Roof Services   Others   Handyman   Interior Design   Trending

[Hello, Manish](#)   [Account](#)   [Orders](#)   [Logout](#)   [Cart\(1\)](#)

Search  
search

Cart(1)

Number_of_items	Product_Name	Quantity	price_per_unit	Remove
1	Verizon	1.0	276.0	<button>Remove</button>
	Total		276.0	
		<button>CheckOut</button>		

## Recommended Products

Store Manager Home:

DataVisualization

DataAnalytics

Inventory

SalesReport

EditService

Hello, Storem

Logout

Cart(0)

Search Ser

search hei

AddService

UpdateService

DeleteService

Add Service:

Add Product

Service Type

Solar Panel Cleaning

Service Id

122ed

Service Name

Test

Service Price

3000

Service Image

cleaning.jpg

Service Discount

20

Service address

3001 South King Drive

Service city

Chicago

Service state

IL

Service zipcode

60616

Service phone

77728628

add

Added Service (Auto complete Search):

DataVisualization

DataAnalytics

Inventory

SalesReport

EditService

Hello, Storem

Logout

Cart(0)

Search Service:

test

Test

**Update Service:**

search here...

Update Service

Service Type	<div>Home Cleaning</div>
Service Id	<div></div>
Service Name	<div></div>
Service Price	<div></div>
Service Image	<div></div>
Service Discount	<div></div>
Service address	<div></div>
Service city	<div></div>
Service state	<div></div>
Service zipcode	<div></div>
Service phone	<div></div>
<div>update</div>	

**Delete Service:**

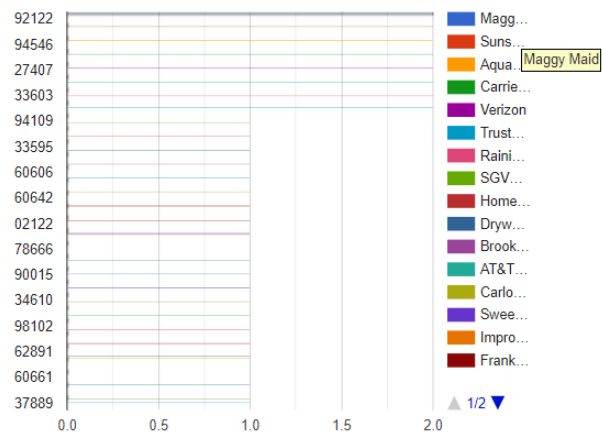
search here...

Delete Service

Service Id	<div></div>
<div>delete</div>	

**Data Visualization:**  
**Reviews of product per zipcode will be shown here.**

Data Visualization



**Data analysis on review:**

Data Analytics on Review

<input checked="" type="checkbox"/> Select	Service Name:	<input type="text" value="Maggy Maid"/>	
<input type="checkbox"/> Select	Service Price:	<input type="text" value="0"/>	<input checked="" type="radio"/> Equals <input type="radio"/> Greater Than <input type="radio"/> Less Than
<input type="checkbox"/> Select	Review Rating:	<input type="text" value="1"/>	<input checked="" type="radio"/> Equals <input type="radio"/> Greater Than
<input type="checkbox"/> Select	Retailer City:	<input type="text"/>	
<input type="checkbox"/> Select	Retailer Zip code:	<input type="text"/>	
<input type="checkbox"/> Group By	<input type="text" value="City"/>		<input checked="" type="radio"/> Count <input type="radio"/> Detail
<input type="button" value="Find Data"/>			

After Find data:

Data Analytics on Review

Review	
Name:	Maggy Maid
Rating:	2
Price:	258
Retailer City:	San Diego
Date:	2020-12-06
Review Text:	Not that good with their service.
RetailerZipCode:	92122
Review	
Name:	Maggy Maid
Rating:	2
Price:	258
Retailer City:	San Diego
Date:	2020-12-06
Review Text:	Not good service.
RetailerZipCode:	92122

Analysis Group By:

☒ Group By

Service Name

☒ Count  
☐ Detail

Find Data

After Find data:

Data Analytics on Review

Name	Count
Sal	1
Frank's Floors and refinishing	1
SDV Group Construction	1
AT&T Internet	1
Optimal Biofuels	1
Ron Don	1
Carlos Wood Floors	1
Drywall: Carpet Cleaning	1
Sweep Home Chicago	1
Home Pros	1
Improovy Painters Chicago	1
Mass Floor Care	1
Verizon	3
Xfinity - Orland Park	1
Popeyes Handyman Service	1
Carrie Livingston Design	2
Maggy Maid	2
Dynamic Surveillance & Communications	1
Sunshine Communications	2
Heaven	1
Aqua Blue Pool Service	2
610 Handyman	1
Fine Waterproofing	1
_abPwUHDgIp35Z6R5Kag160	1
XFINITY	1
Brooklyn Landscape Design	2
Rainier Roofing	2
Professional Tech Gurus	1
Trustworthy Cleaning Services	9

