

Restaurant Management System



Capstone Project By

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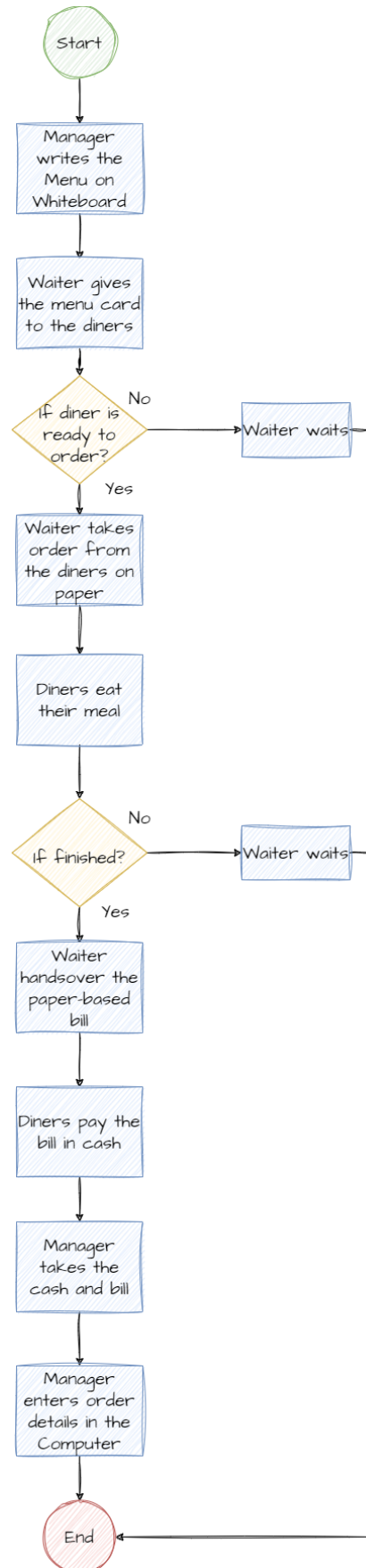
1. Identifying Stakeholders – Create a list of Stakeholders (as taught in the Business Analysis Planning and Monitoring Knowledge Area).

Power Grid Table

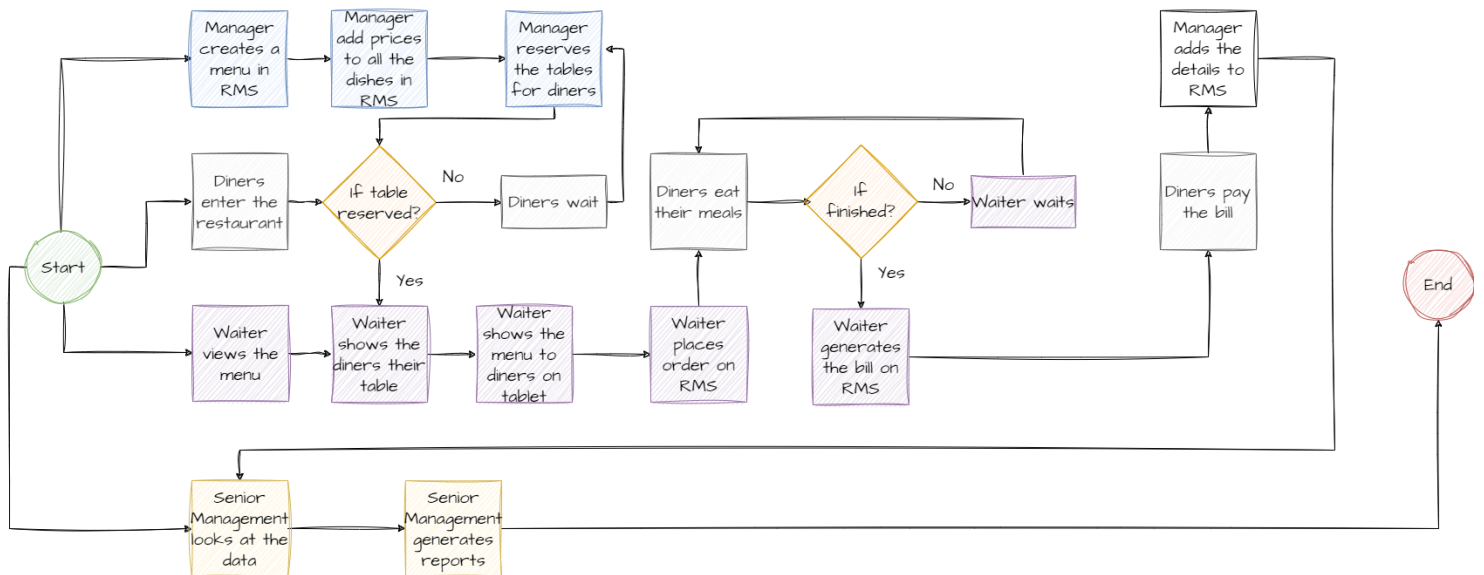
I N T E R E S T	Low	High
	Jamie Oliver (CEO) Senior Management Chefs	Business Analyst Managers Project Manager Customers
	Cleaners Suppliers (Raw Material) Delivery Person	Waiters Developers Testers
0	POWER	

