



# Yelp Reviews Database System

BUDT 703 0502

Team 7

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# BACKGROUND

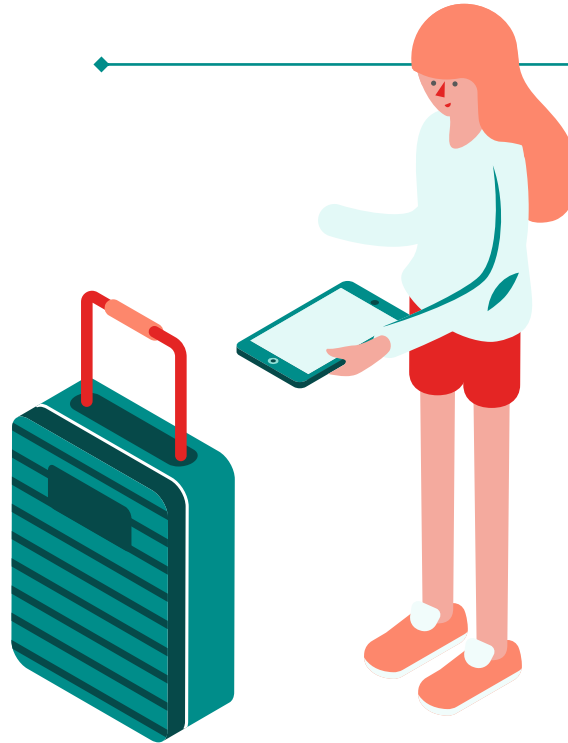
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## *Who are our Users?*

Our users are Prospective UMD students and new residents to the College Park area.

## *What data did we use?*

For our proof of concept, we used data provided by Yelp that includes different cities to supplement College Park Data



# INTRODUCTION



## Mission Statement

Our mission is to increase the accessibility to the amenities that College Park has to offer, whether they are prospective students or businesses. We intend on connecting these stakeholders by using a one-stop shop directory that is convenient and informative.

# MISSION OBJECTIVES

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**Increase number of  
student applicants  
that are informed**

**UMD**



**Increase client base by  
providing transparent  
and real information**

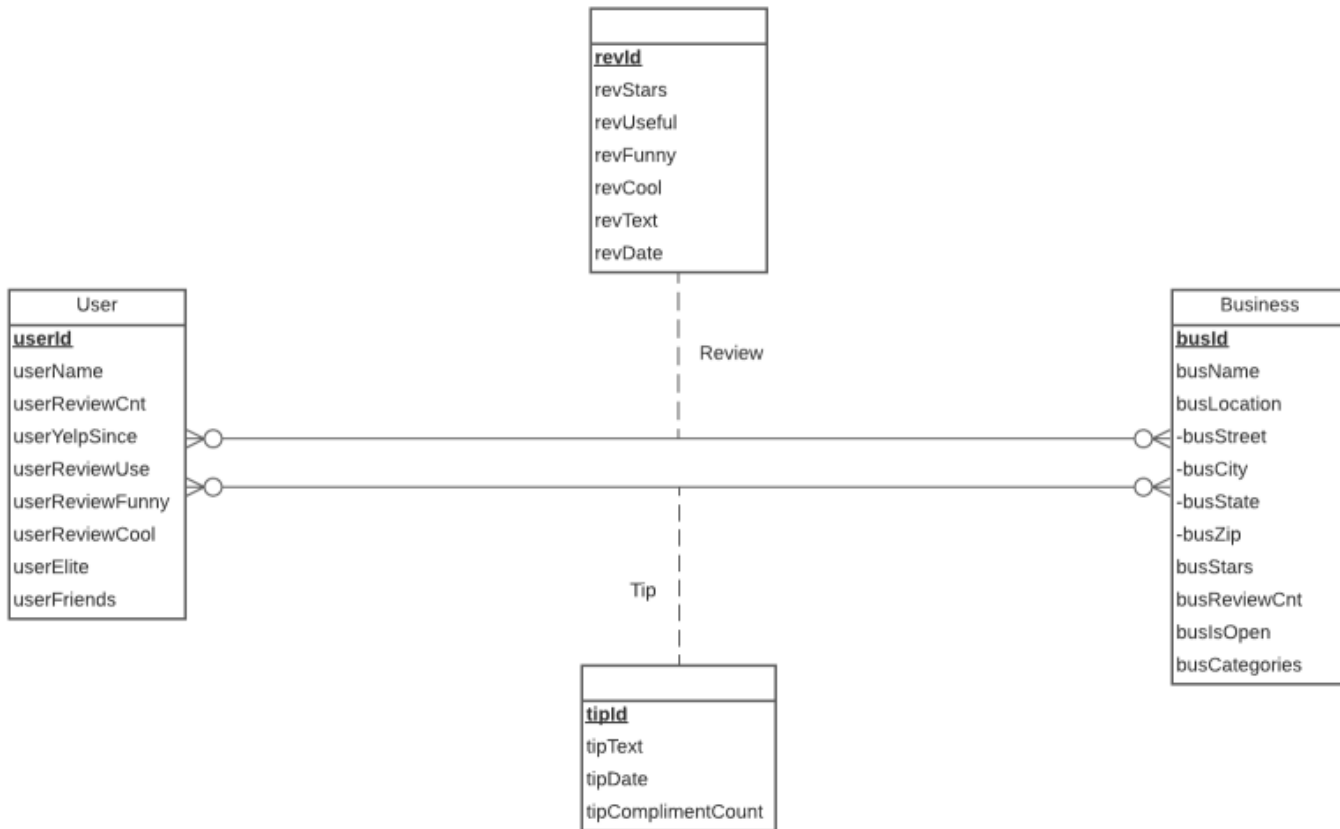
**CP Businesses**



**Make transition and  
settling in period  
smoother**

**New Residents**

# CONCEPTUAL DATABASE DESIGN



# LOGICAL DATABASE DESIGN

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User (userId, userName, userReviewCnt, userYelpSince, userReviewUse, userReviewFunny, userReviewCool, userElite, userFriends)

