

INTRODUCTION

- Meals on Wheels is a non-profit organization based out of US and serves nutritious food to people who are in need. Their mission statement is “Our mission is to organize, plan and administer the service of delivering nutritious meals, nutrition education and resource assistance to people living in our community unable to do so for themselves.” They have over two million volunteers who support this cause. Meals on Wheels manages the volunteer database using MOW Scheduler.

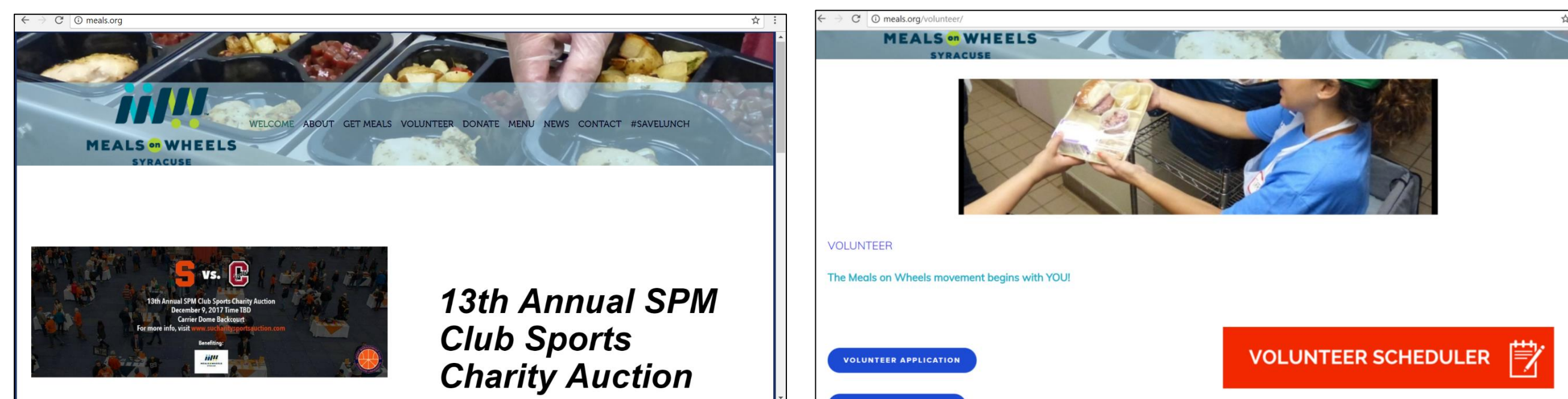


Fig. 1. Actual Meals on Wheels Website

PROBLEM

- The first issue is regarding contacting volunteers using the exported volunteer detail sheet exported from Volunteer Credit tab. This document does not contain volunteer’s mailing or email address. To contact them, the MOW management must go through the entire database of volunteers and find their contact. This is a time-consuming task and needs a better approach.
- There is no facility available for the Meals on Wheels Management to send gratitude email to all the volunteers who have completed a required number of shifts
- Currently, people can pick up shifts even if they are not registered as Meals on Wheels volunteer. When MOW Management cannot find the volunteers in the database, they must call them and ask them to register.

OBJECTIVES

- To reduce the time spent by the Meals on Wheels management to send out gratitude emails to volunteers for completing specific hours or shifts
- To provide ease at which the Meals on Wheels management effectively stores and manages the volunteer details
- To enhance the process of communication with volunteers using MOW Scheduler Application
- Make sure that the process of sending out emails will become automatic and error-free
- To add a volunteer application form which is optional for the volunteers to fill when they pick up shifts

BENEFITS

- Consolidated list of volunteer credits and contact information on Volunteer Credits tab
- Making the process of sending out gratitude emails to volunteers involuntary and eliminating the over sights
- Establish a process which will reduce the effort taken by Meals on Wheels Management to manually call volunteers every time a new shift is picked up by an unregistered volunteer

ANALYSIS

Our team conducted 3 client interviews and followed an iterative process where after every meeting we analyzed business requirements in the form of Minutes of Meeting (MoM) and consolidated all the information in the form of UML diagrams and made changes as per the feedback from the clients during interview sessions.