2. Create As-Is and Future Process maps (using flowcharts). You can use any of the popular tools in the market like Microsoft Visio, Lucidchart, Creately, Pidoco, or Balsamiq.

As-is Process:



Future Process:



3. As a Business Analyst working on this project, find out the scope of the Restaurant Management Software. Write down the main features that need to be developed.

The scope of the Restaurant Management System is to allow restaurants to easily update their menu and recognizes the different types of users such as managers, waiters, etc. Furthermore, the Restaurant Management System should also be able to limit the access of some options of the system to certain users.

The following features are required to be developed:

- a. Menu Creation
- b. Subcategorisation of the Menu
- c. Menu Search
- d. View of all the dishes and their respective prices
- e. Login and Change-password accessibility for different users
- f. Hierarchy-wise access rights.
- g. Table Reservation
- h. Bill Generation
- i. Cash and Card Payment Methods
- j. Paper-based Feedback forms.
- k. Report Generation for the following:
 - i. Total sales of the day by dine-in customers
 - ii. Total sales of the day by home delivery customers
 - iii. Total sales of the day (home delivery and dine-in customers consolidated)
 - iv. Name the top 10 most sold dishes for the day
 - v. Total sales every weekend (to be done by inputting the dates)
 - vi. Total sales every month (to be done by inputting the dates)
 - vii. List of dishes not sold in the current month (this is to phase out dishes that customers are not ordering)
 - viii. Total sales across all cities
 - ix. Total sales for each city

4. Write the in-scope and out-of-scope items for this software.

In-scope Items

- a. Create/Read/Update/Delete Menu option for Managers
- b. View Menu option for Waiters
- c. Search Menu option for Managers and Waiters
- d. Generate Bill option for Waiters
- e. Reserve Table option for Managers
- f. Login and Change Password option for Managers, Waiters, and Jamie Oliver (CEO)
- g. Cash or Card Payment options for Customers
- h. Payment Gateway option for Customers
- i. Subcategorise Menu options, i.e., Starters, Soups, Main Course, Desserts, and Drinks, for Managers
- j. Display Prices of Each and Every Menu Item for All
- k. Store the information from paper-based Customer feedback forms
- l. Generate the following reports for Senior Management:
 - x. Total sales of the day by dine-in customers
 - xi. Total sales of the day by home delivery customers
 - xii. Total sales of the day (home delivery and dine-in customers consolidated)
 - xiii. Name the top 10 most sold dishes for the day
 - xiv. Total sales every weekend (to be done by inputting the dates)
 - xv. Total sales every month (to be done by inputting the dates)
 - xvi. List of dishes not sold in the current month (this is to phase out dishes that customers are not ordering)
 - xvii. Total sales across all cities
 - xviii. Total sales for each city

Out-of-scope Items

- a. Create/Read/Update/Delete Menu option for Waiters
- b. Reserve Table option for Waiters
- c. Paperless feedback forms for Customers
- d. Addition of tips on the payment methods.