Business (busId, busName, busStreet, busCity, busState, busZip, busStars, busReviewCnt, busIsOpen, busCategories)

Review (revId, *userId*, *busId*, revStars, revUseful, revFunny, revCool, revText, revDate)

Tip (tipId, *userId*, *busId*, tipText, tipDate, tipComplimentCount)

```
CREATE TABLE REVIEW_T
    (revId          VARCHAR(255) NOT NULL,
     userId         VARCHAR(255),
     busId          VARCHAR(255),
     revStars       FLOAT,
     revDate        CHAR(100),
     revText        VARCHAR(3000),
     revUseful      INTEGER,
     revFunny       INTEGER,
     revCool        INTEGER,
     CONSTRAINT pk_REVIEW_revId PRIMARY KEY (revId),
     CONSTRAINT fk_REVIEW_busId FOREIGN KEY (busId)
         REFERENCES [BUSINESS_T] (busId)
         ON DELETE CASCADE ON UPDATE CASCADE,
     CONSTRAINT fk_REVIEW_userId FOREIGN KEY (userId)
         REFERENCES [USER_T] (userId)
         ON DELETE CASCADE ON UPDATE CASCADE
    );
```

# PHYSICAL DATABASE DESIGN

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# USE CASES

Q

What are the Top 5 businesses with the highest average star ratings?

```
CREATE VIEW avg_review_ratings AS
SELECT TOP 5 b.busName AS 'Business Name', b.busCategories AS 'Category', AVG(r.revStars) AS
'Average Star Ratings'
FROM BUSINESS_T b INNER JOIN REVIEW_T r ON b.busId = r.busId
GROUP BY b.busCategories, b.busName
ORDER BY 'Average Star Ratings' DESC;
```

A

Brookland Press	Apartment	4.5
Hibachi-San	Restaurant	4
Brooklyn Housing	Apartment	4
The Hall CP	Restaurant	3
Blaze Pizza	Restaurant	2.875



# USE CASES

Q

What are the top 10 businesses with the most reviews?

```
CREATE VIEW top_10_business_with_most_reviews AS
SELECT TOP 10 b.busName AS 'Business Name', b.busCategories AS 'Category', b.busReviewCnt AS
'Review Count'
FROM BUSINESS_T b
GROUP BY b.busCategories, b.busName, b.busReviewCnt
ORDER BY b.busReviewCnt DESC;
```

A

Busboys and Poets	Restaurant	1401
"Duck Donuts"	Breakfast & Brunch;F	373
Taqueria Habanero	Restaurant	209
The Hall CP	Restaurant	131
Blaze Pizza	Restaurant	109
Camden NoMa Apar	Apartment	96
London Chop House	Restaurant	90
"China Buffet"	Buffets;Restaurants;S	76
Five Guys	Restaurant	72
The Bartlett	Apartment	71

# USE CASES

Q

What are the top 10 businesses with the most business stars?

```
CREATE VIEW top_10_bus_with_most_stars AS
SELECT TOP 20 b.busName AS 'Business Name', b.busCategories AS 'Business Category', b.busStars AS
'Stars'
FROM BUSINESS_T b
GROUP BY b.busStars, b.busCategories, b.busName
ORDER BY b.busStars DESC;
```

A

"My Fitness World"	Active Life;Fitness &	5
"KS Audio Video"	Home Services;Tele	5
"Septic Pumping Se	Septic Services;Hom	5
"Duck Donuts"	Breakfast & Brunch;F	4.5
Five Guys	Restaurant	4.5
London Chop House	Restaurant	4.5
Ottava via	Restaurant	4.5
Seoul Spice	Restaurant	4.5
Taqueria Habanero	Restaurant	4.5
The Hall CP	Restaurant	4.5
"Dockside Seafood M	Seafood Markets;Foc	4.5
Camden NoMa Apar	Apartment	4.3
The Bennington	Apartment	4
"Zenith Gymnastics"	Gymnastics;Active L	4
"Fairfield Inn & Suite	Hotels;Event Plannir	4
"Tijuana Flats"	Mexican;Food;Resta	4
"Bubbly Nails"	Nail Salons;Beauty &	4
Blaze Pizza	Restaurant	4
Busboys and Poets	Restaurant	4
Republic	Restaurant	4

# USE CASES

Q

What businesses are closed and their location?

```
CREATE VIEW closed_bus AS
SELECT b.busName AS 'Business Name', b.busCategories AS 'Business Category', b.busStreet AS
'Address', b.busCity AS 'City', b.busState AS 'State'
FROM BUSINESS_T b
WHERE b.busIsOpen = 0;
```

A

"Cosmos Cafe"	Sushi Bars;Restauran	"300 N College St"	Charlotte	NC	28202
"Toast Cafe"	Food;American (Trac	"2429 Hwy 160 W"	Fort Mill	SC	29708
"Tijuana Flats"	Mexican;Food;Resta	"1608 E Blvd"	Charlotte	NC	28203
"Felicitea"	Food;Coffee & Tea;M	"516 E 15th St, Ste 1	Charlotte	NC	28206
"Real Food Charlotte	Restaurants;Vegetari	"2102 South Blvd, #	Charlotte	NC	28203
"By Design"	Home & Garden;Furr	"11812 Carolina Pla	Pineville	NC	28134