House Searching System

EPPS 6354

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HOSPITAL
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Purpose

This project provides an application for users who wants to buy a house. The users can not only find a house but also the facilities around the house, such as schools, hospital, stores, etc. It can help users to find the dream house faster.

Workflow

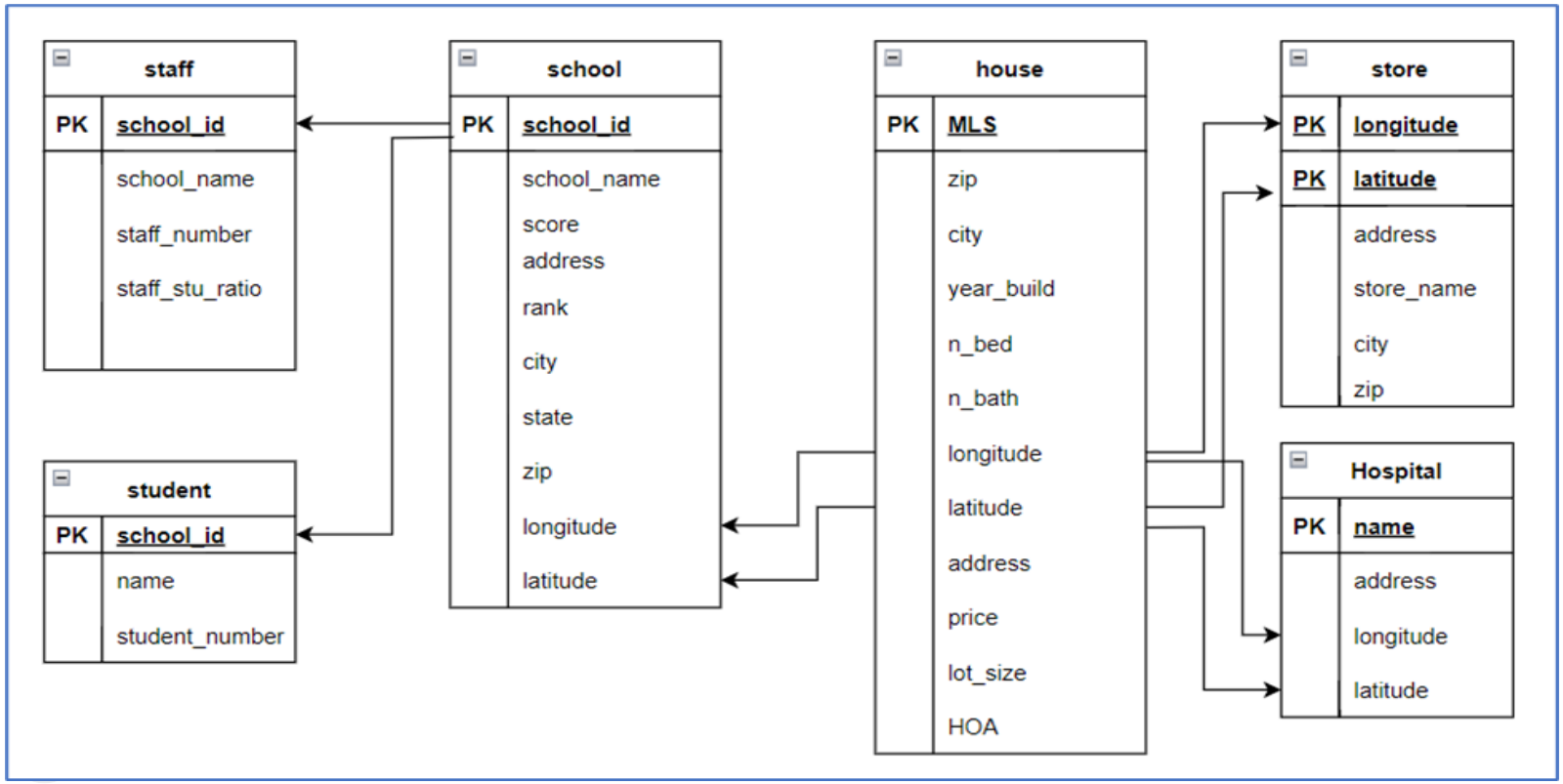
1. Create database use PjAdmin4 and SQL
2. Extract the database from PjAdmin4 with DB browser
3. Put the data into Shiny app folders
4. Use Shiny app to implement applications with R

