

Final Report

For Welcome Housing

Software Solution for Information Management



Version 1

Team 2.0

Community Outreach

Faculty of Computer Science

Dalhousie University

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Project Summary

Welcome Housing is a Non-Profit organization that helps single individuals in Halifax obtain and maintain safe housing by offering various services such as financial advising, eviction prevention, debt recovery and housing tenants. The organization uses mostly paper documents, and excel documents to handle their company data and does not have a centralized system to control their records. Team 2.0 built the organization a Client Relationship Management Software (CRM) to accommodate their needs for information management, task management and report analysis.

Issue Description

With Welcome Housing using mostly paper records to store, access and utilize their information, each department controls their own documents, and the organization naturally creates data silos. Thus allowing budgeting, advocating for their clients and providing access to their services to be increasingly challenging. Their true scope and impact in the community is difficult to represent without a system to host and maintain their data.



Figure 1. Data Silos of Welcome Housing programs. Shows no connection of data/processes between programs, causes duplicate info

Solution

We built a CRM Software, with Salesforce NonProfit Success Pack (SalesForce NPSP), to provide Welcome Housing a program that can track client interactions and relationship(s) to the organization. The following benefits include:

- A large variety of pre-made features and apps
- Calendar Integration
- Detailed Report Generator
- 10 free subscriptions
- A single software system all 3 programs can use (Trusteeship, Housing Service, Tenants)
- Resources for Maintenance/Suggestions (CloudKettle, Salesforce NPSP Forums, User Manual)



Figure 2. Predicted Data Silos of Welcome Housing programs after CRM integration. Shows connection of data/processes between programs

Comparison of Planned vs. Actual

Minimum Functionality/Content (C)

Function	Status
Client Profile with standardized fields (name, age, phone, address etc)	Complete
Track client interactions and dates with calendar system	Partial

Expected Functionality/Content (B)

Function	Status
Dashboard for administrator/program heads (Housing Service Workers, Tenants, and Trustee Service Program)	Complete
Receive 2 in person training sessions by team	In Progress
Have 1 system all 3 programs/groups can use (Housing Service Workers, Tenants, and Trustee Service Program)	Complete
Connect features with apps such as Google Calendar, Task Manager, Report Analyzer etc	Partial
Document Digitizer (provide documentation on software)	Complete
Provide Integration Service (integrate software into organization's hardware)	In Progress

Bonus Functionality/Content (A)

Function	Status
Connect individuals and events with affiliations	Complete
Provide Training Documentation that includes: <ul style="list-style-type: none"> - Material from testing sessions - Detailed process explanations - creating a report, uploading files to specific object(s) etc, - Information about more ways to find help - online resources, paid resources etc 	Complete

Figure 3: Deliverable of Final Version (Version 3) of Project Contract

Original Scope

Custom objects within Salesforce was essential to our original scope for. The Entity Relation Diagram (ERD) in Figure 4, created in mid October, was a simplified system tailored to Welcome Housing's needs of tracking client interactions and relationships through the bill and rent objects.

