Riverside Sharing Alliance Coordination System

The Riverside Sharing Alliance Coordination System (RSACS) allows various providers of shelter, clothing and housing to coordinate their activities, reserve resources, report availability of bunks/rooms/food and request items from food banks. This database system allows users who work at soup kitchens, food pantries, food banks and shelters to more effectively provide service to clients, see available donations stored at food banks and make requests for them. In addition, it provides real-time reports on the total capacity of the Riverside Sharing Alliance which can be used for planning and fundraising purposes. It also allows unauthenticated clients with access to a web capable device to pull up real-time reports on available beds or meals.

Users

In the RSACS system, a "user" is an employee or volunteer at a site that has a login account (username/password) and is tasked with updating the information in the system. Each user is associated with a single "site" over which they have administrative control. (A larger site may have multiple users, all sharing administrative control.) In addition to the username/password, the RSACS system stores the full name of the user and an email address.

Your system does not need to have the capability to manage users (add/edit/delete) as you may assume that a database administrator will enter and update any user data. However, your system will need to use the user data to authenticate users and only allow them to make modifications to the data for the specific site they are associated with.

Users at any site with a food pantry, shelter or soup kitchen may use the system to request items from one or more food banks. Users at a site with a food bank can approve or edit requests for their site's food bank.

Be sure to not confuse "clients", who make use of soup kitchens, food pantries, and shelters with "users" of the RSACS database, who work at the sites.

Sites

A site consists of a short name, a physical location with a street address, city, state and zip code and a primary contact phone number. The RSACS stores a short name to identify each site on-screen and in reports. Generally this name will be unique, but your system should not depend upon uniqueness and should not use this field as a database key.

A site may provide one or more services of different types at the same location. (e.g., be both a shelter and soup kitchen) If a site provides multiple services, all site users have full control of all data for all services. You may assume that the database administrator will load the data for your sites and maintain it, so your RSACS does not need to implement a management interface for sites, but may need to look up information when building reports about various sites.

However, users of a site are free to add additional services, or modify existing services, and your system must allow them to create, delete and edit any of the following services for their site (only). A site will have only one service of a particular type, so a site may have no more than 4 services (Shelter, Soup Kitchen, Food Pantry, Food Bank). [Users should not be able to remove the last service associated with

their site, instead they will need to request that the database administrator removes the entire site for them.]

Services

A site must provide at least one service to be listed in the RSACS. Many sites may provide multiple services. The four service categories are:

- Shelter Provides room or bunks along with bathroom facilities for homeless families or individuals. Many, but not all, have an associated soup kitchen at the same site.
- Soup Kitchen Provides pre-cooked meals and a place to eat them.
- Food Pantry Provides food items to be taken home and prepared/consumed off-site.
- Food Bank Warehouse that categorizes, stores, and re-ships food donations. Users from other
 sites may use the RSACS to review inventory and request items to stock their Food Pantries or Soup
 Kitchens. Clients do not visit or use food banks directly, although they may benefit from them
 indirectly via Soup Kitchens and Food Pantries.

Each of the above services have their own specialized attributes stored in the database.

Shelters, Soup Kitchens, and Food Pantries have listed a description string, hours of operation, and conditions for use. The description string typically includes the facility name, which may be different or a longer form of the site name. The hours of operation describes when the service is open (e.g. a shelter may be open "7pm-7am every day", while a food pantry may be open "Wednesdays 2-6pm, Fridays 9am-12") The conditions describe any documentation requirements or conditions placed on use of the service by clients (e.g. "Food Pantry Documentation Required: Picture ID/driver license, social security card, birth certificate, proof of residence or lease, proof of income", or "When the weather is below 40 degrees and if the client is not intoxicated.")

In addition, a soup kitchen has a count of total seats available, which is typically set to their total seating capacity, but may be temporarily lowered to a smaller number by a user associated with the site of the Soup Kitchen if they know they will not be able to serve their full capacity on a particular day due to labor or food shortages. (These seat count numbers are not typically changed on a day to day basis, unlike bunk capacity at shelters.)

Shelters

Shelters keep a much more accurate track of their available bunk count over the course of an evening. As clients check into shelters a user of the RSACS will use the system to review their usage log (making sure they qualify based upon that shelters' conditions) and reduce the available bunk count as appropriate, so these counts are intended to update in real-time so that other sites or web based users can determine where bunks are still available. Shelters can have three types of bunks, based upon the type of rooms they have: Male only, Female only, or mixed. Some shelters will only have one type of bunk available (woman's shelter, men's shelter, or a shelter with only one large mixed gender room.) Bunks are not reserved, and have no waitlist.

