

Instructions:

- Before running this application, all of the json files must be moved into the provided directory entitled "dataset". The user must also ensure that “fltk” is properly installed on their machine.
- In order to compile the files using the given makefile using: make.
- The next step is to link the library to the rest of the data using the line below:

```
export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:.
```

- At this point the Application is ready for use and can be run using: ./JSONviewer
- The user has the power to limit the number of entries the application takes in through a command line prompt. There is a minimum of 150 entries set in place in order to have enough data to properly use the join commands. This is put in place due to the large size of the provided json files, where larger amount of entries will run, but may cause the application to run slower.

****NOTE:** Each number below is used as a reference to the image on the following page.

- *(1) After providing an entry limit, the GUI application will run. Upon launch, the original data can be displayed by selecting the table names above the custom search bar and join table buttons. Each one of these tables have resizable columns and the ability to scroll through the potentially large table data.
- *(2) Immediately below the table buttons there are two drop down buttons which allow the SQL cross join and natural join functions. This works by joining the currently displayed table and the table selected by the drop down menu. In the case of natural join, a common attribute between the two tables must be specified using the entry field to the right of the join buttons. The resulting joined table will be added to the row of available table buttons.
- *(3) Below the table joining buttons is a search bar for the currently displayed table by making use of the provided Library’s Query function. where the leftmost bar is associated with the SELECT command, and the rightmost bar corresponds to the WHERE command. If no SELECT entry is provided, the application will assume that you mean all attributes (*). As for an empty WHERE, the search function defaults to “True”.

- **Example of usage:** (*values correspond to the descriptions above)

JSON Viewer

Businesses							
address	BikeParking	garage	lot	street	valet	validated	taurantsPr
691 Richmond Rd	True	False	True	False	False	False	2
2824 Milton Rd							2
337 Danforth Avenue	True	False	False	True	False	False	2
Doubletree Ranch Rd, S							
4719 N 20Th St	True	False	False	False	False	False	1
2017 E Camelback Rd	True	False	True	False	False	False	2
4425 N 24th St, Ste 125							
5770 Butler St							
3220 Washington Rd	True	False	True	False	False	False	2
425 S Higley Rd, Ste 10							
11022 W Charleston Blvd	True	True	False	False	False	False	
9393 N 90th St, Ste 112	True	False	True	False	False	False	2
9101 E Baseline Rd	True	False	True	False	False	False	2
12417 W Pima St							
616 E Independence Blv	True	False	False	False	False	False	2
190 E Dallas Rd							
62 S Ctr							
128 Warrensville Ctr Rd							
3710 Payne Ave	True	False	True	False	False	False	1
2385 E Windmill Ln							
10515 B Centrum Parkway							
4759 Liberty Ave	True	False	False	True	False	False	1
10 Saint Barbara Boulev							2

* (1) Table Buttons: Businesses, Users, Reviews, Check In's, Tips, nat 0
 Natural Join, Cross Join, business_id
 name, address (hipster = True) AND (vegan = False) Search