The Use case diagram and the context diagram for the proposed system are given below

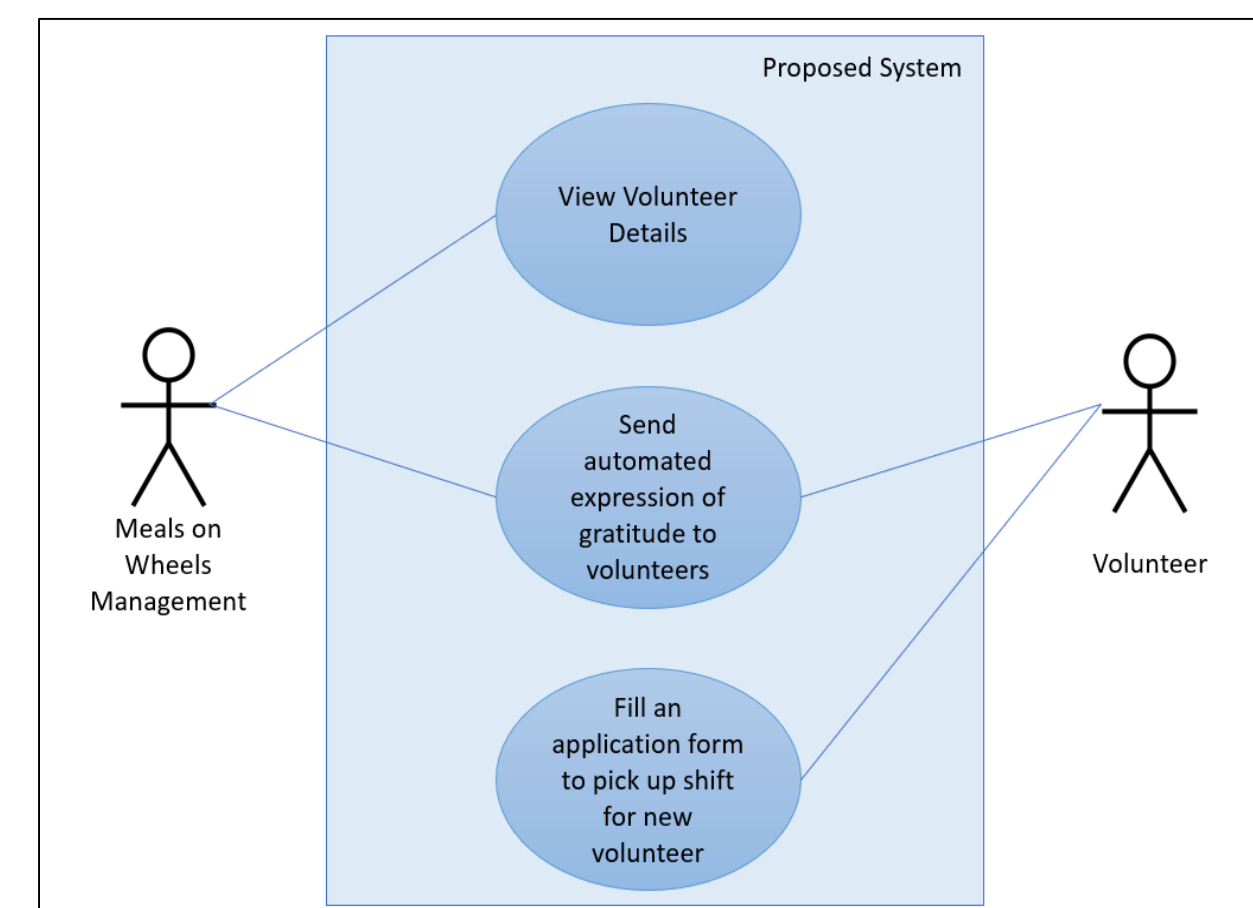


Fig. 2. Use Case Diagram (Proposed system)

