

SI 507 Project Proposal

**Data Collection:**

**1. Create database for US household income stats**

a. Income.db

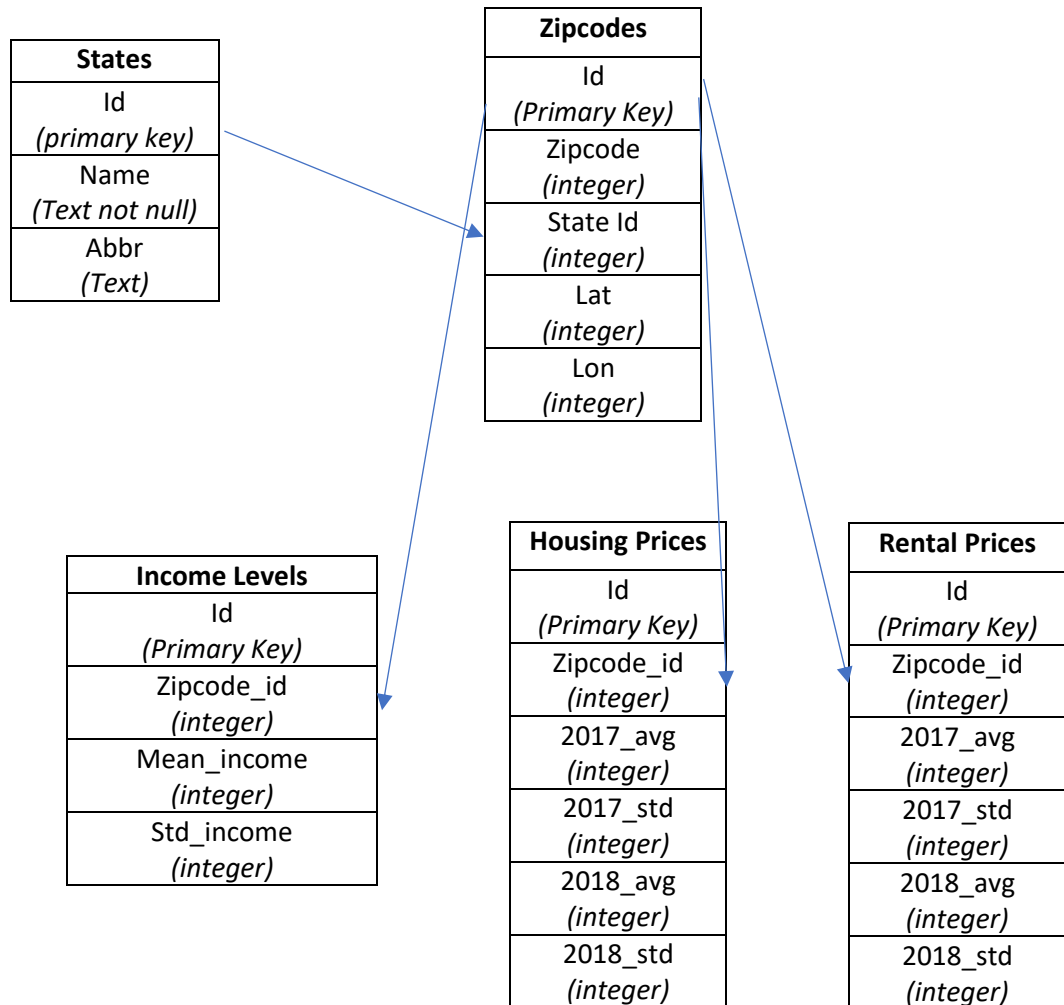


Table: HousingPrices

	Id	zipcode id	2017 avg	2017 std	2018 avg	2018 std
	Filter	Filter	Filter	Filter	Filter	Filter
1	1	3609	958500	89778.5145	999870	96464.87495
2	2	26803	386575	15545.96009	398730	25007.44089
3	3	34220	321366.6667	6069.504831	328755.5556	8580.742148
4	4	35400	128675	2828.169314	129270	1930.310856
5	5	34177	171966.6667	5297.064176	180040	2921.711827
6	6	3586	803366.6667	44595.97017	883050	98093.74343
7	7	16175	184100	8361.319673	209690	10040.56273
8	8	34834	238083.3333	5450.662549	242790	3193.258524
9	9	38362	598175	20968.47336	646970	28866.27964
10	10	16318	233266.6667	5974.715242	254090	6952.330545
11	11	26769	387525	12322.48115	395770	19954.65109
12	12	34274	250858.3333	8495.533957	258280	4537.356058
13	13	34283	253700	5380.520421	254540	3987.781338
14	14	11871	182191.6667	5578.15058	196077.7778	3301.440015
15	15	8140	579425	18877.37292	615230	21771.12997
16	16	34513	216050	8139.973382	223290	5288.941293
17	17	40011	394075	15115.17587	429844.4444	7007.632523
18	18	35379	193808.3333	7692.578494	200220	5386.613036
19	19	34792	282125	5203.544465	287340	12094.06466
20	20	32889	195608.3333	7436.784513	213444.4444	7202.485853
21	21	8147	561591.6667	16616.48069	558210	19282.91731
22	22	34163	244116.6667	24060.1965	257760	8173.885245
23	23	32153	158391.6667	6903.918976	161620	8725.457008
24	24	34159	237150	7575.673787	239660	4314.672641
25	25	34286	270458.3333	10252.72070	250144.4444	12248.82250

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Go to:

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Database Structure    Browse Data    Edit Pragmas    Execute SQL					
Table: <span>IncomeLevels</span>					
	Id	zipcode id	mean income	median income	std income
	Filter	Filter	Filter	Filter	Filter
1	1	16041	38773	30506	33101
2	2	15783	37725	19528	43789
3	3	15356	54606	31930	57348
4	4	16015	63919	52814	47707
5	5	15981	77948	67225	54270
6	6	15362	50715	42643	35886