Store manager (View services):Based on city

Select Service City

Service City:

Brooklyn

See inventory

Services list City:Brooklyn

Service Name	Service Id	Price	Service City
Brooklyn Landscape Design	38Vtanvjq7QjTMhJnKecQ9Q	231.0	Brooklyn
Parthenon Glass	ZCMc3hOovTtCmMYH4B4BhQ	287.0	Brooklyn
The Floating Pool at Brooklyn Bridge Park Beach	Iap3OdfevDrLfAKHQpylovr	246.0	Brooklyn
Megerian Rug Cleaners	hRvABu6v8QKFTFgMUzbRQ	222.0	Brooklyn
Dyno Moving	oLeRkGLaHE4km3c8QfRng7	211.0	Brooklyn
Best Quality Pools	8mgL6y58svHhHmJfa8oOVQ	245.0	Brooklyn
Si Se Puede Women's Cooperative We Can Do It	RIODvA4XN5lcf8cdmQDSXA	205.0	Brooklyn
Premier Roofing Company	FCtazQtpKcIdXllpgjnr	275.0	Brooklyn
Phoenix and Rose Feng Shui	zjFS2QuK8z9aA0iB5dJyA	219.0	Brooklyn
Lock and Tech USA	Ee22ImCnORQtv4KlPdWi6A	229.0	Brooklyn
AC In NYC	Mg5PZTKYUWGS1NqKLo8mv	256.0	Brooklyn
Mr. Green Carpet Care	Ot2Bl-savR1Yt-yOietvvQ	230.0	Brooklyn
Altech Installations	HeHglUH0kpcGJvD3mN08ZQ	263.0	Brooklyn
Bolt Locksmith	v8EaGrzzvXaTFpomGsECqA	220.0	Brooklyn
Prince Cleaning Services	MMRPdHX6R6hlgjeuPTs_2w	258.0	Brooklyn
M & A Design	7HuFuBmO4M-DE-vvYsTsBeA182	216.0	Brooklyn
Hi Tech Contracting & Restoration Corp	6dKrvJUO-tFHyRL_36E2Qpw81	249.0	Brooklyn
Queensboro Flooring Corporation	d2qGS8aqQjlye9eglZy9TFvr	220.0	Brooklyn
K.F. Kitchen Cabinets	YTJ3UdJslgt49S2rIdu4A	244.0	Brooklyn
Heights Woodworking	SGZJtzhT-OuMbcRPdTH49vr	214.0	Brooklyn

Services sold:

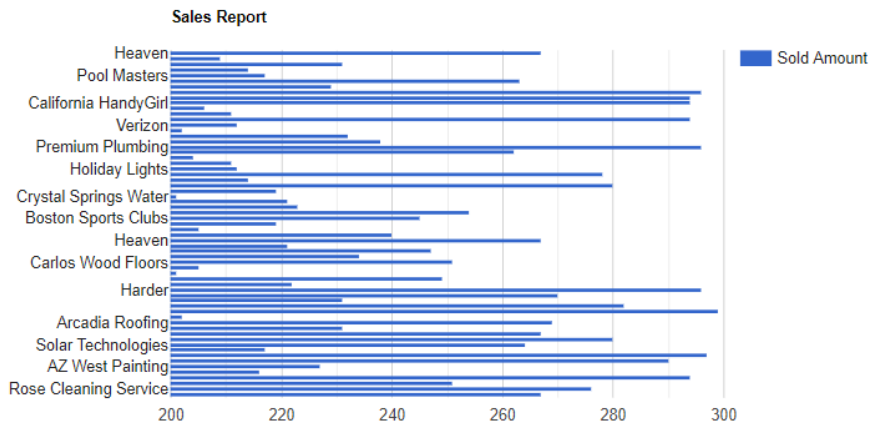
Table of Services Sold

SERVICE ORDERS

Service Name	Sold Price
Heaven	267
Professional Tech Gurus	209
Brooklyn Landscape Design	231
Niche Interiors	214
Pool Masters	217
High Efficiency Heating & Cooling	263
Constructive Services	229
Harder	296
Dynamic Surveillance & Communications	294
California HandyGirl	294
Classic Window Film	206
Woods Wizards	211
Triple B Garage Doors And Gates	294
Verizon	212
Sunshine Communications	202

## Visualization:

Bar Chart of Service Sold




## Per day sales:

Table of Daily Sales Transactions

Date	Sold Amount
2020-12-06	41

## Salesman home:

Can create customer and delete orders.