5. Write out the business requirements, both functional and non-functional requirements.

Functional Requirements:

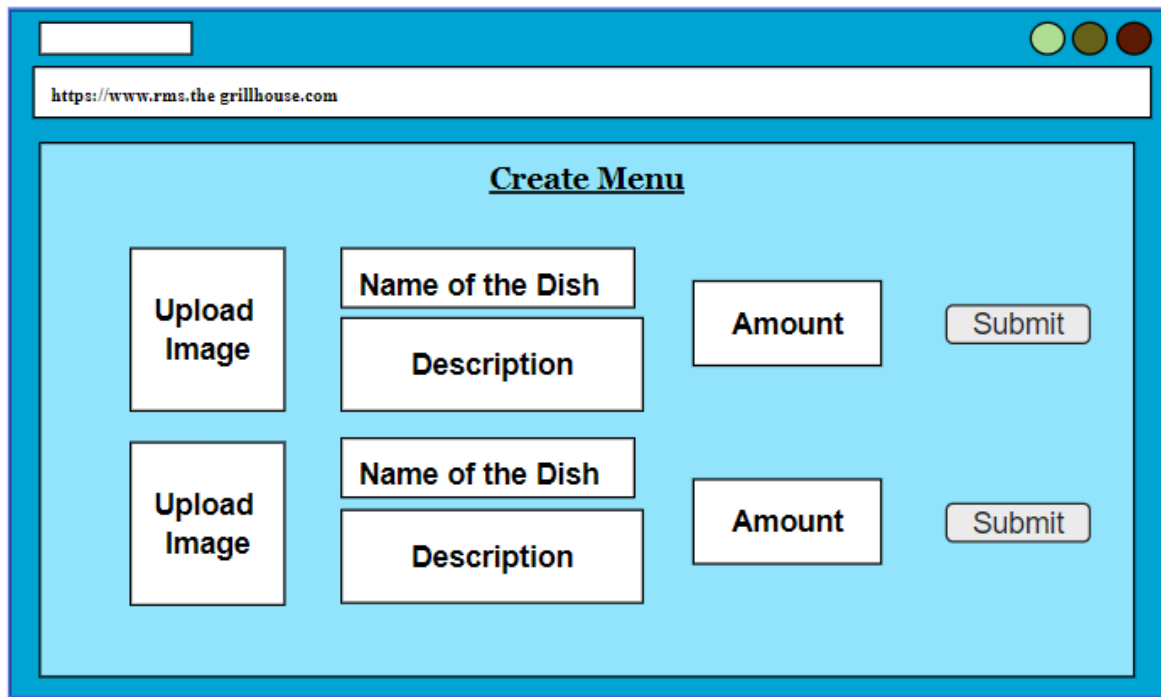
- a. The Restaurant Management System shall have login and change-password credentials for Managers, Waiters, and Jamie Oliver (CEO).
- b. Different hierarchies shall have different access rights.
- c. The managers shall be able to create/read/update/delete menus.
- d. The manager shall be able to subcategorise the menu into 5 different categories, i.e., starters, soups, main courses, desserts, and drinks.
- e. The manager shall be able to add the prices of all items.
- f. The waiters shall be able to view all the items, along with their prices.
- g. The managers and waiters shall be able to search the menu.
- h. The managers shall be able to reserve a table for the customers.
- i. The waiters shall be able to generate bills in the Restaurant Management Software.
- j. The waiter shall be able to provide a Cash or Card payment option to the customers using the payment gateway.
- k. The managers shall manually add the customer information in the Restaurant Management System from the paper-based feedback forms.
- l. The senior management shall be able to view the following reports:
 - i. Total sales of the day by dine-in customers
 - ii. Total sales of the day by home delivery customers
 - iii. Total sales of the day (home delivery and dine-in customers consolidated)
 - iv. Name the top 10 most sold dishes for the day
 - v. Total sales every weekend (to be done by inputting the dates)
 - vi. Total sales every month (to be done by inputting the dates)
 - vii. List of dishes not sold in the current month (this is to phase out dishes that customers are not ordering)
 - viii. Total sales across all cities
 - ix. Total sales for each city