In addition to bunks, shelters may have a number of rooms suitable for family use. Although the system does keep track of available family rooms, the number of available rooms rarely rises above zero for most shelters. The RSACS allows a site user to modify the room available number independently of the

room waitlist. In many cases, when a family moves out of a room, the site user will leave the availability number at zero and immediately take the top client off of the room waitlist.

Each shelter has its own room waitlist where users can keep track of client families who have requested a room. A waitlist entry consists of a link to a specific client entry in the RSACS who serves as the "head of household". Users can add a client to the waitlist, take a client off the waitlist, or modify the position/ranking of a client on a waitlist. (The default ranking is first come first served.)

Clients can be waitlisted at multiple different shelters, but a user who is associated with each shelter will need to add them to each additional waitlist. A user of site "A" cannot view or modify the room waitlist at site "B", but will be able to see the size of the waitlist on all sites by viewing the "bed/room report" discussed below, and if they view the "client report" for a specific client they will be able to see a list of all the shelters where the client is currently waitlisted.

Food Banks

Food Banks are the only type of service that a site provides to other sites/users, and not directly to clients. A Food Bank accepts bulk donations, categorizes the items and enters them into the RSACS database, and stores them until requested. When an item is requested, the request appears in the food banks' "pending requests" report, and a user of that site can accept the request (reducing their inventory), reduce the request (by providing fewer than the requested number of items), or deny the request (by providing zero items).

All users of the RSACS system can search for items and put in a request for one or more (up to the maximum amount available) of them. These requests queue up until a user from that food bank processes them by looking at their "pending request" report. If a request is accepted as-is, the number of items in the food bank is reduced by that number. If a request is denied, the number of items provided will be zero and the Food Bank inventory will not change. If a request is only partially fulfilled, only that number of items will be removed from the Food Bank inventory.

The RSACS system does not have to manage transfers of items between Food Banks. All requested items go directly from a Food Bank to soup kitchens, shelters, or food pantries and are consumed by clients. Soup kitchens, Food Pantries, and Shelters do not track their "working inventory" in the RSACS system, only Food Banks will "add" items to their own inventory due to donations or delete items due to fulfilled requests. Each Food Bank has its own independent inventory.

Items

Items that are donated to a food bank have a name, number of units (count of bags, boxes, cartons, etc), and expiration date (or 01/01/9999 for non-expiring items). Items are classified into two main categories (Food or Supplies) and each item has a storage type (Dry Good, Refrigerated, Frozen). Supplies are categorized into the following four categories: Personal hygiene, Clothing, Shelter, other. Foods are categorized into the following six categories: Vegetables, nuts/grains/beans, Meat/seafood, Dairy/eggs, Sauce/Condiment/Seasoning, Juice/Drink.

The RSA defines a "meal" as one unit each of a Vegetable, nuts/grains/beans, and Meat/seafood OR Dairy/eggs. So a meal could consist of "Carrots, Hamburger Bun, Ground Beef" or "Potatoes, Biscuit, Eggs". This becomes important when generating the "meals remaining" report.

Any user at a site with a Food Bank will need access to a form where they can add inventory into the RSACS as it is received.

Requests

A request for an item will have a source site / Food Bank, as well as a destination User (who made the request). It will be for a specific item in the inventory, with a specific number requested. It can be in "pending" status (if it has not been acted upon by a user from the source food bank) or a "closed" status if the request was fully or partially fulfilled. Note that a request can be fulfilled with a smaller number of items (as few as zero!) than requested, so the request must keep track of the number of items requested while in pending status, and the number of items provided once it is in closed status. Note that it is possible for an item to be removed from the RSACS database (because its stock quantity reached zero) while a pending request for that item still exists. In this case, the request should be marked as closed with zero items provided.

Clients

A client is a person who makes use of a service provided by the RSA. Users at any RSA site can enroll a client by adding them to the RSACS. A client entry in the database consists of their full name, an ID number / Description field "e.g.: Georgia Driver's License: 9813432" or "FL Birth Certificate: 312432", and an optional contact phone number (if they have a phone). Clients cannot be deleted by users, but their name and description can be modified. If a client's name or description field is modified, the original name/description field is stored in a "field modified" log entry.

Associated with each client is a log consisting primarily of services used, but that also shows any modifications to the client name/description information. As clients make use of shelters, soup kitchens and food pantries, the users at those sites will enter a log entry as part of the check-in process, which consists of a date/time stamp, the site, and a textual description of the service used and any extra notes.

You may implement the RSACS to automatically populate the date/time and part of the description (for example, if a user checks a client into a shelter, your user interface could fill in the date/time, Site information, and prepend "Male Bunk Check-in" as a default description, while allowing the user to add extra notes "late check-in" to the end of the description string. Alternatively, you may require each user to provide the full description for each log entry.