[Cleaning](#)[Pool Services](#)[Carpenting](#)[Electrical](#)[Windows & Roof Services](#)[Others](#)[Handyman](#)[Interior Design](#)[Trending](#)

[ViewOrder](#)[Hello, Salesman](#)[Logout](#)[Cart\(0\)](#)

[Cleaning](#)

- Home Cleaning
- Carpet Cleaning

[Pool Services](#)

- Pool Cleaners
- Swimming Pools

[Carpenting](#)

- Cabinetry
- Flooring

[Electrical](#)

- Insulation Installation
- Security Systems

[Windows & Roof Services](#)

### Create New Customer

### View Orders

Order ID	Username	Product Name	Price			
23	test	Candle	278	302, 3001, South King Drive, IL, Chicago, 60616	687305471	<input type="button" value="Cancel"/>
24	test	Popovers Handyman Service	214	302, 3001, South King Drive, IL, Chicago, 60616	687305471	<input type="button" value="Cancel"/>
25	test	Pacific Gas & Electricity	280	302, 3001, South King Drive, IL, Chicago, 60616	687305471	<input type="button" value="Cancel"/>
26	test	Empower Electrical Supply	239	302, 3001, South King Drive, IL, Chicago, 60616	687305471	<input type="button" value="Cancel"/>
27	test	2" Insulated Window Window	1616	1611, 16041, South King Drive, IL, Chicago, 60616	687305471	<input type="button" value="Cancel"/>

## Salesmen can cancel orders:

### View Orders

Order Id:	Username:	Product Name:	Price:			
23	hari	Connie	278	302, 3001, South King Drive, IL, Chicago, 60616	987265471	<button>Cancel</button>
24	hari	Popeyes Handyman Service	214	302, 3001, South King Drive, IL, Chicago, 60616	987265471	<button>Cancel</button>
25	hari	Pacific Gas & Electricity	280	302, 3001, South King Drive, IL, Chicago, 60616	987265471	<button>Cancel</button>
26	hari	Emperor Electrical Supply	219	302, 3001, South King Drive, IL, Chicago, 60616	987265471	<button>Cancel</button>
27	hari	Crystal Springs Water	201	302, 3001, South King Drive, IL, Chicago, 60616	987265471	<button>Cancel</button>
28	hari	TL Premier Plumbing	221	302, 3001, South King Drive, IL, Chicago, 60616	987265471	<button>Cancel</button>
29	hari	Awesomer Home Repair	223	302, 3001, South King Drive, IL, Chicago, 60616	987265471	<button>Cancel</button>

## After cancel:

### View Orders

Order Id:	Username:	Product Name:	Price:			
24	hari	Popeyes Handyman Service	214	302, 3001, South King Drive, IL, Chicago, 60616	987265471	<button>Cancel</button>
25	hari	Pacific Gas & Electricity	280	302, 3001, South King Drive, IL, Chicago, 60616	987265471	<button>Cancel</button>
26	hari	Emperor Electrical Supply	219	302, 3001, South King Drive, IL, Chicago, 60616	987265471	<button>Cancel</button>
27	hari	Crystal Springs Water	201	302, 3001, South King Drive, IL, Chicago, 60616	987265471	<button>Cancel</button>
28	hari	TL Premier Plumbing	221	302, 3001, South King Drive, IL, Chicago, 60616	987265471	<button>Cancel</button>
29	hari	Awesomer Home Repair	223	302, 3001, South King Drive, IL, Chicago, 60616	987265471	<button>Cancel</button>

## Database Screenshots:

### Staff:

staff_ID	name	username	password	address_ID	salary	job_title
1	James	storem	a	NULL	8000.00	StoreManager
2	Marie	salesm	a	NULL	6000.00	Salesman
NULL	NULL	NULL	NULL	NULL	NULL	NULL

### Customer:

customer_id	name	username	password	address_id	age	outstanding_balance
0	Vishal	avishal	12345	2	24	251.00
1	Manish	manish	12345	3	25	201.00
2	Hari	hari	12345	4	25	201.00
3	Aravind	aravind	12345	5	24	2521.00
4	Suriya SKT	suriya	12345	6	24	2334.00
5	Leoraj	Suriya SKT	12345	7	25	2583.00
6	Manish	screenshot_user	a	8	20	267.00
NULL	NULL	NULL	NULL	NULL	NULL	NULL