Non-functional Requirements:

- a. Scalability & Performance: The Restaurant Management System shall be scalable for a volume of at least 12 restaurants.
- b. Availability: The Restaurant Management System webpage shall be available on the intranet and the internet
- c. Usability: The Restaurant Management System shall be user-friendly and self-explanatory
- d. Maintainability: Java shall be used to develop the Restaurant Management System to be easy to maintain in the future.
- e. Portability: The Restaurant Management System shall run on both Windows and Mac Operating Systems.
- f. Functionality: The Restaurant Management System shall be able to calculate the bill amount precisely.

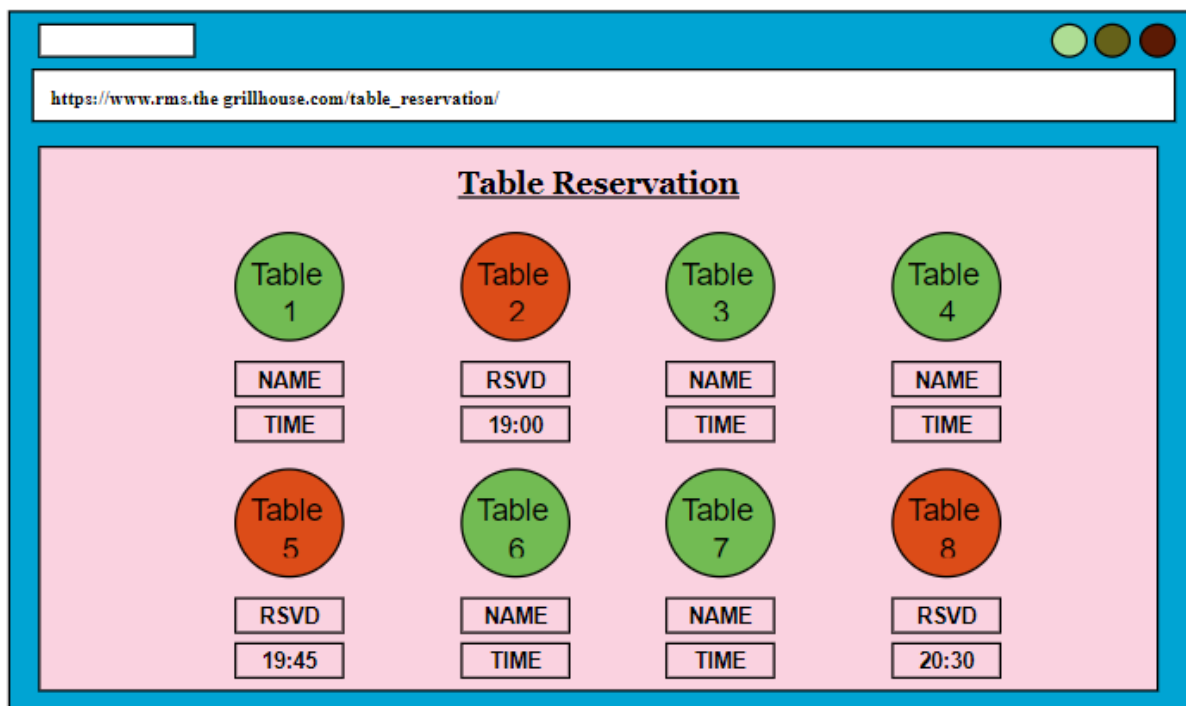
6. Draw wireframes or mock screens for two features: menu creation and table reservation. Use the technique of prototyping or wireframing that is taught in training. You can use any wireframing tools like Microsoft PowerPoint, Microsoft Word, Balsamiq, Sketch, Adobe XD, Adobe Illustrator, Figma, UXPin, InVision Studio, Invision Freehand, or Moqups.