7	7	15926	33737	23610	28256
8	8	15757	46319	40242	38941
9	9	15618	57994	39591	47235
10	10	15420	54807	41712	51359
11	11	15742	47929	38947	44430
12	12	15706	42251	28811	41397
13	13	15769	27993	19757	27656
14	14	15409	31229	22745	27452
15	15	16091	36439	21136	45043
16	16	15580	56934	39047	53934
17	17	15906	41057	21608	45280
18	18	15378	93682	300000	55763
19	19	15708	57202	46738	44401
20	20	15950	49699	34049	48287
21	21	15717	51926	300000	28590
22	22	15589	44572	34725	36562
23	23	15676	56029	31635	62581
24	24	15924	51098	43794	32431
25	25	15042	45465	26840	45634
<div> <span>1 - 25 of 32526</span> <span>Go to:</span> </div>					

Table:

RentalPrices

	Id	zipcode id	2017 avg	2017 std	2018 avg	2018 std
	Filter	Filter	Filter	Filter	Filter	Filter
1	1	3609	3449.375	39.14616041	3416	18.68154169
2	2	26803	1929.833333	120.8593076	1868.75	88.49611573
3	3	3607	3701.791667	57.86566999	3626.95	88.5097311
4	4	34220	2084.166667	102.0994885	2080	54.54356057
5	5	26765	2236.625	107.7220816	2080.4	89.40604006
6	6	35400	1026.666667	28.30881292	1021.5	23.56374334
7	7	34177	1421.875	17.7695022	1491.7	17.02967997
8	8	33970	1419.375	24.02526882	1472.7	25.4039367
9	9	3586	3125.625	149.5762243	3165.5	67.51666461
10	10	26789	1523.333333	59.31319883	1479.5	48.29337429
11	11	39807	4091.208333	159.7518203	4388.75	153.4814728
12	12	4014	1564.875	68.59182562	1649.75	67.55044411
13	13	3600	3505.833333	15.11529762	3487.95	42.73256955
14	14	16175	1460.125	40.00214838	1555.95	40.16992034
15	15	4064	2323.541667	203.1329058	2050	70.71067812
16	16	4022	2404.125	72.77022199	2289.75	116.7071656
17	17	34834	1568.75	30.14720827	1636.55	26.66312997
18	18	38362	3074.363636	192.1001267	3091.5	85.47806736
19	19	26795	2105.625	140.5425684	2011.7	80.19513701
20	20	16318	1546.041667	64.07562535	1545.25	40.59633604
21	21	3613	3286.875	41.29574484	3273.25	39.57666611
22	22	3593	3430.416667	55.26294469	3427.75	44.74161933
23	23	26769	1799.958333	68.50196419	1842.5	80.07808689
24	24	3595	3866.458333	66.48510433	3736.35	41.69115614
25	25	34274	1627.416667	34.78228524	1616.75	38.7248248

