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CptS451

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Milestone 2 paper

In this project, we use data collected by Yelp to analyze the popular or successful businesses in each area of different cities. To define how a business is popular or successful there are a few metrics that need to be taken into consideration. In the data provided by Yelp, data in the Reviews table would be the most important data to analyze, also the number of check-ins of different businesses would also be important. The stars/ratings that each user gives to the business would be combined with the number of reviews to get the average review rating of the business. The number of population in the zipcode combined with the number of check-ins would also be useful to determine if a business is popular.

In my opinion, the definition for a business to be popular would be having the most number of check-ins compared to other businesses in the zip code. The query that I use to get the information would be “Select name, address, city, state, zipcode, num_checkins, reviewrating from Business WHERE zipcode = '85206' ORDER BY num_checkins desc” Using this query, the table would be populated with business in the zip area of ‘85206’ order by the highest amount of check-ins to the lowest amount.

Data Output Messages Notifications								
	name character varying (100)	address character varying (100)	city character	state character	zipcode integer	num_checkins integer	reviewrating double precision	
1	Fuddruckers	6455 East Southern Ave	Mesa	AZ	85206	558	3.912280701754386	
2	Red Robin Gourmet Burgers	1636 South Stapley	Mesa	AZ	85206	531	2.683333333333333	
3	Red Robin Gourmet Burgers	6632 E Superstition Springs Blvd	Mesa	AZ	85206	499	3.621212121212121	
4	Dos Gringos	1958 S Greenfield Rd	Mesa	AZ	85206	410	2.768292682926829	
5	Tosinos Mexican Grill	2235 S Power Rd, Ste 120	Mesa	AZ	85206	286	3.933333333333333	
6	Winco Foods	6904 E Hampton Ave	Mesa	AZ	85206	280	3.833333333333335	
7	Serrano's	1021 S Power Rd	Mesa	AZ	85206	211	3.095890410958904	
8	Filiberto's Mexican Food	3636 E Baseline Rd	Mesa	AZ	85206	175	2.7857142857142856	
9	Xaviers Casa Reynoso	3701 E Southern Ave	Mesa	AZ	85206	159		4
10	Fry's Food Stores of Arizona	1915 S Power Rd	Mesa	AZ	85206	115	3.6666666666666665	

As for successful businesses, it would be harder to define whether a business is successful or not.. The query that I use is “Select name, address, city, state, zipcode, num_checkins, reviewrating from Business NATURAL JOIN (SELECT AVG(num_checkins) as avgzipcheckins from Business WHERE zipcode = '85206') WHERE zipcode = '85206' AND num_checkins > avgzipcheckins ORDER BY reviewrating desc”.

First this query get the avg check-ins in the zip area “SELECT AVG(num_checkins) as avgzipcheckins from Business WHERE zipcode = '85206'”. Then the query the all the businesses that got a check-in number larger then the average. Lastly order it by the review rating of the business. This would be the query for me to find the most successful business in the specific area.

Data Output		Messages	Notifications
<div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>			
	avgzipcheckins numeric		
1	98.2826086956521739		

Data Output								Messages	Notifications
<div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>									
	name character varying (100)	address character varying (100)	city character	state character	zipcode integer	num_checkins integer	reviewrating double precision		
1	Xaviers Casa Reynoso	3701 E Southern Ave	Mesa	AZ	85206	159	4		
2	Tosinos Mexican Grill	2235 S Power Rd, Ste 120	Mesa	AZ	85206	286	3.933333333333333		
3	Fuddruckers	6455 East Southern Ave	Mesa	AZ	85206	558	3.912280701754386		
4	Winco Foods	6904 E Hampton Ave	Mesa	AZ	85206	280	3.833333333333333		
5	Fry's Food Stores of Arizona	1915 S Power Rd	Mesa	AZ	85206	115	3.666666666666666		
6	Red Robin Gourmet Burgers	6632 E Superstition Springs Blvd	Mesa	AZ	85206	499	3.621212121212121		
7	Earnhardt Nissan	6354 E Test Drive	Mesa	AZ	85206	102	3.3157894736842106		
8	Serrano's	1021 S Power Rd	Mesa	AZ	85206	211	3.095890410958904		
9	Filiberto's Mexican Food	3636 E Baseline Rd	Mesa	AZ	85206	175	2.7857142857142856		
10	Dos Gringos	1958 S Greenfield Rd	Mesa	AZ	85206	410	2.768292682926829		
11	Mi Amigo's Mexican Grill	6465 E Southern Ave	Mesa	AZ	85206	99	2.761904761904762		