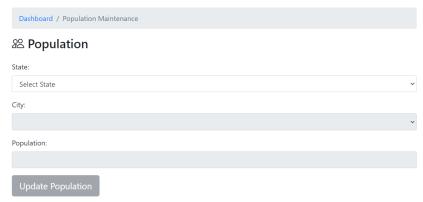
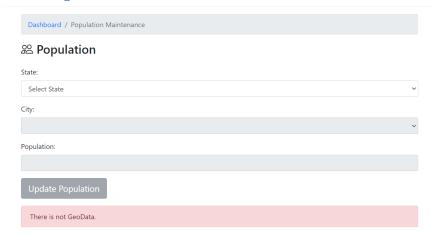
Population Maintenance

1. Page Load without error



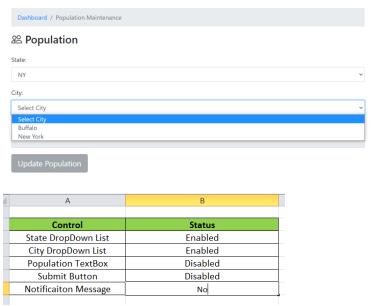
Control	Status
State DropDown List	Enabled
City DropDown List	Disabled
Population TextBox	Disabled
Submit Button	Disabled
Notificaiton Message	No

2. Page Load But there is no data in database



T		
2	Control	Status
3	State DropDown List	Enabled
4	City DropDown List	Disabled
5	Population TextBox	Disabled
6	Submit Button	Disabled
7	Notificaiton Message	There is not Geo Data Message shows
0		

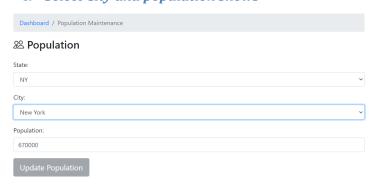
3. Select State and City List shows



Scenario:

when user select the State back to "Select State" option, the city dropdown, population textbox and submit button returns to page loading status.

4. Select City and population shows

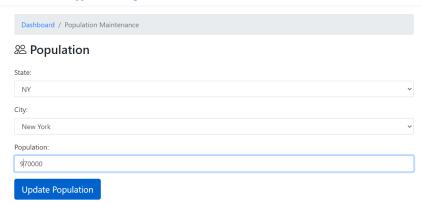


1		
2	Control	Status
3	State DropDown List	Enabled
4	City DropDown List	Enabled
5	Population TextBox	Enabled
6	Submit Button	Disabled
7	Notificaiton Message	No
8		

Scenario:

when the user selects the State back to "Select City" option, the population textbox and submit button returns to page loading status.

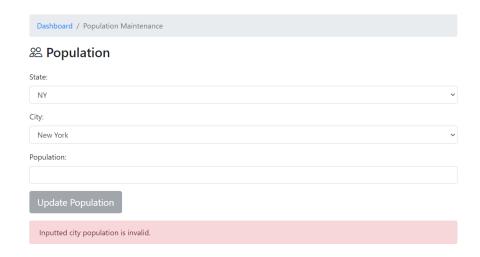
5. Modify the Population Number



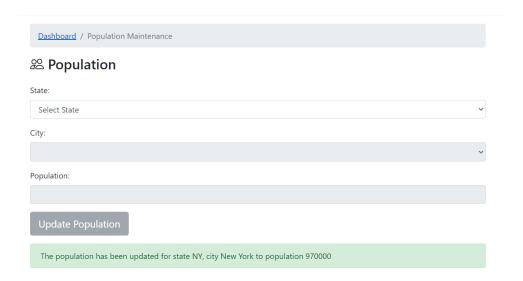
1		
2	Control	Status
3	State DropDown List	Enabled
4	City DropDown List	Enabled
5	Population TextBox	Enabled
6	Submit Button	Enabled
7	Notificaiton Message	No
8		

NOTE:

- 1. Population Text only accept number
- 2. If the population is empty or population length bigger than 12, below message shows and the submit button is disabled again.



6. Population Updated Success



1		
2	Control	Status
3	State DropDown List	Enabled
4	City DropDown List	Disabled
5	Population TextBox	Disabled
6	Submit Button	Disabled
		The population has been updated for state {0},
7	Notificaiton Message	city {1} to population {2}
Q		

Holiday Maintenance

Loading: http://127.0.0.1:8000/reporting/holiday/

Dashboard / Holiday List

Holiday Maintenance - Holiday List

Add Holiday

Holiday Date	Holiday Name
Jan. 1, 2021	New Yaer
Jan. 2, 2021	New Yaer2
Jan. 3, 2021	New Yaer3
April 1, 2021	April Fools' Day
April 2, 2021	New Year 4

Dashboard / Holiday Maintenance

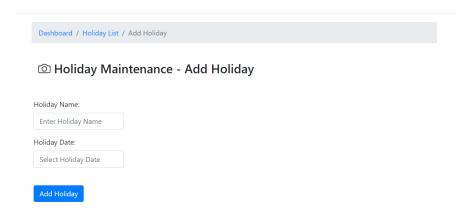
Holiday List

Add Holiday

No Holiday!