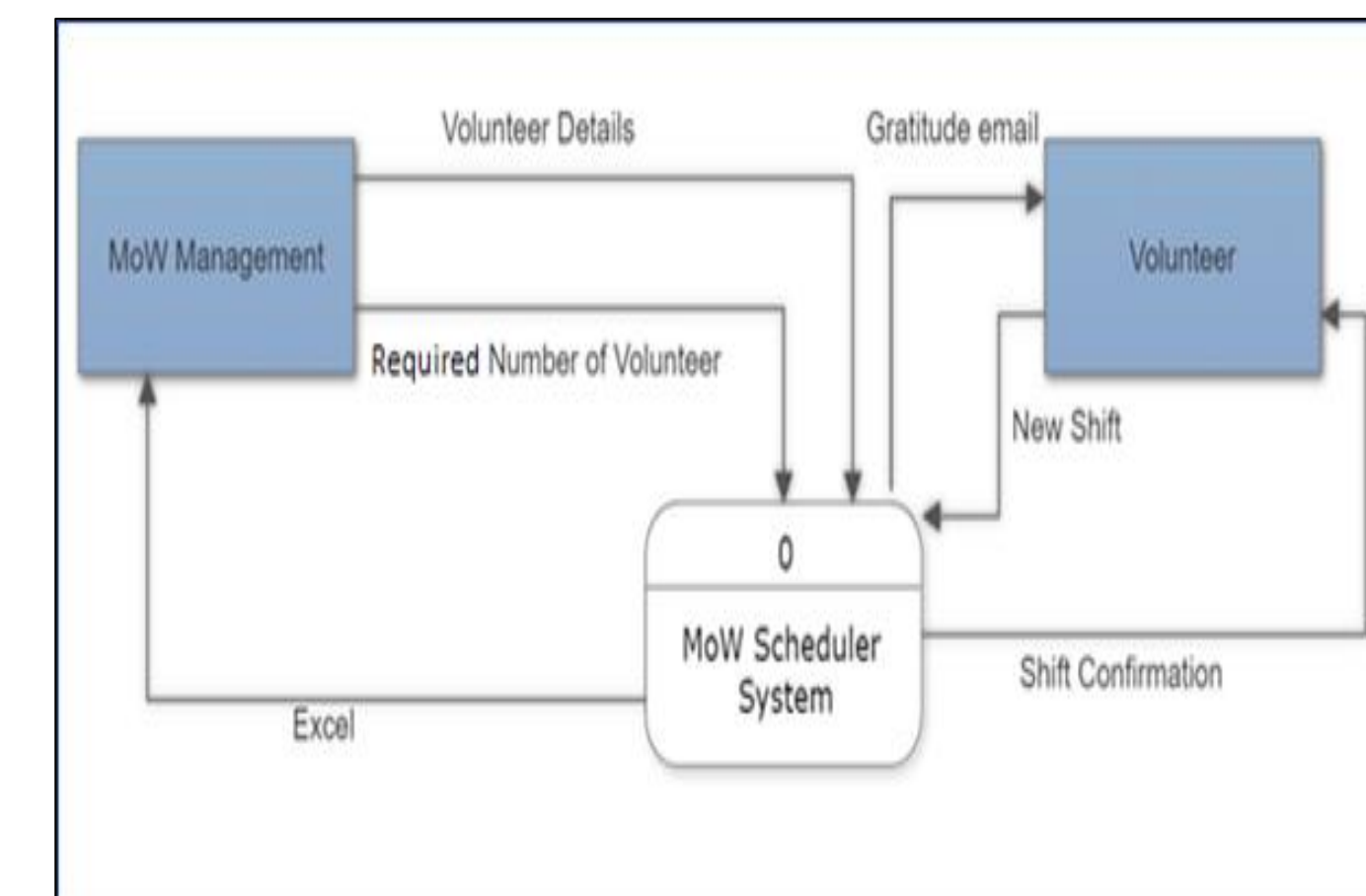


Fig. 3. Context Diagram (Proposed system)