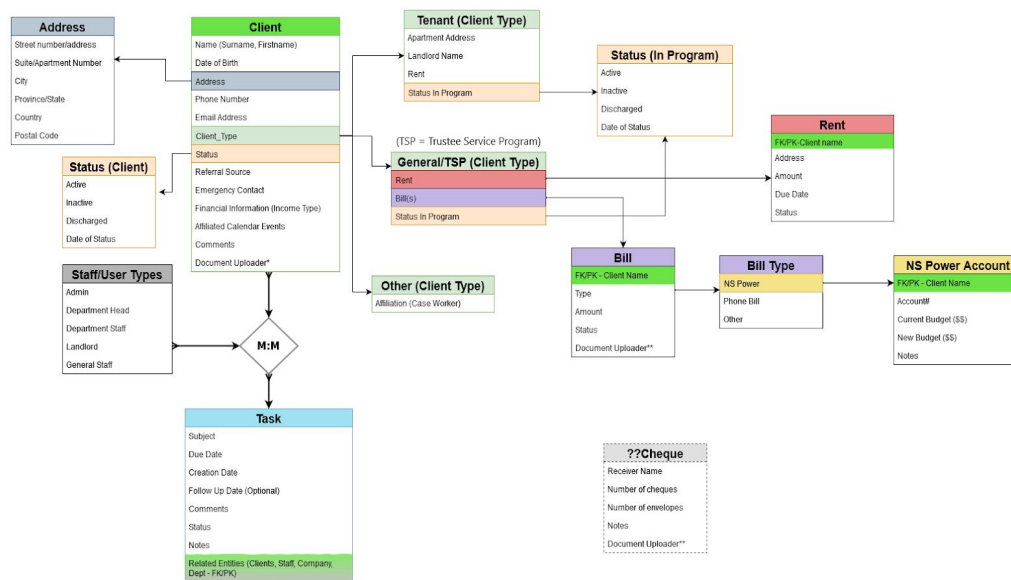


Figure 4. ERD created October 18, 2019

While Salesforce NPSP contained pre-built objects and features, we found the original objects to have more information than needed and centric to nonprofits that accept donations. Since Welcome Housing does not accept donations or organize their volunteers in this way, we felt the extra information would create a confusing interface and we attempted to use the premade objects only where necessary. In Figures 5 and 6, the contact object, which is a premade Salesforce NPSP object, includes donor information and volunteer information, respectively.

The screenshot shows the 'Donation Information' form in the npsp Salesforce interface. The form is divided into two main sections: 'Donation Information' and 'Donation Totals'. The 'Donation Information' section includes fields for 'First Gift Date', 'Last Gift Amount', 'Last Gift Date', 'Largest Gift', 'Average Gift', 'Smallest Gift', 'Best Gift Year', and 'Best Gift Year Total'. The 'Donation Totals' section includes fields for 'Total Gifts', 'Total Number of Gifts', 'Total Gifts Last N Days', 'Number of Gifts Last N Days', 'Total Gifts This Year', 'Number of Gifts This Year', 'Total Gifts Last Year', and 'Number of Gifts Last Year'. The form is set against a background of the Salesforce interface, showing a list of contacts and a sidebar with navigation options.

Figure 5. Donor Information fields for contact object

The screenshot shows the 'Volunteer Information' form in the npsp Salesforce interface. The form is divided into two main sections: 'Volunteer Information' and 'Volunteer Skills'. The 'Volunteer Information' section includes fields for 'Volunteer Status', 'Volunteer Organization', 'Volunteer Last Web Signup Date', and 'Volunteer Auto-Reminder Email Opt Out'. The 'Volunteer Skills' section includes a list of skills (Computer usage, Manual labor, Marketing, Fundraising, Event Planning, Landscaping) and a 'Volunteer Availability' section. The form is set against a background of the Salesforce interface, showing a list of contacts and a sidebar with navigation options.

Figure 6. Volunteer Information fields for contact object

The issues with the first ERD arose when we were unable to form various relationships with our custom objects through Salesforce that would allow for seamless communication between the 3 program of Welcome Housing. We were unable to form these relationships because we did not have access to a Developer License of Salesforce