Data Design

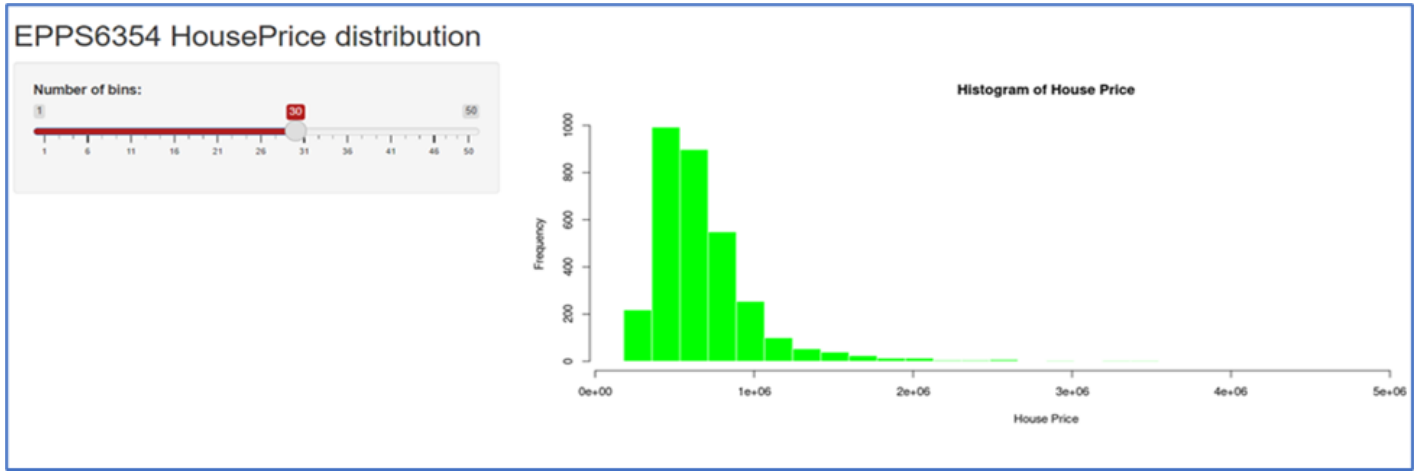
- Data is collected from redfin and data.World
- The house data covers some attributes, such as number of bedrooms and bathrooms, price, address, longitude, latitude, etc.
- The facility data covers the school, hospital, store, gym, etc.