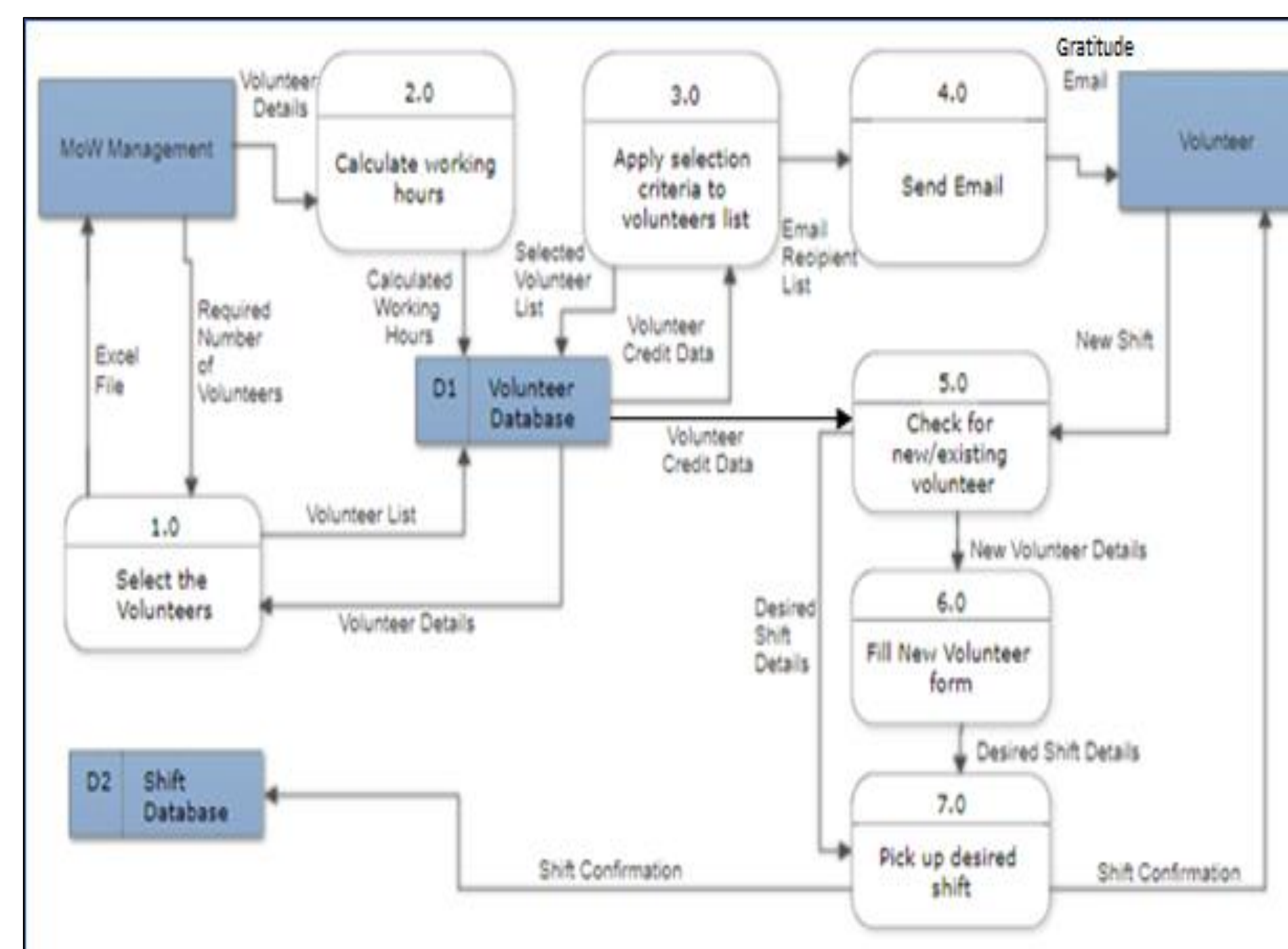


Fig. 4. Data Flow Diagram (Proposed System)

The Data Flow diagram and the Entity relationship diagram for the proposed system are given below