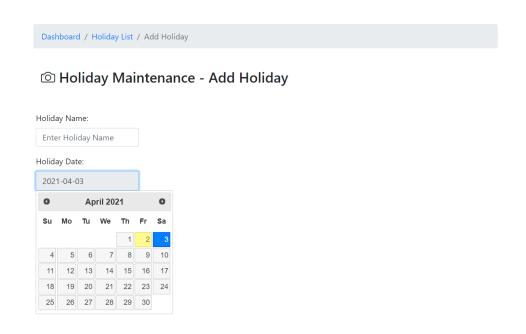
Add Holiday Loading

http://127.0.0.1:8000/reporting/holiday/add holiday/

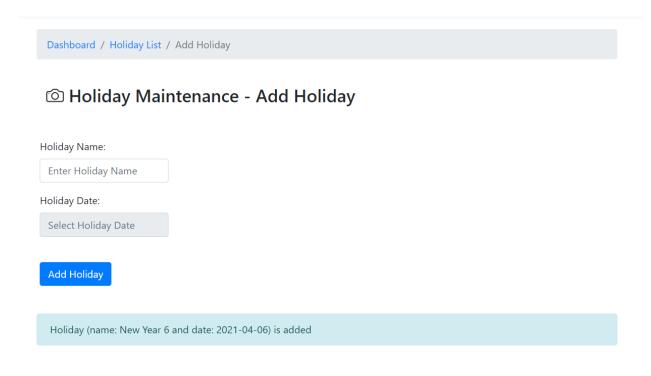


NOTE: 1) Input Holiday Name and Select Holiday Date from DateTimePicker

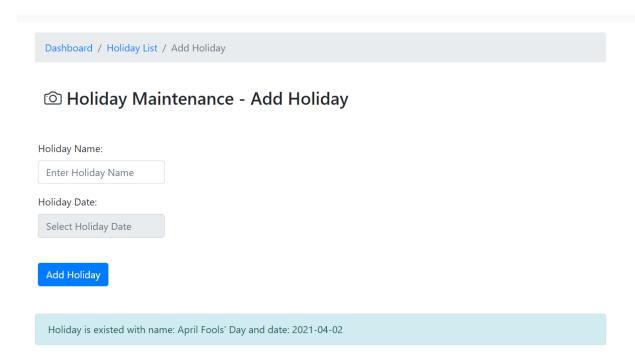
2) The Date Text box is read only and only support the time picker



Holiday is added



Scenario: If holiday existed with the same name and same day



Loading: http://127.0.0.1:8000/reporting/report1_category/

Dashboard / Category

Category

Category Name	Total Number of Products	Minimum Regular Retail Price	Average Regular Retail Price	Maximum Regular Retail Price
Couches and Sofas	2	10.0	205.0	400.0
NO product category	0	None	None	None
Outdoor Furniture	2	7.0	13.5	20.0

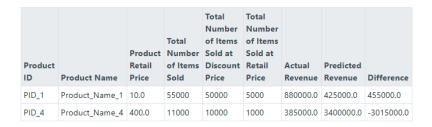
- 1.Once the user clicks this link, queries for each category including those without products, returns category name, total number of products, Min & Average & Max retail price of products.
- 2. Sorted by Category_Name in ascending order.