[illegible]

	order_id	customer_id	card_number	issued_date	status	userAddress	deliveryDate	deliveryType	orderreturned	outstanding_balance
▶	0	0	123098	2020-12-06	Approved	123, South King Drive, apt 12 Chicago IL 60616	2020-12-16	Pickup	1	267.00
	1	0	123098	2020-12-06	Approved	123, South King Drive, apt 12 Chicago IL 60616	2020-12-11	Pickup	1	209.00
	10	0	123098	2020-12-06	Approved	4/47, James St New York NY 62738	2020-12-10	Pickup	1	206.00
	11	0	123098	2020-12-06	Disputed	4/47, James St New York NY 62738	2020-12-07	Pickup	0	275.00
	12	1	12367890	2020-12-06	Approved	2900, South King Drive, apt 1900 Chicago IL 60...	2020-12-06	Pickup	0	211.00
	13	1	12367890	2020-12-06	Disputed	2900, South King Drive, apt 1900 Chicago IL 60...	2020-12-13	Pickup	0	294.00
	14	1	12367890	2020-12-06	Disputed	2900, South King Drive, apt 1900 Chicago IL 60...	2020-12-10	Pickup	1	212.00
	15	1	12367890	2020-12-06	Approved	2900, South King Drive, apt 1900 Chicago IL 60...	2020-12-10	Pickup	1	202.00
	16	1	1236789067	2020-12-06	Disputed	21, Tin Cup Dr Austin TX 56010	2020-12-11	Pickup	0	232.00
	17	1	12367890	2020-12-06	Disputed	21, Tin Cup Dr Austin TX 56010	2020-12-11	Pickup	0	238.00
	18	1	12367890	2020-12-06	Approved	2900, South King Drive, apt 1900 Chicago IL 60...	2020-12-16	Pickup	1	296.00
	19	1	12367890	2020-12-06	Approved	2900, South King Drive, apt 1900 Chicago IL 60...	2020-12-08	Pickup	0	262.00
	20	0	123098	2020-12-06	Approved	123, South King Drive, apt 12 Chicago IL 60616	2020-12-11	Pickup	1	231.00

orders 50 x

Result Grid						
			Filter Rows:	Edit:	Export/Import:	Wrap Cell Content: <a href="#">IA</a>
	id	order_id	service_id	review_rating	price	servicename
▶	1	0	J1Pa1E-G9HB7a-FEY0AjjA	5.0	267	Heaven
	2	1	mX1vu86i9eLaZ7RJNUx6lQ	5.0	209	Professional Tech Gurus
	3	2	38Vtawjq7QjTMvJrKecQ9Q	4.5	231	Brooklyn Landscape Design
	4	3	7a5-JFxoAEOZHuvqHMC3qQ	4.5	214	Niche Interiors
	5	4	OL15n8aecwzpHWSBo_-KDA	1.0	217	Pool Masters
	6	5	y9Lu8bWXleHZI_ROnoM8Mw0	5.0	263	High Efficiency Heating & Cooling
	7	6	n1KTx5XY4jX0FNEHE0tyaQ	4.0	229	Constructive Services
	8	7	AkJVp9tEHwmIIB4uE7OndA	5.0	296	Harder
	9	8	r5Db5G35arj7MkoleDyJCQ143	5.0	294	Dynamic Surveillance & Communications
	10	9	G4oU0WNX_Nl-e8LpRlxcEA	5.0	294	California HandyGirl
	11	10	bm1R0aZtW-ePqF9PFozNw	5.0	206	Classic Window Film
	13	12	iGaif0SUKGrwVPrbMkNB-w130	5.0	211	Woods Wizards

## Transactions:

Result Grid														Filter Rows	Export	Wrap Cell Contents	
login_ID	Customer_Name	Customer_Age	Customer_Occupation	Credit_Card_Number	Order_ID	Order_Date	Expected_Delivery_Date	Actual_Delivery_Date	Product_ID	Product_Name	Review_Rating	Delivery_Tracking_ID	Delivery_Type	Delivery_Zc			
avishal	Vishal	24	Student	123098	0	2020-12-06	2020-12-09	2020-12-11	1JPaIE-G94B7a-FEY0A0A	Heaven	5.0	496	Pickup	60616			
avishal	Vishal	24	Student	123098	1	2020-12-06	2020-12-12	2020-12-11	mX1vu8696LazR3JNuxdQ	Professional Tech Gurus	5.0	7744	Pickup	60616			
avishal	Vishal	24	Student	123098	2	2020-12-06	2020-12-10	2020-12-07	38VtavjQ7QTMu3Kxsc9Q	Brooklyn Landscape Design	4.5	7452	Delivery	60616			
avishal	Vishal	24	Student	123098	3	2020-12-06	2020-12-08	2020-12-09	78e-3PaAEQ2HvqPMc3qQ	Niche Interiors	4.5	3185	Pickup	60616			
avishal	Leo	29	Engineer	12309888	4	2020-12-06	2020-12-11	2020-12-10	OL15n8acvgrpV58b_ADA	Pool Masters	1.0	5597	Pickup	56010			
avishal	Leo	29	Engineer	123098878	5	2020-12-06	2020-12-10	2020-12-10	ysu8u8WMeHdZL_BQoN8MwQ	High Efficiency Heating & Cooling	5.0	2423	Pickup	56010			
avishal	Leo	29	Engineer	12309889	6	2020-12-06	2020-12-13	2020-12-08	n3KT5XVt9X0FHEd0tyq	Constructive Services	4.0	9914	Pickup	56010			
avishal	Leo	29	Engineer	12309879	7	2020-12-06	2020-12-15	2020-12-06	Ak3lp98EHumJIB4E7QndA	Harder	5.0	636	Pickup	56010			
avishal	Eddy	21	Engineer	987651	8	2020-12-06	2020-12-07	2020-12-09	r5Db5G5ser7MkoleDyJCQ143	Dynamic Surveillance & Communications	5.0	7471	Pickup	62738			
avishal	Eddy	21	Engineer	123098	9	2020-12-06	2020-12-14	2020-12-06	G4x0U0WNL_N4e8LzR1vxdA	California HandyGirl	5.0	2199	Pickup	62738			
avishal	Eddy	21	Engineer	123098	10	2020-12-06	2020-12-13	2020-12-09	bm3Qd2Wv-ehP8PFCshw	Classic Window Film	5.0	2274	Pickup	62738			
avishal	Eddy	21	Engineer	123098	11	2020-12-06	2020-12-14	2020-12-09	z4u6vins&3rYVH1947_M&6	Online Banquet Services	5.0	8493	Pickup	43798			

