Problem Statement:

Employees at Cogent Labs in Daikanyama are always having trouble picking what to eat for lunch. They would like to have a Salesforce application which can help them pick a restaurant close to the office. Sometimes they will be tipped off about an awesome restaurant, so they would also like to be able to do a keyword search for restaurants in the area.

Solution:

Users of all the employees will be created in salesforce organization. They will be assigned to different profiles and roles.

a. Roles and Profiles:

I have created following roles and profiles:

Role	Profile
Organization Administrator	System Administrator
Team Lead	Team Lead Profile
Team Member	Team Member Profile

b. Objects ,Relationships and permissions:

I have created following objects:

1. Restaurant__c: It will save the records of API response selected by team member.
2. Team__c: Each team is assigned a team lead (lookup to User). It will store the venue of team for lunch (lookup to restaurant).
3. User: Employees working at cogent labs. Team lead/manager of employees are entered in manager field of user.

Following are the CRUD permissions of object for different profiles:

Object CRUD Permission	Profile
Team – Read, Edit Restaurant- Read, Edit	Team Lead Profile
Team- Read Restaurant- Create, Read	Team Member Profile

Team leads has read and edit permission for Team object, because, lead will decide venue for lunch and update the team record.

Team member has read permission for Team, because, member needs to know final venue for lunch.

Team leads has read and edit permission for Restaurant object, because, leads have to select one restaurant amongst all restaurants selected by his team members and mark that restaurant as selected.

Team members have create and read permission for Restaurant object because team members will save their selected restaurant into salesforce.

Following are the sharing settings:

Team	Public read only (Grant access using role hierarchy - yes)
Restaurant	Private (Grant access using role hierarchy - No)

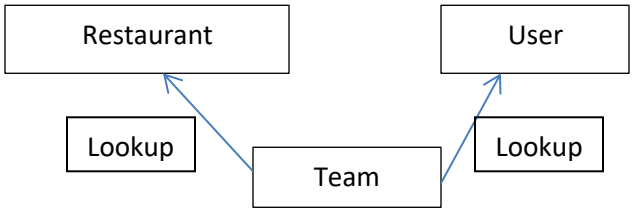
OWD for team is public read only because members should see the teams but not edit them.
OWD for restaurant is private because member should not see other member's choice of restaurant. Not granted access using role hierarchy because only team lead belonging to the same team as that of team member should see the records and not all team leads.

These requirements are taken care by creating following sharing rules:

1. Team sharing rule-> so that team leads can update the teams with selected venue.
2. Restaurant sharing rule->
   For this I have first created separate public groups for each team that contains team lead and team members.
   1. Salesforce Team-> has team lead and members in salesforce team.
   2. Java Team-> has team lead and members in java team.

   Restaurants created by any member in particular team's public group are shared with that group (team).

Object Relationship:



c. Configurations :

1. Authorized end point URL of foursquare places API in order to send request and get response from it.
2. Created custom labels to store 'client id, client secret and name of team lead and team members profile in order to avoid hard coding in apex code.
3. In order to fulfill the requirement of activating poll every day during lunch time and notifying members about it, I have written a schedulable apex class to send email

notifications to all team members. I have scheduled that class to run daily during lunch time.

d. Lightning App and Lightning Pages:

I have created a lightning app called “Lunch venue”. This app is default app for team lead, members and organization administrator. It consists of custom object tabs (Restaurant, team, report with different visibility) and following lightning app pages.

I have created following lightning app pages:

1. **RestaurantLocatorApp ->**
   - **Functionality**:

   Allows members to search for restaurant.User can perform following actions:

   1. User can search for restaurants within 1km from their office either by keyword search (enter keyword and press “Search within 1 KM”) or directly by clicking on “Search within 1KM” button.
      A randomly selected restaurant from API response will be displayed and user will have choice to either submit that restaurant or search for other restaurant.

   2. User can search for restaurants within 5km from their office by keyword search only (I.e. enter keyword and press “Search within 5 KM”).
      List of restaurants returned by API response will be displayed on page. User will select one restaurant amongst them and click on “submit”.

   3. Submit button will create a record for selected restaurant in salesforce.

   - **Visibility :**
     This page is visible only to team members. It is the default landing page for team members.

2. **Finalize Restaurant For Lunch:**
   - **Functionality:**
     Team lead will see the restaurants selected by his/her team members for today’s lunch. He/she will finalize one restaurant. That restaurant will get updated in team object record. Team object record indicates lunch venue of team selected by team lead.

As soon as lead submits the selected restaurant, a process builder will send an email notification to team members.

Process builder is written for "Team" object. Whenever the team object is updated with lunch venue, it will invoke an apex method. I have chosen apex method over OOTB email notification option because, mail should be triggered only to team members of respective team leads with the respective restaurant selected.

In OOTB, email would have been triggered to all team members irrespective of team lead.

- **Visibility:**
  This page is visible only to team leads. It is the default landing page for team leads.

3. Teams and Their Venues :

This page displays dashboard which shows lunch venue of all teams on daily basis to admin. And also displays list of restaurants selected by all team members on daily basis.

- **Visibility:**
  This page is visible only to organization admin. It is the default landing page for admins.

e. What I Left out :

1. I did not implemented functionality to display map of restaurants. I have tried it using lightning: map but it was not showing markers on the map. Due to time constraint I chose to skip it.
2. Some validations like a team member can select only one restaurant for one day (Currently member is able to create multiple records) and team lead should be able to finalize only one restaurant for a day. (This condition is taken care of but no validation message is displayed to user).

f. Additional Efforts :

1. The requirement was to update the dashboard when team lead selects restaurant and make that dashboard visible to all users. Instead of it I have chosen to send email notification to team members, because I thought instead of having user to go and manually check the dashboard, it would be good if an

email notification will pop up on their screen. It will not disturb their ongoing work.

2. I have taken care of the situation that if in future, organization admin wants to see history of lunch venue of each team. For this I have enabled field history tracking on “lunch venue” field and created a report for team history object.
   This report displays all the history of lunch venues selected by each team. Only admin has access to this report.

g. Another Approach:

1. Instead of using users as team members and team leads and creating custom object for team, we can use account as team and contacts as team members.
   We can create lightning community and send its link to each contact in mail. We need to purchase community license in order to create users from contacts that can access community. Because of license, I did not choose this approach.
2. Instead of having users to log in to salesforce org, we can also use apex sites. But as I have already developed my code in lightning components I have skipped it. I could have done it by embedding my components in visualforce pages if I had more time to spend on this project.

h. My linkedin profile:

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