Report 2

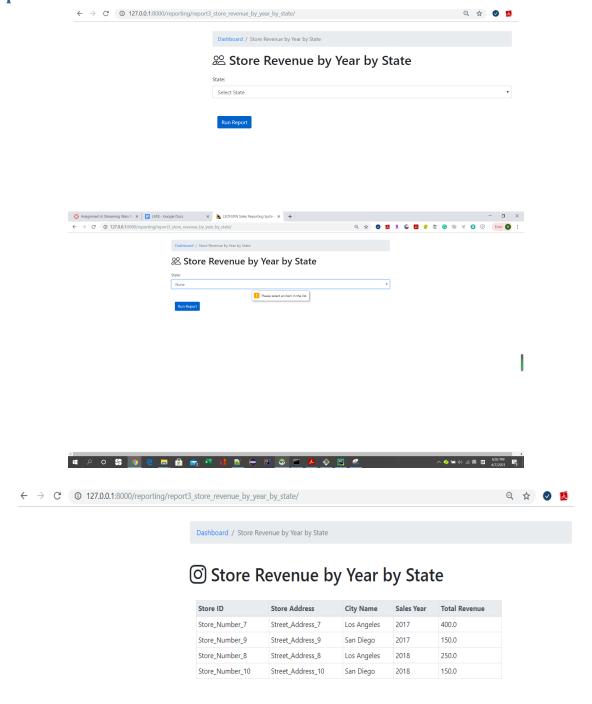
Loading: http://127.0.0.1:8000/reporting/report2_actual_versus_predicted_revenue_for_couches_and_sofas/

Dashboard / Actual versus Predicted Revenue for Couches and Sofas

Actual versus Predicted Revenue for Couches and Sofas



- 1. Once the user clicks this link, queries for each product in 'Couches and Sofas' category, returns corresponding information shown as the title row in the table.
- 2. Only display the revenue difference which is greater than \$5000 (positive or negative), sort by revenue difference in descending order.



- 1. If state is not selected and run report button is clicked, message asking for input will be displayed.
- 2. The report is sorted first by year in ascending order and then by revenue in descending order.

Loading: http://127.0.0.1:8000/reporting/report4 outdoor furniture revenue/

Dashboard / Outdoor Furniture Revenue

Outdoor Furniture Revenue

Year	Total Number of Items Sold	Average Number of Items Sold per Day	Total Number of Items Sold on Groundhog Day
2012	10	0.0274	10
2013	100	0.2740	0

- 1. Once the user clicks this link, queries for each year from the 'Outdoor Furniture' Category, returns all years, total number of products sold for each year, average number of products sold per day, and total number of products sold on Groundhog day (Feb 2).
- 2. Sorted by year in ascending order.

Report 5

Report 6



O Revenue by Population

Years	Small City	Medium City	Large City	Extra Large City
2012	0.0	0.0	415.0	0.0
2013	0.0	0.0	50.0	0.0
2014	0.0	0.0	80.0	0.0
2015	35.0	0.0	0.0	0.0
2016	100.0	0.0	0.0	0.0
2017	150.0	400.0	0.0	0.0
2018	150.0	250.0	0.0	0.0

- 1. Both rows and columns in this report are arranged in ascending order.
- 2. When population is updated in the Population Maintenance, the city size category in this report will also be updated simultaneously.

Loading

http://127.0.0.1:8000/reporting/report8 restaurant impact on category sales/

Dashboard / Restaurant Impact on Category Sales

© Restaurant Impact on Category Sales

Category	Store Type	Quantity Sold
Cauchas	Non-restaurant	0
Couches	Restaurant	20
Pots and Pans	Non-restaurant	5
Pots and Pans	Restaurant	5

Dashboard / Restaurant Impact on Category Sales

Restaurant Impact on Category Sales

No Records!

Note:

- 1. At most of LEOFURN's stores, the restaurant is located before customers enter the main sales floor. Recent psychometric studies show that customers with a full stomach are less interested in purchasing certain kinds of items (such as dining room furniture, kitchen utensils, etc.) but show stronger interest in others (such as beds, couches, sofas, or reclining chairs). While understanding that the data loaded into LSRS does not allow for correlating individual customer restaurant purchases with other sales, this report aims to provide some insights on if the presence of a restaurant causes this behavioral trend.
- 2. In the report, for all sales data, for each category, take the total quantity of all products sold in the category and display separate totals for stores with a restaurant, and stores without. For the Store Type that has no quantity sold, 0 will be shown in the third column.
- 3. The report is ordered by category name ascendingly, with non-restaurant store data listed first.
- 4. It excludes any categories that are not assigned products as their information would not be useful here.

- 5. It is presented as "grouped rows" and grouped by category.
- 6. When there's no category or all existing categories are not assigned products, "No Records!" will be shown.