New Database

Open Database

Write Changes

Database Structure

Browse Data

Edit Pragmas

Table: States

	Id	Name	Abbr
	Filter	Filter	Filter
1	1	Alabama	AL
2	2	Alaska	AK
3	3	Arizona	AZ
4	4	Arkansas	AR
5	5	California	CA
6	6	Colorado	CO
7	7	Connecticut	CT
8	8	Delaware	DE
9	9	District of Colu...	DC
10	10	Florida	FL
11	11	Georgia	GA
12	12	Hawaii	HI
13	13	Idaho	ID
14	14	Illinois	IL
15	15	Indiana	IN
16	16	Iowa	IA
17	17	Kansas	KS
18	18	Kentucky	KY
19	19	Louisiana	LA
20	20	Maine	ME
21	21	Montana	MT
22	22	Nebraska	NE
23	23	Nevada	NV
24	24	New Hampshire	NH
25	25	New Jersey	NJ

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Database Structure

Browse Data

Edit Pragmas

Execute SQL

Table: Zipcodes



	Id	Zipcode	state id	lat	lon
	Filter	Filter	Filter	Filter	Filter
15984	15984	36532	1	30.562883	-87.810464
15985	15985	36533	1	30.484131	-87.860613
15986	15986	36535	1	30.467608	-87.692401
15987	15987	36536	1	30.42216	-87.706371
15988	15988	36538	1	31.406683	-88.175846
15989	15989	36539	1	31.406683	-88.175846
15990	15990	36540	1	31.58842	-87.840875
15991	15991	36541	1	30.498046	-88.332468
15992	15992	36542	1	30.284936	-87.794246
15993	15993	36543	1	31.216132	-87.461537
15994	15994	36544	1	30.479141	-88.232843
15995	15995	36545	1	31.592985	-87.898539
15996	15996	36547	1	30.265325	-87.629926
15997	15997	36548	1	31.406683	-88.175846
15998	15998	36549	1	30.39736	-87.458796
15999	15999	36550	1	31.22896	-87.713373
16000	16000	36551	1	30.513519	-87.667604
16001	16001	36553	1	31.209178	-88.075266
16002	16002	36555	1	30.427641	-87.796011
16003	16003	36556	1	31.406683	-88.175846
16004	16004	36558	1	31.553004	-88.294124
16005	16005	36559	1	30.562308	-87.900545
16006	16006	36560	1	31.080313	-88.057203
16007	16007	36561	1	30.281046	-87.581457
16008	16008	36562	1	31.040306	-87.666600

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Go to:

Questions:

1. How to get Id to properly increment on database

## 1. Create API request for Yelp

### a. Inputs

- i. Base: 'https://api.yelp.com/v3/businesses/search'
- ii. HTTP Auth: headers={'Authorization': 'bearer %s'%YELP\_KEY}
- iii. Parameters: term='restaurants'
- iv. *Zipcode search*
  1. Params: Lat and Lon [from SQL query on zipcodes table]
- v. *Full Address search*
  1. Params:location [from user input]

### b. Returns (json file)

- i. 20 restaurants in location with:
  1. Business name
  2. Business type
  3. Business lat and lon
  4. Business price(\$-\$\$\$\$)
  5. Ratings(1-5)
  6. URL to site

YelpResults
Id (Primary Key)
Zipcode_id (integer)
Business Name (integer)
lat (integer)
Lon (integer)
Business_price (text)
Ratings (integer)
Site_url (text)

Picture of Cache File

Project

data\_processing.py

Unstaged Changes: ...