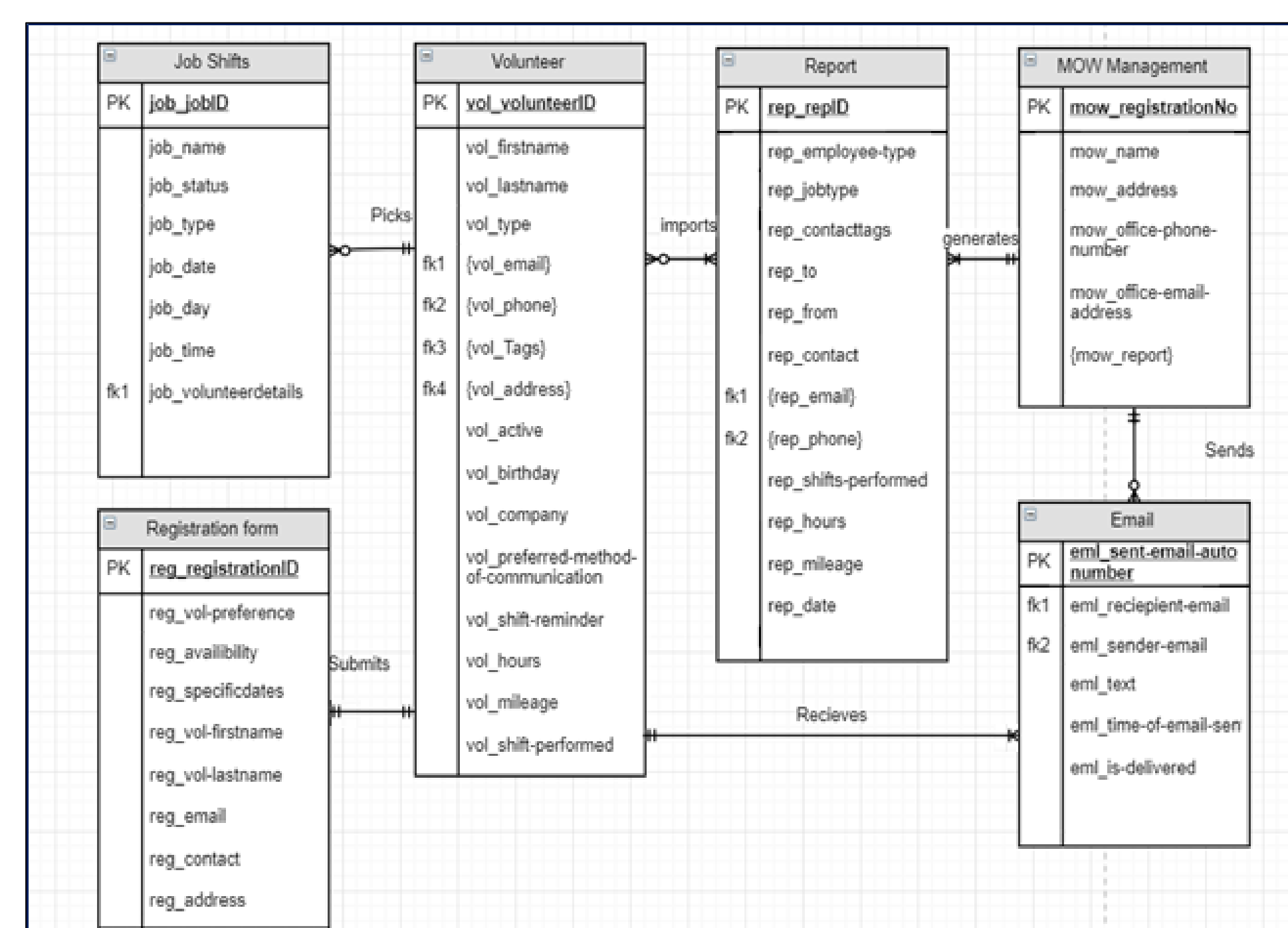
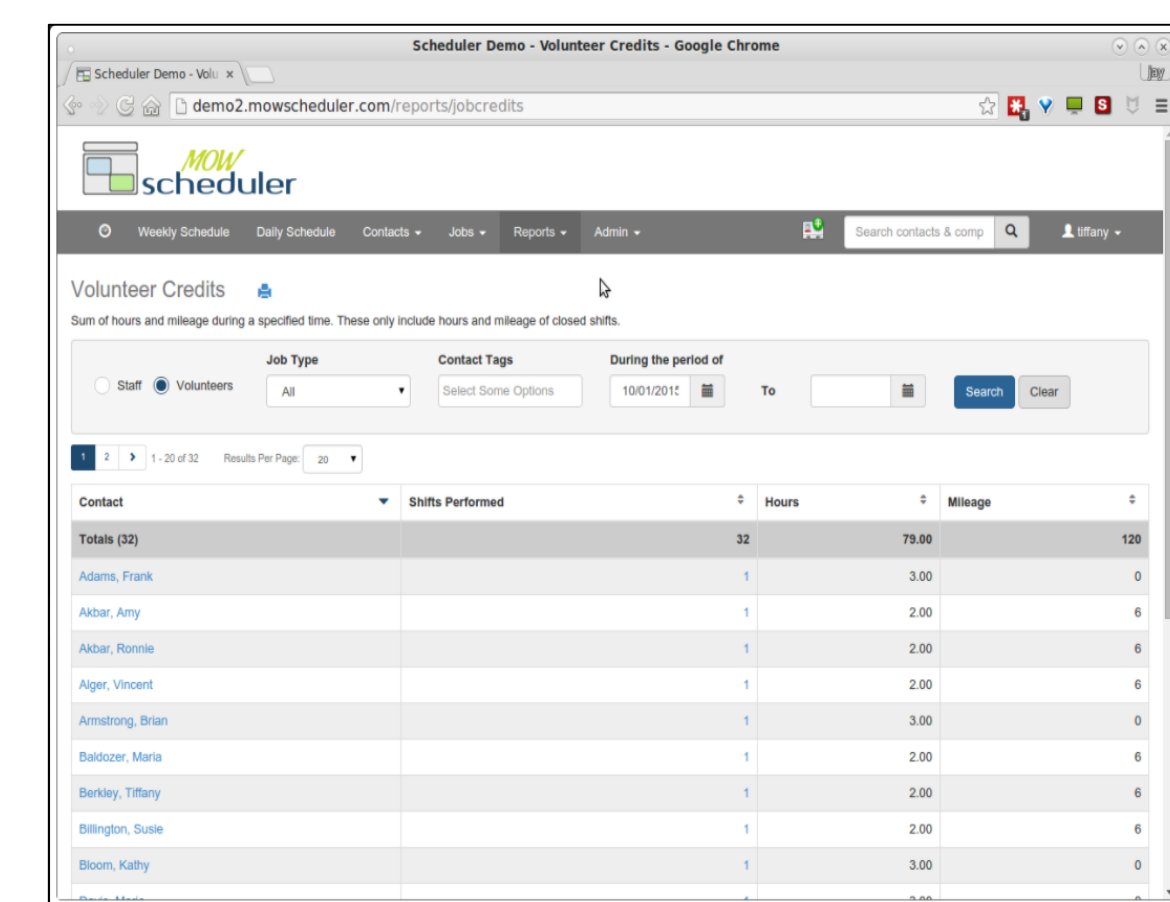