Loading

http://127.0.0.1:8000/reporting/report9 advertising campaign analysis/

Dashboard / Advertising Campaign Analysis

Advertising Campaign Analysis

Product ID	Product Name	Sold During Campaign	Sold Outside Campaign	Difference
PID_1	Product_Name_1	10	5	5

Dashboard / Advertising Campaign Analysis

O Advertising Campaign Analysis

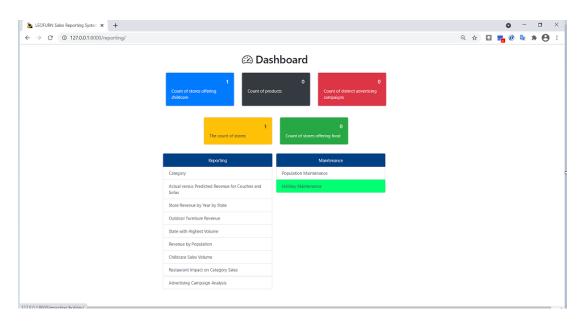
No Records!

Note:

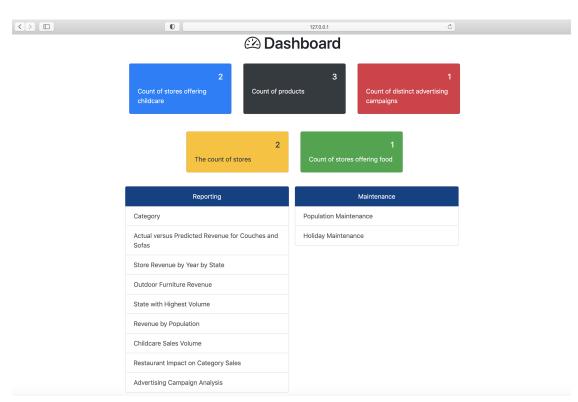
- 1. While there are numerous possibilities to correlate advertising campaigns and sales data, this report aims to provide a relatively simple analysis: if a product is discounted, does an advertising campaign affect its sales volume?
- 2. The report queries for all products when a discount price is in effect. For each product, it displays the product ID, the product name, the total sold when any advertising campaign was active, the total sold when no advertising campaign was active, and the difference between the two totals.
- 3. The results are sorted by difference in descending (highest to lowest) order.
- 4. Only the top 10, followed by the bottom 10 from the results are shown in this report.
- 5. When there's no product or all existing products don't have a discount price, "No Records!" will be shown.

Home Page - Dashboard

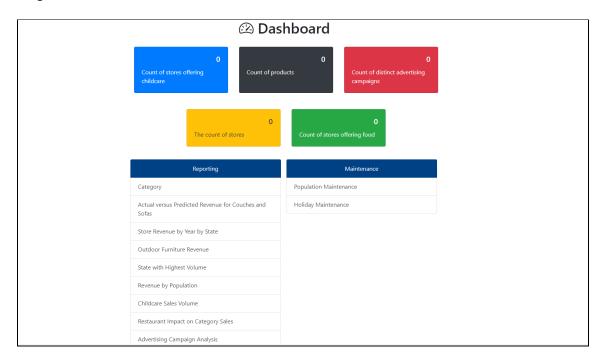
Robin:



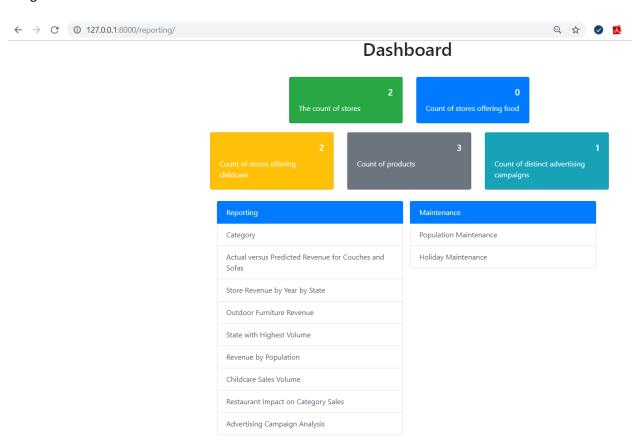
Meihua:



Teng:



Liang



Reference	Document:

Boostrap Table's HTML

https://getbootstrap.com/docs/4.0/content/tables/

KickOff 会议视频录像

https://drive.google.com/file/d/15ekmsSBsEnhP7dD42jXYCxhTUoTWJHnf/view?usp=sharing

Python、Pycharm、Django安装详细教程 https://blog.csdn.net/diligentkong/article/details/79129185

Python3.6安装使用mysqldb、PyCharm安装pymsql

https://blog.csdn.net/ydw_ydw/article/details/81282692

Pycharm 安装 python - connect mysql 插件说明

https://www.lfd.uci.edu/~gohlke/pythonlibs/#mysqlclient

Dajango 链接 MySQL 密码错误修复

https://www.programmersought.com/article/83934501527/

Python & Django Development Best Practice

https://developer.mozilla.org/zh-CN/docs/learn/Server-side/Django