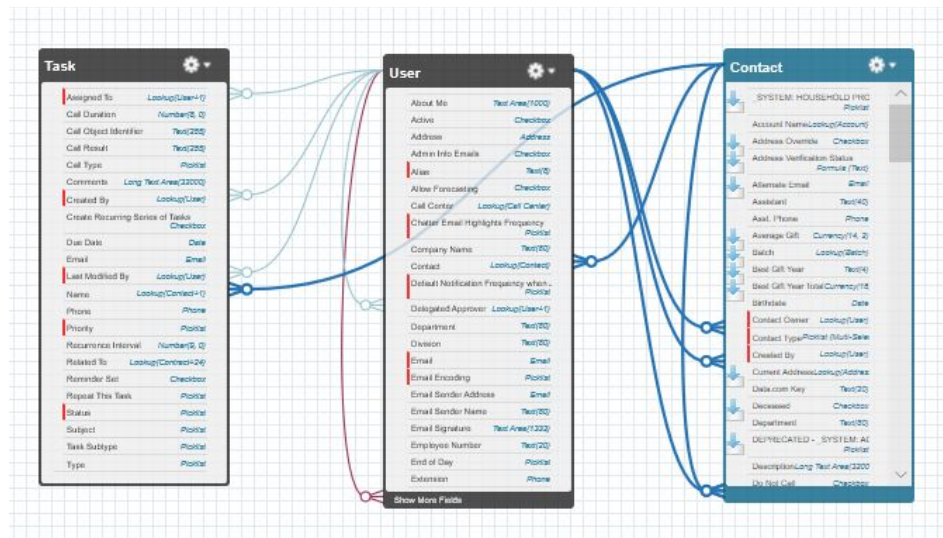


Figure 7. Final Entity Relationship Diagram

Our final ERD, in Figure 7, was more consistent with the premade schema in Salesforce such that 'Contact' object took the place of our 'Client' object. As a premade object, the Contact object allowed for more functionality and integration within Salesforce. We were able to edit the Contact object to make contact types and included a type for each program.

Features

Contact

A contact is any client that utilizes Welcome Housing's Services. Contacts have a name, date of birth, address, phone number, type. Contact types are: Housing Service, Tenant, Trustee Service, and Other.

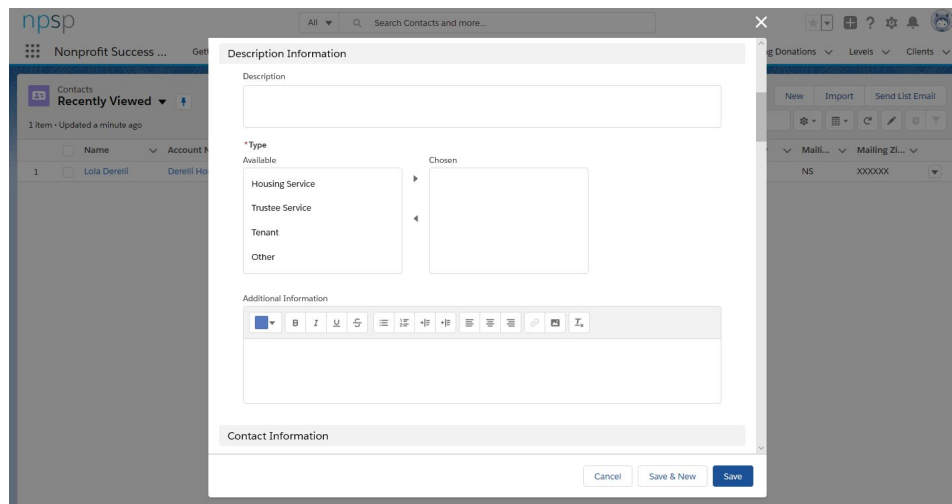
The image is a screenshot of a Salesforce interface for a nonprofit organization named 'npsp'. A modal window titled 'Description Information' is open over a list of contacts. The modal contains a 'Description' text area, a 'Type' section with 'Available' and 'Chosen' lists, an 'Additional Information' rich text editor, and a 'Contact Information' section at the bottom. The background shows a list of contacts with columns for Name, Account, and Address.

Figure 8. Contact Type and Rich Text Information

Task

A task records any interaction that a contact may have with the Welcome Housing. A task had a subject, associated staff member(s), type, date created, due date, status and priority. Tasks can also be used to record bill and rent collection. Task types include bill, rent, and general meetings.

Report Generator

The report generator can generate reports on any object in Salesforce. The reports are completely customizable and can be displayed in list format or chart format.