Transactions 49 x

Read Only

## Services from api:

Result Grid														Filter Rows	Export/Imports	Wrap Cell Contents	Fetch rows
servicetype	id	servicename	serviceprice	servicemage	url	rating	latitude	longitude	address	city	zipc						
Cabinetry	_38dHTSP3NC8uM41Fw	Evolution Cabinets	279	https://s3-media1-f.yelpcdn.com/bphoto/4VOC...	https://www.yelp.com/biz/evolution-cabinets-b...	5.0	40.64555	40.64555	140 58th St	Brooklyn	11212						
Mobile Home Repair	_m2vZc3ps3U0RPO8u	Ramirez Handyman Services	253	https://s3-media2-f.yelpcdn.com/bphoto/4f8C...	https://www.yelp.com/biz/ramirez-handyman-s...	4.5	32.7138557434082	32.7138557434082	3924 Wiley Davis Rd	San Diego	92124						
Air Duct Cleaning	_y8K7y6W2U7u2Vn7eQ	Clear Air Solutions LLC	280	https://www.yelp.com/biz/clear-air-solutions-llc...	https://www.yelp.com/biz/clear-air-solutions-llc...	2.0	36.0106294397264	36.0106294397264	1011N 159th Ave	Greensboro	27404						
Fences & Gates	_w8cQ3QACzmHYMR3m7Cw38	Flores Fence	254	https://s3-media2-f.yelpcdn.com/bphoto/8HWH...	https://www.yelp.com/biz/flores-fence-melrose...	4.5	41.8964725	41.8964725	1011N 159th Ave	Phoenix	85005						
Solar Panel Cleaning	_w5Q3QACzmHYMR3m7Cw38	Innovative Cleaning Services	279	https://s3-media1-f.yelpcdn.com/bphoto/8066...	https://www.yelp.com/biz/innovative-cleaning...	5.0	33.4510508	33.4510508	3905 W Van Buren St	Phoenix	85005						
Solar Panel Cleaning	_w5Q3QACzmHYMR3m7Cw38	Innovative Cleaning Services	294	https://s3-media1-f.yelpcdn.com/bphoto/8066...	https://www.yelp.com/biz/innovative-cleaning...	5.0	33.4510508	33.4510508	3905 W Van Buren St	Phoenix	85005						
Pressure Washers	_w5Q3QACzmHYMR3m7Cw38	Innovative Cleaning Services	255	https://s3-media1-f.yelpcdn.com/bphoto/8066...	https://www.yelp.com/biz/innovative-cleaning...	5.0	33.4510508	33.4510508	3905 W Van Buren St	Phoenix	85005						
Pressure Washers	_w5Q3QACzmHYMR3m7Cw38	Innovative Cleaning Services	221	https://s3-media1-f.yelpcdn.com/bphoto/8066...	https://www.yelp.com/biz/innovative-cleaning...	5.0	33.4510508	33.4510508	3905 W Van Buren St	Phoenix	85005						
Security Systems	_08u3y8d8p3m7UW3u	Comprehensive Electrical Services	298	https://s3-media1-f.yelpcdn.com/bphoto/8066...	https://www.yelp.com/biz/comprehensive-elect...	4.5	47.28295	47.28295	346 Congress St	Auburn	9800						
Interior Design	_0mE-CUJrE90uQJYHQ	Stanton Schwartz Design Group	273	https://s3-media2-f.yelpcdn.com/bphoto/8066...	https://www.yelp.com/biz/stanton-schwartz-de...	5.0	42.3506949	42.3506949	346 Congress St	Boston	02022						
Fences & Gates	_0p4C7arvEZVVB1y5FEG	Smith-Bopp Fence Installation	258	https://s3-media2-f.yelpcdn.com/bphoto/K-IBY...	https://www.yelp.com/biz/smith-bopp-fence-in...	5.0	42.0699544195527	42.0699544195527	00 Gratian Cr	Undridge	01515						
Darkening Curtains	_3u84R6Wd4e_Cb3u3M3	Smooth (no Mouse Yet)	216	https://s3-media1-f.yelpcdn.com/bphoto/8066...	https://www.yelp.com/biz/smooth-no-mouse-ye...	5.0	40.7063388516023	40.7063388516023	00 Gratian Cr	Undridge	01515						

