**Food Order Center – Android Application.**

The system is a client server application, implemented in JDK 1.6.  
The system will provide services for restaurants, companies and companies' employees. It simplifies the process of money handling for both the companies and the restaurants.

**The system will have the following user types:**

**Administrators (admin)** – manage the system, admin can add companies and restaurant chains and delete them, can add additional users to the system with any privilege, or delete them.

**Restaurant Network Administrator (net-admin)** – may add or remove branches to the network, may add or remove branch admins for each of the branches.

**Restaurant Branch Administrator (net-branch-admin)** - mange his branch, may add or delete branch's employees (waiter), may change the menu of his branch, may add or remove type of available services: take away – for here, take away – to go, or delivery including the delivery radius from the current branch, can set the types of this restaurant - milk, meat, kosher.

**Restaurant Employee (waiter)** – May take orders from customers and deliver the meal to the costumer when its ready.

**Branch Chef (branch-chef)** – May see the list of all orders, and once a order is handled, he may check the order as handled.

**Company Administrator (company -admin)** - mange his company, may add or delete company branches, manage branches, change the company name.

**Company's Branch Admin (company-branch-admin)** – May add or remove company employees (emp), May add or remove restaurants and the acceptable services from this restaurant (for example, if restaurant offers both take away – sit here and delivery, cadmin may approve only delivery),  
can do an area based search for restaurants in order to add them to the company approved restaurant list, can change each of the employees' budget, can add or remove other company branch admins, check for each employee for how much he exceeded from his budget in order to remove it from his salary.

**Company Employee (emp)** – Can search for service based (take away, delivery, order-sits) restaurants, can search for location based approved restaurant, check the restaurant's menu and order according to his budget, can see other employee's orders for today, can see the history of his orders, and can order sit for himself+ coworkers.

**Server description**

The server is a servlet based server and is developed using the Google App Engine Java SDK. The server use Google Web Toolkit (GWT) in order to provide remote procedure calls (RPC) and web client UI.  
The server has a database – Google Data Store, and the database is accessed using the Java Data Object (JDO) interface with the implementation of Google Datastore JDO as provided as part of their SDK.

**Web Client description**

The web client is developed using GWT to access the web service and to show the UI.

Once the user goes to the web client URL, he will be asked to login using his google account user name and password.

User account has one privilege, and for user has many privileges, he will have the same number of accounts.

For each privilege the client has its own screen, and each screen will have different options.

A user without the appropriate access will not be able to access the screen nor do any operations which he doesn't have the privileges to.

**Admin main screen** will include at least these options:  
 - manage restaurant networks  
 - mange companies

When admin chooses 'manage restaurant networks', he should be provided with the option to add a new restaurant network or to search for a restaurant network, the search should be by its name, or from a list.  
Once he found the proper network, he may delete it, or open the net-admin screen.  
  
When admin chooses 'manage companies' he should be provided with the option to add a new company or to search for a company, the search should be by its name, or from a list.  
Once he found the proper company, he may delete it, or open the company-admin screen.

**Net-admin main screen** will include at least these options:

* Change network name
* Manage Menu
* Manage branches

When net-admin chooses 'change network name' he should be provided with the options to change the network name.

When net-admin chooses the option 'manage menu' – he should be provided with the following categories: 1st course, main course and desert. Once he chooses one of them he may add/remove/change courses, its description and its price.

When net-admin chooses to 'manage branches' – he should be provide with the option to add a new branch based on its location, search for a branch from a list, and enter each of the branches branch-admin main screen, or remove the found branch.  
When a new branch is created it inherits the network menu.

**Branch-admin main screen** will include at least these options:

* Manage branch options
* Manage waiters
* Manage menu
* Manage chefs
* Check handled orders

When branch-admin chooses the option 'manage branch options' a new screen will appear and will provide branch-admin the following options: multiple select of the provided services from a list: take away – to go, take away – for here, delivery including the radius of delivery,  
multiple select the type of this branch – milk, meat, kosher.

When branch-admin chooses the options 'manage waiters' – he should be provided with the option to add or remove waiters.

When branch-admin chooses the option 'manage menu' – he should be provided with the following categories: 1st course, main course and desert. Once he chooses one of them he may add/remove/change courses, its description and its price.  
He may also reset the menu to the network updated menu.

When branch-admin chooses the option 'manage chefs' – he should be provided with the branch-chef main screen.