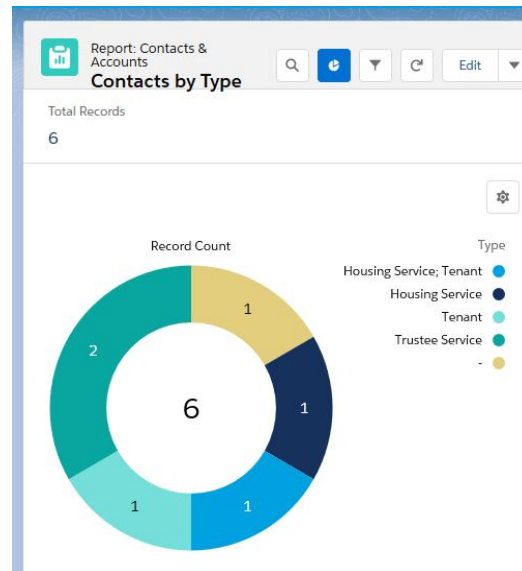


Figure 9. Report Generator

Document Uploader

Documents, images, and files of any type are able to be uploaded to a specific contact.

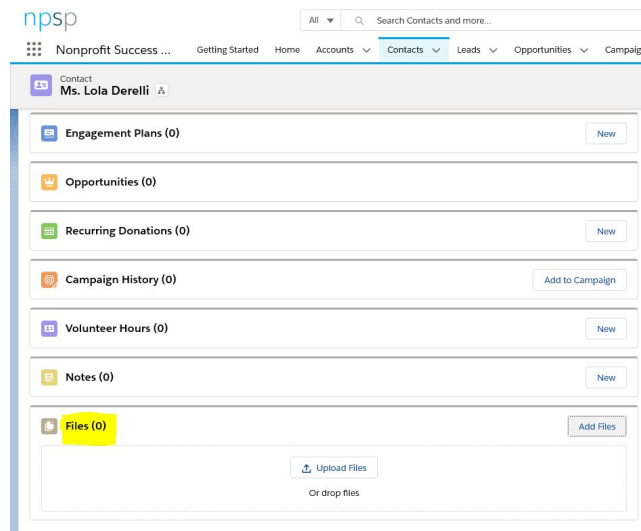


Figure 10. Document Uploader

Outstanding Issues

We were unable to integrate Google Calendar into the project to accommodate Welcome Housing's current use of Google Calendar; however, we are able to track tasks in a Salesforce calendar. Through research, we learned that Google Calendar integration required some coding through the Salesforce coding language, Apex. While there are some apps available to integrate Google Calendar to Salesforce, all required some inf of payment to access their services. If there were an increase in the organization's budget, we recommend using Zapier, a web-based service that allows for integration and helps the user automatically create or update leads, contacts, or opportunities from emails, online forms, etc. (Starter fee at \$19.99 per month) I.e. Google Calendar, Gmail, Google Sheets.

Maintenance Resources

Cloud Kettle

CloudKettle, a local Business to Business (B2B) organization that specializes in Salesforce has agreed to meet and discuss their ability to assist Welcome Housing maintain Salesforce once integrated. CloudKettle is a Pledge 1% organization: They pledge 1% of their resources, or 25 hours, to nonprofit organizations per year. CloudKettle's offers the following cloud services:

- Security of cloud data in motion
- Performance Optimization and Salesforce functionality
- Free resources on Salesforce integration
- Consulting

Out point of contact is Eilidh Lindsay-Sinclair (Eilidh@CloudKettle.com).

Address:

CloudKettle

1888 Brunswick St

Suite 900

Halifax, Nova Scotia

User Manual

NPSP Subscription Information

Organization Name: Welcome Housing

Salesforce.com Organization ID: 00D4T000000GKjW

Organization Edition: Enterprise Edition

Instance: NA136

Server: na136.salesforce.com

10 Free NPSP Licenses

10 Free Marketing Licenses

10 Free Service Cloud Licenses

More information found under Company Information in Setup.

Features

Contact

A contact is any client that utilizes Welcome Housing's Services. Contacts have a name, date of birth, address, phone number, type. Contact types are: Housing Service, Tenant, Trustee Service, and Other.

Create a contact by hovering over the down arrow on the 'Contacts' tab and selecting 'New Contact.' Enter the required information including name, date of birth, address, and client type.