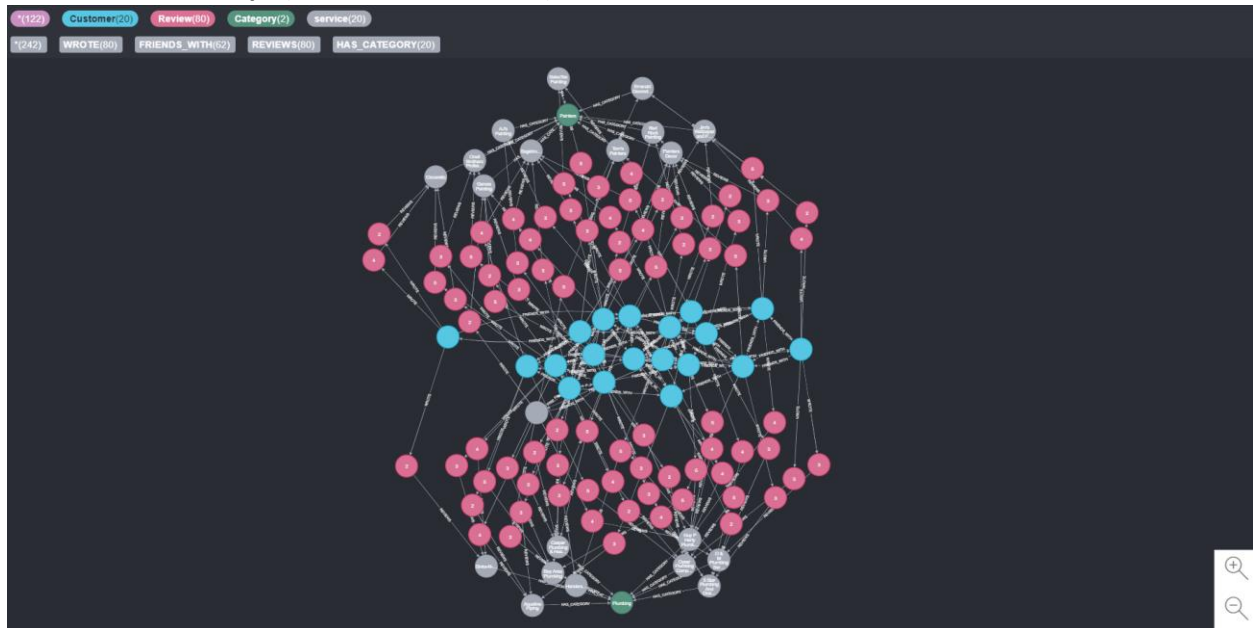
services 51 x

Apply

## Mongodb:

```
db.myReviews.find(
  { '_id': ObjectId('5fcd8b36095f76608573a28f8f6b7'), 'title': 'myReview', 'userName': 'avishal', 'productName': 'Trustworthy Cleaning Services', 'productType': 'services', 'reviewRating': 4, 'reviewDate': '2020-12-06', 'reviewText': 'The service is good.', 'retailerpin': '60517', 'retailerCity': 'Chicago', 'userAge': '24', 'userGender': 'male', 'userOccupation': 'Student', 'userStreet': '21, Tin Cup Dr', 'userCity': 'Austin', 'userState': 'TX', 'userZipcode': '78701', 'productrate': 'Yes', 'price': 254 }
  { '_id': ObjectId('5fcd8b36095f76608573a28f8f6b7'), 'title': 'myReview', 'userName': 'avishal', 'productName': 'Trustworthy Cleaning Services', 'productType': 'services', 'reviewRating': 4, 'reviewDate': '2020-12-06', 'reviewText': 'The service was awesome!', 'retailerpin': '60517', 'retailerCity': 'New York', 'userAge': '24', 'userGender': 'male', 'userOccupation': 'Student', 'userStreet': '21, Tin Cup Dr', 'userCity': 'Austin', 'userState': 'TX', 'userZipcode': '78701', 'productrate': 'Yes', 'price': 254 }
  { '_id': ObjectId('5fcd8b36095f76608573a28f8f6b7'), 'title': 'myReview', 'userName': 'avishal', 'productName': 'Professional Tech Gurus', 'productType': 'services', 'reviewRating': 5, 'reviewDate': '2020-12-06', 'reviewText': 'Great service!', 'retailerpin': '60661', 'retailerCity': 'Chicago', 'userAge': '24', 'userGender': 'male', 'userOccupation': 'Student', 'userStreet': '21, Tin Cup Dr', 'userCity': 'Austin', 'userState': 'TX', 'userZipcode': '56010', 'productrate': 'Yes', 'price': 209 }
  { '_id': ObjectId('5fcd8b36095f76608573a28f8f6b7'), 'title': 'myReview', 'userName': 'avishal', 'productName': 'Brooklyn Landscape Design', 'productType': 'services', 'reviewRating': 3, 'reviewDate': '2020-12-06', 'reviewText': 'Service was satisfactory.', 'retailerpin': '60291', 'retailerCity': 'Austin', 'userAge': '24', 'userGender': 'male', 'userOccupation': 'Student', 'userStreet': '21, Tin Cup Dr', 'userCity': 'Austin', 'userState': 'TX', 'userZipcode': '56010', 'productrate': 'Yes', 'price': 231 }
  { '_id': ObjectId('5fcd8b36095f76608573a28f8f6b7'), 'title': 'myReview', 'userName': 'manish', 'productName': 'Trustworthy Cleaning Services', 'productType': 'services', 'reviewRating': 3, 'reviewDate': '2020-12-06', 'reviewText': 'Good service!', 'retailerpin': '60517', 'retailerCity': 'Chicago', 'userAge': '24', 'userGender': 'male', 'userOccupation': 'Student', 'userStreet': '32, Michigan Ave', 'userCity': 'New York', 'userState': 'NY', 'userZipcode': '13780', 'productrate': 'Yes', 'price': 254 }
  { '_id': ObjectId('5fcd8b36095f76608573a28f8f6b7'), 'title': 'myReview', 'userName': 'avishal', 'productName': 'abPvEUNdGp135Z6R5Xag168', 'productType': 'services', 'reviewRating': 4, 'reviewDate': '2020-12-06', 'reviewText': 'This is good.', 'retailerpin': '60102', 'retailerCity': 'Seattle', 'userAge': '24.0', 'userGender': 'male', 'userOccupation': 'Student', 'userStreet': '12 123 South King Drive', 'userCity': 'Chicago', 'userState': 'IL', 'userZipcode': '60610', 'productrate': 'Yes', 'price': 263 }
  { '_id': ObjectId('5fcd8b36095f76608573a28f8f6b7'), 'title': 'myReview', 'userName': 'avishal', 'productName': 'Aqua Blue Pool Service', 'productType': 'services', 'reviewRating': 3, 'reviewDate': '2020-12-06', 'reviewText': 'Satisfactory service.', 'retailerpin': '94540', 'retailerCity': 'Castro Valley', 'userAge': '24.0', 'userGender': 'male', 'userOccupation': 'Student', 'userStreet': '12 123 South King Drive', 'userCity': 'Chicago', 'userState': 'IL', 'userZipcode': '60610', 'productrate': 'Yes', 'price': 244 }