When branch-admin chooses the option 'check handled orders' – he should be provided the list of all the companies which make orders on these dates, for each company he will see the courses ordered for each day and the total amount of money he needs to collect, then he can print this list.

**Branch-chef main screen** – will include at least these options:

* Check all orders
* Check un-handled orders

When branch-cheff chooses the option 'check for orders' – he shall be provided with the list of all the orders so far, including the option to mark an order as already handled. When there is a new order, the screen will be updated with the new order. He can mark an order as handled (it means it was served to the waiters/ host).

When branch-cheff chooses the option 'check un-handled orders' – he shall be provided with the list of all the un-handled orders, including the option to mark an order as already handled. When there is a new order, the screen will be updated with the new order. He can mark an order as handled (it means it was served to the waiters/ host).

**Company-admin main screen** – will include at least these options:

* Change company name
* Manage company branches

When company-admin chooses 'change company name' he should be provided with the options to change the company name.

When company-admin chooses the option 'manage company branches' he shall be provided with the option to search for all the branches of his company, he can delete some of them, add new branches based on its locations, and enter each of the branches company-branch-admin main screen.

**Company-branch-admin main screen** – will include at least these options:

* Manage employees
* Manage service types
* Manage base budget
* Check user orders

When company-branch-admin chooses the option 'manage employees' – he should be provided with the option to add or remove employees, and he may search for an employee by its name, and change his custom budget (delta from the base budget).

When company-branch-admin chooses 'Manage service type' he should be provided with a multiple selection of which of the service types he wants to make acceptable for his employees, the service types are – take away – to go, take away – for here, delivery.

When company-branch-admin chooses 'Check user orders' he should be provided with an option to select start and end dates, then he will be provided with 2 options: by user or by branch, when selecting the by user, he will get a list of all the users with each of the users orders for each day, each record of the list will show how much the employee exceeded his budget, and it will also show the total budget exceeded by this employ. When he chooses by branch he gets all the orders ordered by branch and can see how much money he should pay for this branch for these dates.

**Android Client description**

The client is an Android client using the Google Android SDK platform and developed on API level 10 – to support most of the clients available in the market, and must be user friendly for all the available users.

Once the user opens the app, he will login using his Google ID and password / or if he was already logged in, it will take him to the main screen.

User account has one privilege, and for user has many privileges, he will have the same number of accounts.

For each privilege the client has its own screen, and each screen will have different options.

A user without the appropriate access will not be able to access the screen nor do any operations which he doesn't have the privileges to.

**Waiter main screen** – will include at least these buttons:

* Handle table

When waiter chooses 'Handle table' he should be able to provide the table number.  
After that, he can see all the users on the table (if they ordered) or add/remove new users to the table.  
When the waiter chooses one of the users on the table, he gets the emp menu screen, and can add courses.

**Emp main screen** – will include at least these buttons:

* Search for restaurant
* My History
* My coworkers

When emp chooses 'search for restaurant' a new screen will appear, this screen will include the following options:  
'name' with a text field to enter the name, 'food type' with multi select meat, milk, kosher or any (default is any), 'service type' with multi select take-away, delivery or order-sits.  
The user may fill all the fields or some of the fields and hit the search button.  
once the search is done a list with all the found branches will appear on the screen, the user may select one of them and a menu screen will be opened, the user may change the service type even if he is already on the menu – of course if this network branch allows it, and if its company branch allows it, once he selects a course on the menu, it will be added to his cart with the restaurant's name, appropriate service type and its price.  
The emp should be able to change the screen to its cart and back whenever he wants.  
Once the user has finished filling his cart he can switch to the cart's screen and choose 'buy cart', 'empty cart' or 'change service type'.  
If the emp tries to add to cart from different restaurants, a popup message should appear telling him that he can't and he should be able to choose: 'abort' or 'empty cart and add new item'.

If the user chooses to change the service type to order-sits a new screen will appear, allowing him to add all the users from his company which will join him,  
then he can see the times available to get a table for the sitting.  
Once he adds all the users, a notification will appear to all of them and a invitation will be delivered to the restaurant. Once the restaurant approves it, all the users of this reservation will get a notification confirming their table.

When emp chooses 'My History' a new screen will appear, this screen will include a list of all of the last 10 previous purchases, if there are more than 10 purchases, a next, previous buttons should allow the user to see the whole list, he can save this list to his gmail.

When emp chooses 'My coworkers' a new screen will appear, on this screen he can search for a coworker, by typing its name and see where this coworker goes and what he ordered.