Task

A task records any interaction that a contact may have with the Welcome Housing. A task has a subject, associated staff member(s), type, date created, due date, status and priority. Tasks can also be used to record bill and rent collection. Task types include bill, rent, and general meetings.

Create a task by clicking the 9 clustered dots at the top left near the ‘Nonprofit Success Pack’ label. Locate ‘Task’ by scrolling alphabetically or by searching ‘Task.’ Enter the required information including Subject, Due Date, type, priority and Affiliations.

Report Generator

The report generator can generate reports on any object in Salesforce. The reports are completely customizable and can be displayed in list format or chart format.

Create a report by hovering over the down arrow of the ‘Reports’ tab and select ‘New Report.’ Choose the object group that the data will be derived from. Select the group columns and filters to best create the report desired. Choose a graph or chart to represent the data at the top right corner. Remember to include a name and save.

Document Uploader

Documents, images, and files of any type are able to be uploaded to a specific contact.

Upload documents to a contact by selecting the specific contact, or head to the contact page.

Choose Related, then scroll to the bottom and choose ‘Files.’ View, select or upload files here.

Setup View

Setup is where the Salesforce software can be edited and manipulated. If an object needs to be updated in anyway, or if information about the organization needs to be changed, one can access the Setup to complete this. Setup icon is a ‘gear’ with a lightning rod in the middle and can be found at the top right corner of the interface. It is recommended to open Setup in a new tab.

Forums/Other Resources

Power of Us Program (PowerOfUs.force.com)

The Power of Us program allows for Nonprofits and Educational Institutions to access Salesforce through NPSP with 10 free subscriptions, and allows for other discounts on Salesforce products. The program also provides training resources, and engagements or connections with other nonprofits and educational institutions using Salesforce through the Power of Us Hub.

SalesForce General Forum and Trailblazer (Success.SalesForce.com)

Trailblazer is a Salesforce online community that provides training resources, and a forum for all Salesforce related issues. The training resources are very extensive and detailed. There are often Salesforce certified developers who provide answers to topics.

Testing Materials

3-4 Welcome Housing employees will be guided to test the software.

SalesForce NPSP Testing Checklist			
Tested By	Welcome Housing Employees	Date	Dec 4, 2019
Application Name	SalesForce NonProfit Success Pack (NPSP)		
Procedure	Directions/Hints	Outcome (Pass/Fail)	Notes
Basic Functionality			
Create 5 contacts	Enter in all the required fields, varying the contact type		
Delete 1 contact	Delete contact created above or other		
Schedule a meeting with a contact	Task types include meetings, bills, rent, other, etc		
Create a power bill for a contact	Remember to add a due date ; Task types include meetings, bills, rent, other, etc		
Create a report of client type	Type can be selected from the group column		
View the report of client types			
Create 3 new bills	Remember to add a due date ; Task types include meetings, bills, rent, other, etc		
Create 2 new rent tasks	Remember to add a due date ; Task types include meetings, bills, rent, other, etc		
View the total ongoing tasks	Sort by due date		

Figure 11. Chart to record the usability of the software

List of Deliverables

SalesForce NPSP Licenses

Includes features of software listed above, and integration of login information.

Final Report

Includes the details of project, features, training materials, maintenance resources such as CloudKettle contact information and software user manual. The User Manual contains information on where to locate information, how to create, access and handle objects or features in SalesForce.


Team Member Signatures

Signing this document indicates that team members have read and agreed upon the contents of this document.

Name	Role	Signature	Date
Max Chircop	Developer		December 1, 2019
Christina Cheung	Developer		December 1, 2019
Serena Jackson	Developer		December 1, 2019
Mitadru Mitra (Drue)	Developer		December 1, 2019
Renayre Forbes	Leader		December 1, 2019

Client Signature

Signing this document indicates the client has read and agreed upon the contents of this document.

Name	Role	Signature	Date
Diana Devlin	Executive Director of Welcome Housing		December 8, 2019