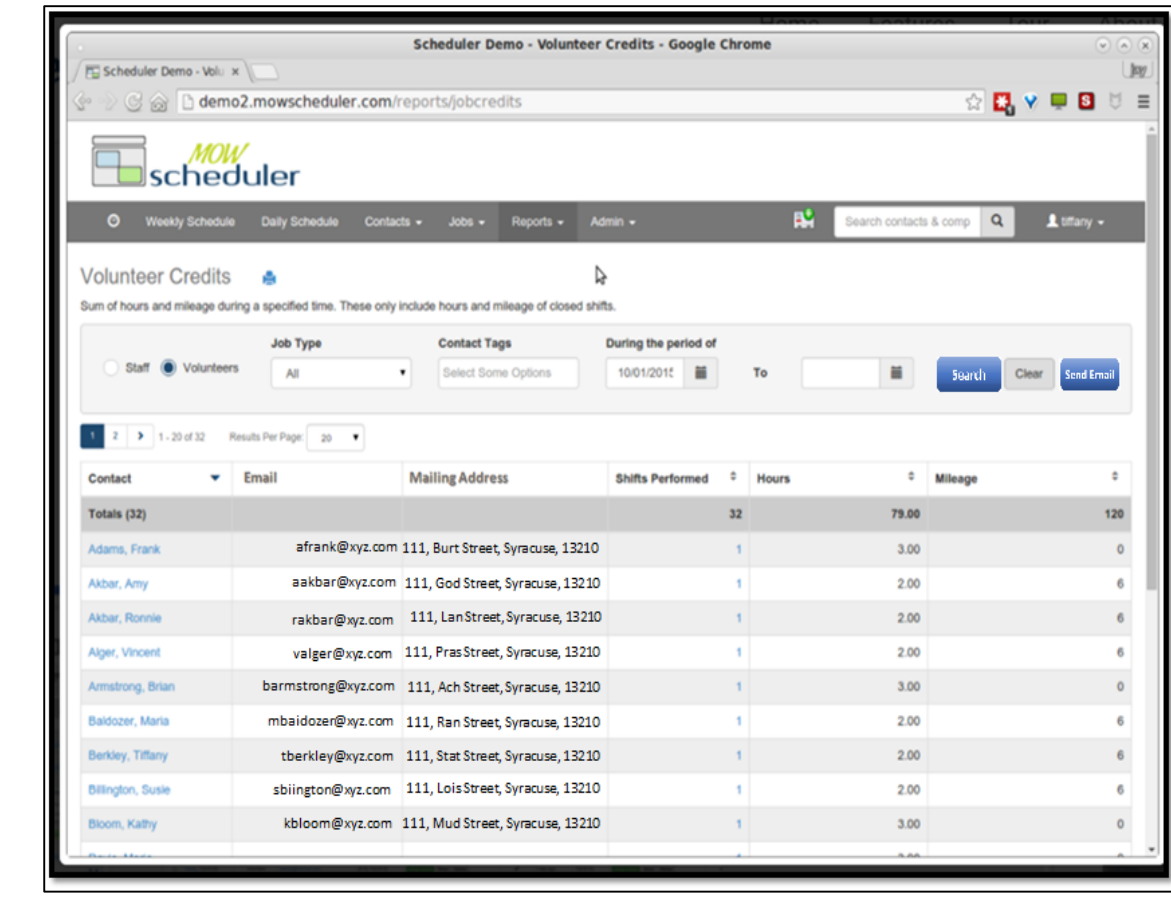