Primary Key & Schema

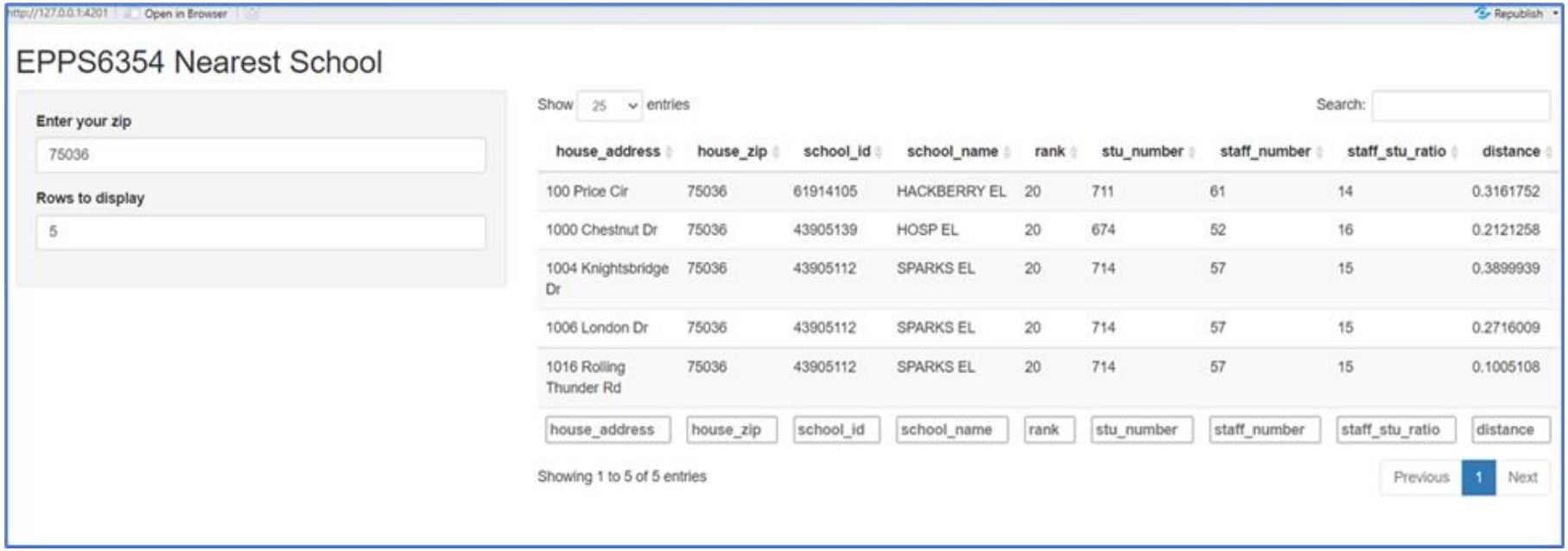
- The tables are:
- house(with primary key: MLS)
- hospital(with primary key: name)
- store(with primary key: longitude, latitude)
- school(with primary key: school_id)
- student(with primary key: school_id)
- staff(with primary key: school_id)


staff
PK
school_id
school_name
staff_number
staff_stu_ratio
school
PK
school_id
school_name
score
address
rank
city
state
zip
longitude
latitude
house
PK
MLS
zip
city
year_build
n_bed
n_bath
longitude
latitude
address
price
lot_size
HOA
store
PK
longitude
PK
latitude
address
store_name
city
zip
student
PK
school_id
name
student_number
Hospital
PK
name
address
longitude
latitude

Applications



EPPS6354 Hospitals within selected distance
enter the distance(miles):
0
7
100
0 10 20 30 40 50 60 70 80 90 100
Enter your zip
75036
Rows to display
1
Show 25 entries
Search:
address
city
zip
hp_name
hp_address
distance
No data available in table
address
city
zip
hp_name
hp_address
distance
Showing 0 to 0 of 0 entries
Previous
Next


http://127.0.0.1:4201
Open in Browser
Republish
EPPS6354 Nearest School
Enter your zip
75036
Rows to display
5
Show 25 entries
Search:
house_address house_zip school_id school_name rank stu_number staff_number staff_stu_ratio distance
100 Price Cir 75036 61914105 HACKBERRY EL 20 711 61 14 0.3161752
1000 Chestnut Dr 75036 43905139 HOSP EL 20 674 52 16 0.2121258
1004 Knightsbridge Dr 75036 43905112 SPARKS EL 20 714 57 15 0.3899939
1006 London Dr 75036 43905112 SPARKS EL 20 714 57 15 0.2716009
1016 Rolling Thunder Rd 75036 43905112 SPARKS EL 20 714 57 15 0.1005108
house_address house_zip school_id school_name rank stu_number staff_number staff_stu_ratio distance
Showing 1 to 5 of 5 entries
Previous 1 Next

EPPS6354 Stores within selected distance

enter the distance(miles):

0 5 100

0 10 20 30 40 50 60 70 80 90 100

Enter your zip

75036

Rows to display

1

Show 25 entries

Search:

address	city	zip	st_name	st_address	distance
100 Price Cir	Hackberry	75036	costco	11220 DALLAS PKWY	4.728803
address	city	zip	st_name	st_address	distance

Showing 1 to 1 of 1 entries

Previous 1 Next

Shiny app link

1. https://xiaoyanhouston2.shinyapps.io/house_store/
2. https://xiaoyanhouston2.shinyapps.io/houseprice_frequency/
3. https://xiaoyanhouston2.shinyapps.io/house_hospital/
4. https://xiaoyanhouston2.shinyapps.io/house_school/

Thank You!