proj2\_nps.py

yelp\_cache.json

SI507\_Final\_Project

\_\_pycache\_\_

.git

finalproj

~WRL0005.tmp

data\_processing.py

datacheckpoint\_J

fp\_database.db

home\_sales-zip.c

income.db

kaggle\_input.csv

Proposal\_Jainabo

rental\_proces-zip

secrets.py

states.csv

yelp\_cache.json

zillow\_cache.json

zip\_codes\_states

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```
"https://api.yelp.com/v3/businesses/
searchterm=restaurants&latitude=42.291734&longitude=-83.485776": {
  "businesses": [
    {
      "id": "Fuvi_a0fj7mABX5rPYJ8KQ",
      "alias": "the-levant-kitchen-canton",
      "name": "The Levant Kitchen",
      "image_url": "https://s3-media1.fl.yelpcdn.com/bphoto/
GRmWvYHPSh07khYWx2XbSww/o.jpg",
      "is_closed": false,
      "url": "https://www.yelp.com/biz/the-levant-kitchen-
canton?adjust_creative=0mwkSgTbSEnC8USCUCUUhQ&utm_campaign=yelp_api
v3&utm_medium=api_v3_business_search&utm_source=0mwkSgTbSEnC8USCUC
UUhQ",
      "review_count": 46,
      "categories": [
        {
          "alias": "mediterranean",
          "title": "Mediterranean"
        }
      ],
      "rating": 4.5,
      "coordinates": {
        "latitude": 42.3221249,
        "longitude": -83.4855794
      },
      "transactions": [],
      "price": "$",
      "location": {
        "address1": "45164 Ford Rd",
        "address2": "",
        "address3": null,
```

Git

Unstaged Chan...

Proposal\_Jainabou.doc

+ \_\_pycache\_\_\secrets.cpy  
37.pyc

data\_processing.py

+ datacheckpoint\_Jainabo

+ finalproj\Include\Pytho

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List truncated to the first 1000 ite

Staged Changes

No changes

Commit message



New Database

Open Database

Write Changes

Revert Changes

Open Project

Save Project

Attach Database

Close Database

Database Structure

Browse Data

Edit Pragmas

Execute SQL

Table: YelpResults

New Record

Delete R

	Id	zipcode id	buisness name	lat	lon	buisness price	rating	site url
	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter
1	1	21144	The Levant Kit...	42.3221249	-83.4855794	\$	4.5	https://www.y...
2	2	21145	Famous Hamb...	42.275049064...	-83.48477985...	\$\$	3.5	https://www.y...
3	3	21144	Aki Sushi & Thai	42.30836	-83.48706	NULL	4	https://www.y...
4	4	21082	Twisted Roost...	42.231352	-83.48511	\$\$	3.5	https://www.y...
5	5	21144	OMC	42.323859	-83.487337	\$\$	4	https://www.y...
6	6	21144	Matsuchan	42.325491196...	-83.47709281...	\$	4	https://www.y...
7	7	21152	HANA Korean ...	42.244842529...	-83.58435821...	\$\$	4.5	https://www.y...
8	8	21151	Lan City: Hand...	42.2495183	-83.6527657	\$\$	4	https://www.y...
9	9	21145	Angie's Hamb...	42.266557	-83.504946	\$	3.5	https://www.y...
10	10	21082	Kabob Garden ...	42.203824116...	-83.48026502...	\$\$	4.5	https://www.y...
11	11	21082	Benzina's Bistro	42.26251	-83.52379	NULL	3	https://www.y...
12	12	21145	L George's Co...	42.27527	-83.46984	\$	4	https://www.y...
13	13	21152	Jamerican Grill	42.243194708...	-83.56907678...	NULL	5	https://www.y...
14	14	21082	Bayou Grill	42.20863	-83.49062	\$\$	4	https://www.y...
15	15	21144	Kimchi	42.321939	-83.4903951	\$\$	4	https://www.y...
16	16	21144	Spoon's Place	42.320570017...	-83.48770276...	\$\$	3.5	https://www.y...
17	17	21144	Bangkok Flavo...	42.308066904...	-83.45896493...	\$	4	https://www.y...
18	18	21144	Biscuits & Gravy	42.323615	-83.457154	\$	4	https://www.y...
19	19	21141	Avenue Ameri...	42.2824183	-83.3887414	\$\$	4.5	https://www.y...
20	20	21151	Chick-fil-A	42.246357	-83.625264	NULL	4.5	https://www.y...
21	21	21144	The Levant Kit...	42.3221249	-83.4855794	\$	4.5	https://www.y...
22	22	21145	Famous Hamb...	42.275049064...	-83.48477985...	\$\$	3.5	https://www.y...
23	23	21144	Aki Sushi & Thai	42.30836	-83.48706	NULL	4	https://www.y...
24	24	21082	Twisted Roost...	42.231352	-83.48511	\$\$	3.5	https://www.y...
25	25	21144	OMC	42.323859	-83.487337	\$\$	4	https://www.y...

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