Reports

The RSACS can generate two types of reports. The first is a "web report" which can be pulled up by anyone, with no user authentication. The intention is that the "web reports" will be provided by a website to assist the public in understanding available housing options and food supply levels. The RSA website will display the available bunks/rooms and meals remaining reports to anyone.

Available Bunks/Rooms

The available bunks/rooms report provides a list of all shelters that have available bunks or rooms. (shelters with zero availability are not shown). For each shelter, it displays the name, site location, phone number, hours of operation and conditions, as well as the number of male/female/mixed bunks

and rooms available. If no bunks/rooms are available throughout the entire RSA system, a message "Sorry, all shelters are currently at maximum capacity." should be shown instead.

Meals Remaining

This report shows a simple number of the meals remaining in inventory in all food banks in the RSA system. (It does not consider food already at soup kitchens or food pantries and no longer in the food bank inventory system.) In addition to listing the maximum number of meals that can be served using current food bank inventory, the report explains what type of donations are most needed to provide more meals (Either vegetables, nuts/grains/beans, or one of Meat/seafood or Dairy/eggs.). This report is used for fund-raising and donation solicitation purposes, and is made available to local newscasts, government officials, and the general public via the web.

All other reports are only provided to logged in users. Many of these "reports" will be integrated into your user interface so that users can move from the data presented to other related actions.

Client Search / Report

When a client comes to a service provider, the user who greets them will ask for their name or ID number, and enter that number/name into the RSACS to find their client record. To protect client privacy, users are never shown a full list of all clients. They must provide a search string that matches at least one client in the database, but it may NOT match more than 5 clients in the database. So, if a user searched for just the letter "S" the system would NOT show all clients with an S in their name.

The user would instead be prompted to enter a more unique search term. If the user uses a search key that provides fewer than 5 clients, a list of the client's names and descriptions are shown so that the user can disambiguate between clients with a similar name or search key. Once the user has uniquely identified the client the full client report would be shown, which shows the client's name/description along with the log of services used (sorted by date, newest entry first) so far. The client report will also show the shelter room wait-lists that the client is currently on, if any.

From this screen the user could modify the client's information, add a new service log entry (check them into a bunk/room, provide a meal, etc), or place them on the user's site room waitlist.

Wait-list Report

If the user is associated with a site that has a Shelter, they can view their room wait-list report. If there are no clients on the wait-list the report should state that the waitlist is empty. Otherwise it should display the wait-list in rank order. From this screen the user can delete a wait-list entry, or move a client up or down in the waitlist.

Item Search / Report

The user can search for an item from the inventory of all Food Banks, or a single specific food bank. By using wild cards, the user can view all inventory, or they can view inventory based upon filters of expiration date, storage type, Food/Supply, individual category within Foods or Supplies, or even a keyword search based upon the item name / description. When they see an item they need, they can request a set number of those items. (Each request will be for a specific number of a single item, although the user at the food bank completing each request may batch them together into a single box

or pallet for delivery, the RSACS does not know about boxes, pallets, etc.) A user should NOT be able to request an item from the Food Bank associated with their site, even though they can see items from their site. (In this case, the user should simply reduce the number available when they take the item from the Food Bank and put it into use in another service, see below.)

A special case exists with the item search report. If the report shows an item that is "owned" by the Food Bank associated with the site that the current user is associated with, the user will be able to modify the numbers of that the item (for example, if some has been thrown out due to reaching its expiration date or gotten damaged or lost.) If at any time the count of an item reaches zero, its record should be removed from inventory completely.

Outstanding Requests Report

If a user is associated with a site that has a Food Bank, they can view a report of all outstanding requests. The report can be sorted by storage type, category or sub-category, or by quantity of items requested. (Many food banks will service small requests first, and then service as much of any large requests as they have available items remaining.) If more than one request for a particular item exists such that the total number of items requested is greater than the total number available, the report should indicate this shortfall in inventory to the user by highlighting numbers in red or some other suitable method. From the outstanding requests screen, the user should be able to mark the request fulfilled in full, or reduce the total number of items provided to some smaller number (possibly zero) and then mark it partially fulfilled or unable to be fulfilled.

The RSACS should automatically reduce inventory of items as requests are marked fulfilled. If an inventory item reaches zero quantity, its record will be removed from the system.

Request Status Report

If a user has made requests for items, this report will show the requests as well as their status (pending or closed). A closed request will also show the actual number of items that was provided (possibly zero). A user can cancel any of their outstanding requests from this screen which will remove it from the system.

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Version History:

Version	Date	Notes:
1.00	2/5/2018	Initial release brought forward from SP 2017 course.