Menu Creation:



The wireframe shows a web browser window with the URL <https://www.rms.the grillhouse.com>. The main content area is titled "Create Menu" and contains two identical forms stacked vertically. Each form has an "Upload Image" button on the left, followed by two input fields for "Name of the Dish" and "Description". To the right of these fields is an "Amount" input field and a "Submit" button.

Table Reservation:

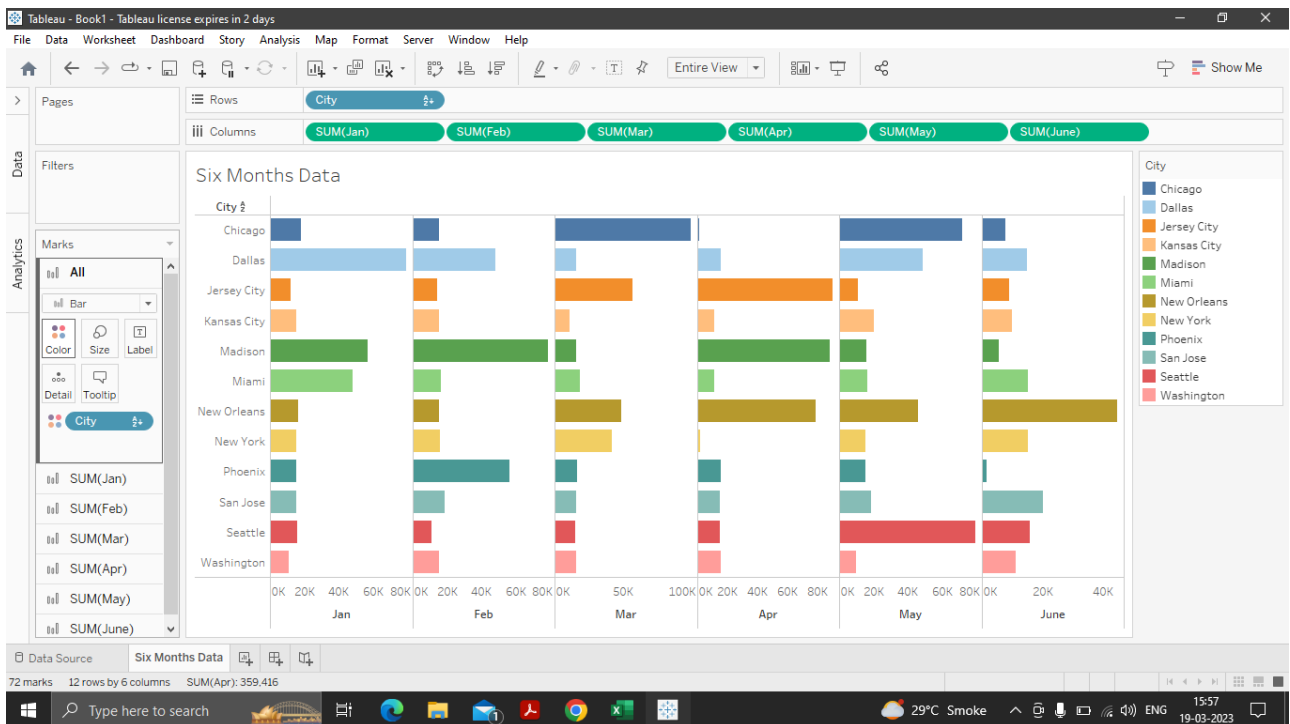


The wireframe shows a web browser window with the URL https://www.rms.the grillhouse.com/table_reservation/. The main content area is titled "Table Reservation" and displays eight tables arranged in a 2x4 grid. Each table is represented by a colored circle (green or orange) with a number. Below each circle are input fields for "NAME", "RSVD", and "TIME".