  { '_id': ObjectId('5fcd8b36095f76608573a28f8f6b7'), 'title': 'myReview', 'userName': 'avishal', 'productName': 'Sunshine Communications', 'productType': 'services', 'reviewRating': 2, 'reviewDate': '2020-12-06', 'reviewText': 'Not happy with the service.', 'retailerpin': '92020', 'retailerCity': 'El Cajon', 'userAge': '24.0', 'userGender': 'male', 'userOccupation': 'Student', 'userStreet': '12 123 South King Drive', 'userCity': 'Chicago', 'userState': 'IL', 'userZipcode': '60610', 'productrate': 'Yes', 'price': 202 }
  { '_id': ObjectId('5fcd8b36095f76608573a28f8f6b7'), 'title': 'myReview', 'userName': 'avishal', 'productName': 'Dynamic Surveillance & Communications', 'productType': 'services', 'reviewRating': 2, 'reviewDate': '2020-12-06', 'reviewText': 'Not happy with the service.', 'retailerpin': '34610', 'retailerCity': 'Spring Hill', 'userAge': '24.0', 'userGender': 'male', 'userOccupation': 'Student', 'userStreet': '12 123 South King Drive', 'userCity': 'Chicago', 'userState': 'IL', 'userZipcode': '60610', 'productrate': 'Yes', 'price': 204 }
  { '_id': ObjectId('5fcd8b36095f76608573a28f8f6b7'), 'title': 'myReview', 'userName': 'avishal', 'productName': 'Rainier Roofing', 'productType': 'services', 'reviewRating': 1, 'reviewDate': '2020-12-06', 'reviewText': 'Most service ever.', 'retailerpin': '31601', 'retailerCity': 'Tampa', 'userAge': '24.0', 'userGender': 'male', 'userOccupation': 'Student', 'userStreet': '12 123 South King Drive', 'userCity': 'Chicago', 'userState': 'IL', 'userZipcode': '60610', 'productrate': 'Yes', 'price': 240 }
  { '_id': ObjectId('5fcd8b36095f76608573a28f8f6b7'), 'title': 'myReview', 'userName': 'avishal', 'productName': '618 Handyman', 'productType': 'services', 'reviewRating': 5, 'reviewDate': '2020-12-06', 'reviewText': 'Excellent service!', 'retailerpin': '60601', 'retailerCity': 'Chicago', 'userAge': '24.0', 'userGender': 'male', 'userOccupation': 'Student', 'userStreet': '12 123 South King Drive', 'userCity': 'Chicago', 'userState': 'IL', 'userZipcode': '60610', 'productrate': 'Yes', 'price': 209 }
  { '_id': ObjectId('5fcd8b36095f76608573a28f8f6b7'), 'title': 'myReview', 'userName': 'manish', 'productName': 'Carrie Livingston Design', 'productType': 'services', 'reviewRating': 3, 'reviewDate': '2020-12-06', 'reviewText': 'Excel lent service.', 'retailerpin': '60024', 'retailerCity': 'Los Angeles', 'userAge': '25.0', 'userGender': 'male', 'userOccupation': 'Student', 'userStreet': '1900 2900 South King Drive', 'userCity': 'Chicago', 'userState': 'IL', 'userZipcode': '60610', 'productrate': 'Yes', 'price': 257 }
  { '_id': ObjectId('5fcd8b36095f76608573a28f8f6b7'), 'title': 'myReview', 'userName': 'manish', 'productName': 'Popeyes Handyman Service', 'productType': 'services', 'reviewRating': 5, 'reviewDate': '2020-12-06', 'reviewText': 'Excel lent service.', 'retailerpin': '64572', 'retailerCity': 'Oakland', 'userAge': '25.0', 'userGender': 'male', 'userOccupation': 'Student', 'userStreet': '1900 2900 South King Drive', 'userCity': 'Chicago', 'userState': 'IL', 'userZipcode': '60610', 'productrate': 'Yes', 'price': 214 }
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  { '_id': ObjectId('5fcd8b36095f76608573a28f8f6b7'), 'title': 'myReview', 'userName': 'manish', 'productName': 'Improvoy Painters Chicago', 'productType': 'services', 'reviewRating': 4, 'reviewDate': '2020-12-06', 'reviewText': 'The service was good.', 'retailerpin': '33504', 'retailerCity': 'Chicago', 'userAge': '25.0', 'userGender': 'male', 'userOccupation': 'Student', 'userStreet': '1900 2900 South King Drive', 'userCity': 'Chicago', 'userState': 'IL', 'userZipcode': '60610', 'productrate': 'Yes', 'price': 249 }
```