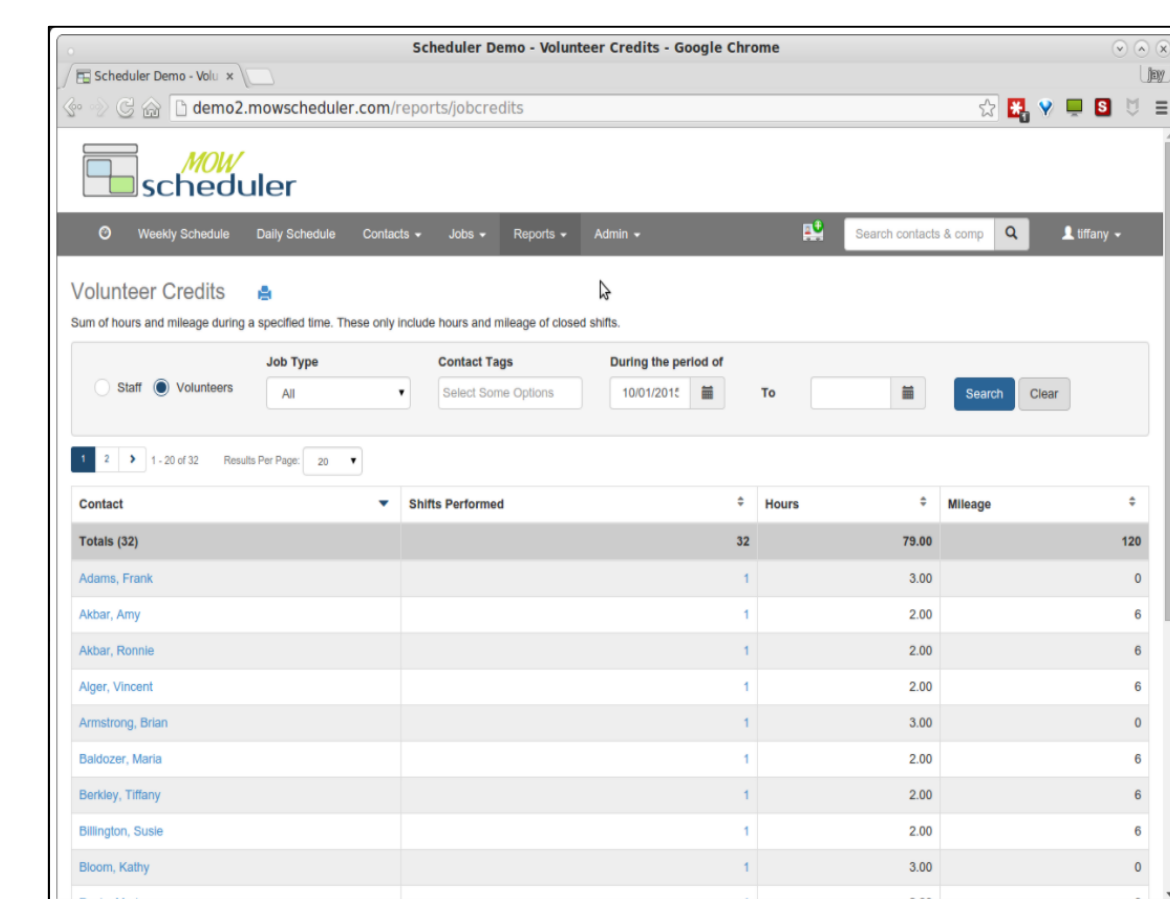