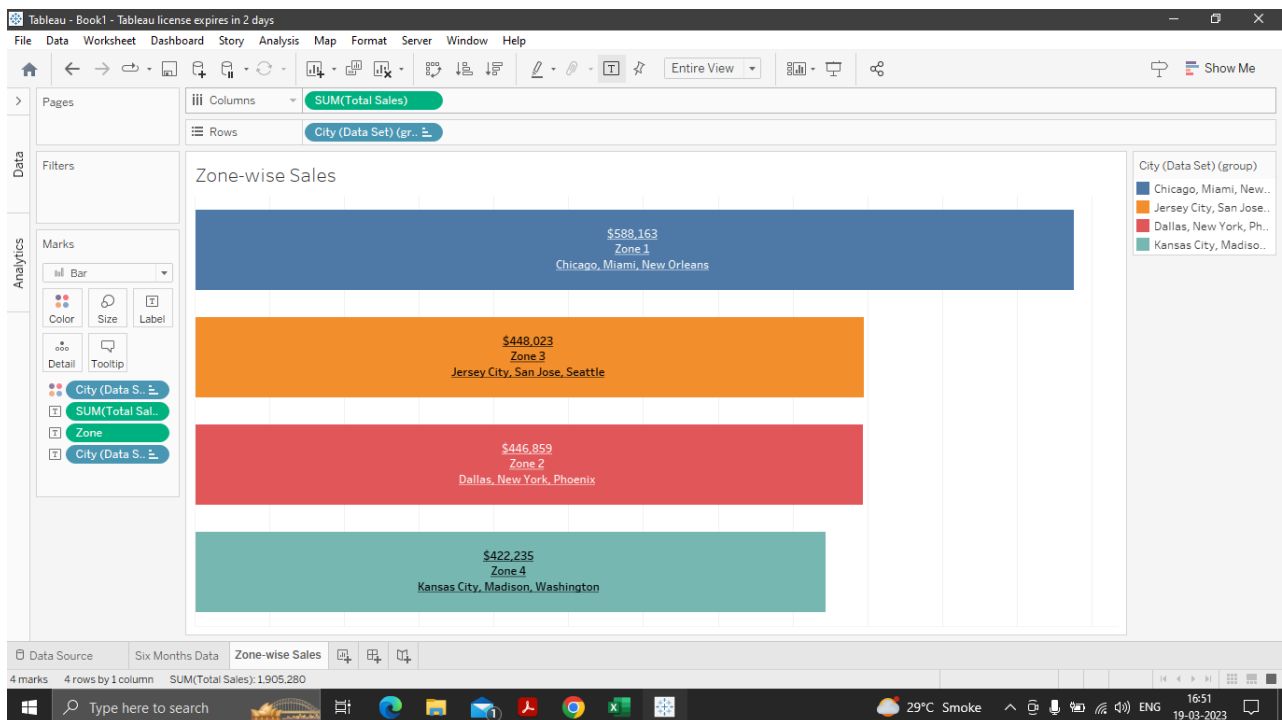
Table 1	Table 2	Table 3	Table 4
NAME	RSVD	NAME	NAME
TIME	19:00	TIME	TIME