## Nodes & relationships (Customer & Reviews):



## PageRank Implementation:

```
neo4j$ CALL gds.pageRank.write({ nodeQuery: 'MATCH (u:Customer)-[:WROTE]->()-[:REVIEWS]->()' })
```

	nodePropertiesWritten	createMillis	computeMillis	writeMillis	ranIterations
1	16	8095	209	24	20

```
neo4j$ MATCH (u:Customer) WHERE exists(u.HomePagerank) RETURN avg(u.HomePagerank) as ave, ...
```

	ave	50%	75%	90%	95%	99%	100%
1	0.536318625668953	0.44	0.59	1.08	1.28	1.28	1.28

```
neo4j$ MATCH (u:Customer) WHERE u.HomePagerank > 0.44 WITH u ORDER BY u.HomePagerank DESC LIMIT 10 RETURN u.name AS name, u.HomePage...
```

	name	pageRank	homeReviews	totalReviews	friends
1	"Marsh GSD"	1.278224836334958	1	3	10
2	"Sam Bill"	1.0796121621155181	1	2	8
3	"David Warner"	1.0124458294012586	3	4	8
4	"Samuel Curran"	0.7137306637800068	2	5	5
5	"Darrel Waller"	0.5886471314763186	3	5	3
6	"Suriya SKT"	0.5880035071891965	2	3	6
7	"Edward K"	0.5872731555835344	3	5	9
8	"Denedict Vimal"	0.5198749944145676	5	6	7

## Nodes & relationship (Transactions & Ratings):