Table 5	Table 6	Table 7	Table 8
RSVD	NAME	NAME	RSVD
19:45	TIME	TIME	20:30

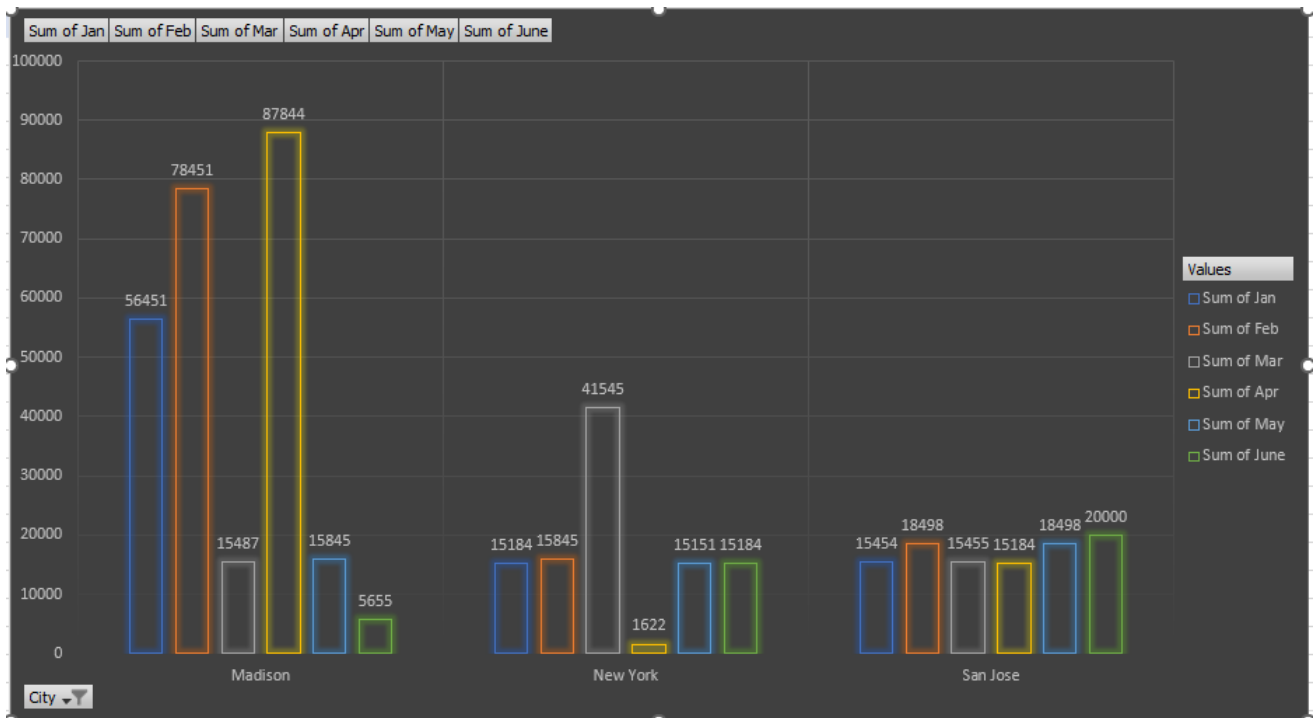
7. Create a dashboard for senior management to view sales of restaurants for the last six months. Make assumptions as appropriate and create the dashboard using your own mock data.



8. Create a dashboard to show which zone (Zone 1, 2, 3, or 4) has the highest sales. Make assumptions as appropriate and create the dashboard using your own mock data.



9. Create a bar graph for San Jose, Madison, and New York showing the sales. Label the chart drawn correctly so that senior management gets a clear report of sales.



10. Arrange the data above in excel in ascending and descending order for each city.



11. In the above chart for restaurant ID 1200789, find the sales for the month of June.

=VLOOKUP(A17,\$A\$1:\$H\$13,8,)

Restaurant ID	Month	Sales
1200789	June	5655
1200739	April	78787
1200352	January	15184

12. In the above chart for restaurant ID 1200739, find the sales for the month of April.

=VLOOKUP(A18,A1:\$H\$13,6,)

Restaurant ID	Month	Sales
1200789	June	5655
1200739	April	78787
1200352	January	15184

13. In the above chart for restaurant ID 1200352, find the sales for the month of January.

=VLOOKUP(A19,A2:\$H\$13,3,)

Restaurant ID	Month	Sales
1200789	June	5655
1200739	April	78787
1200352	January	15184