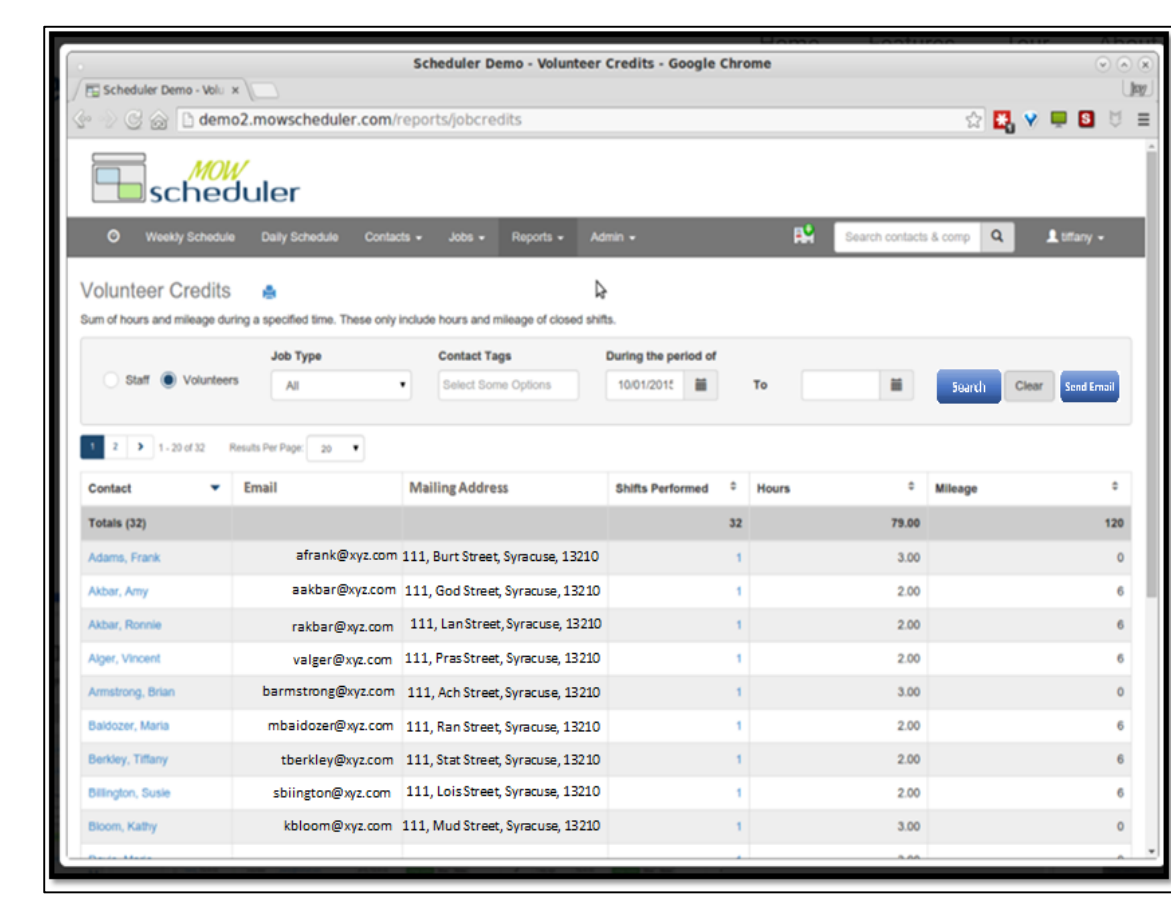
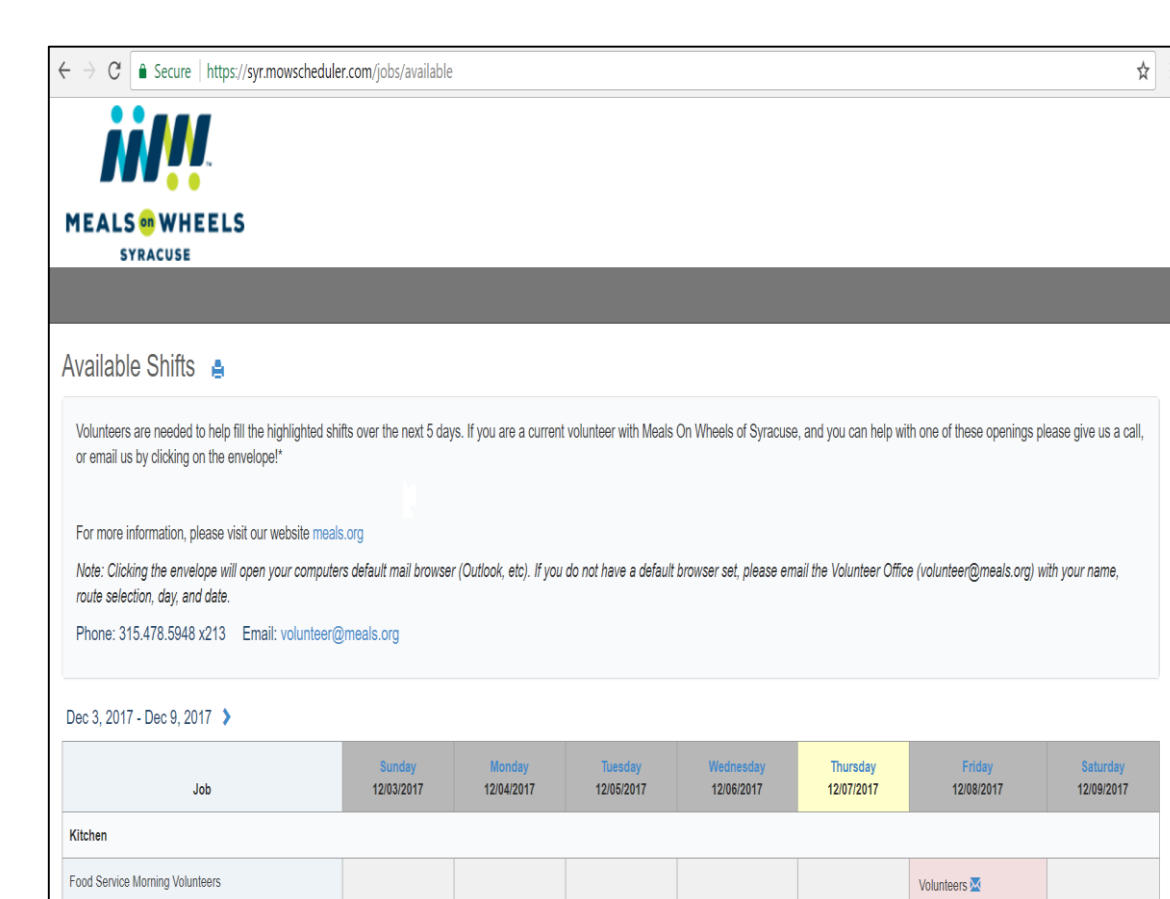
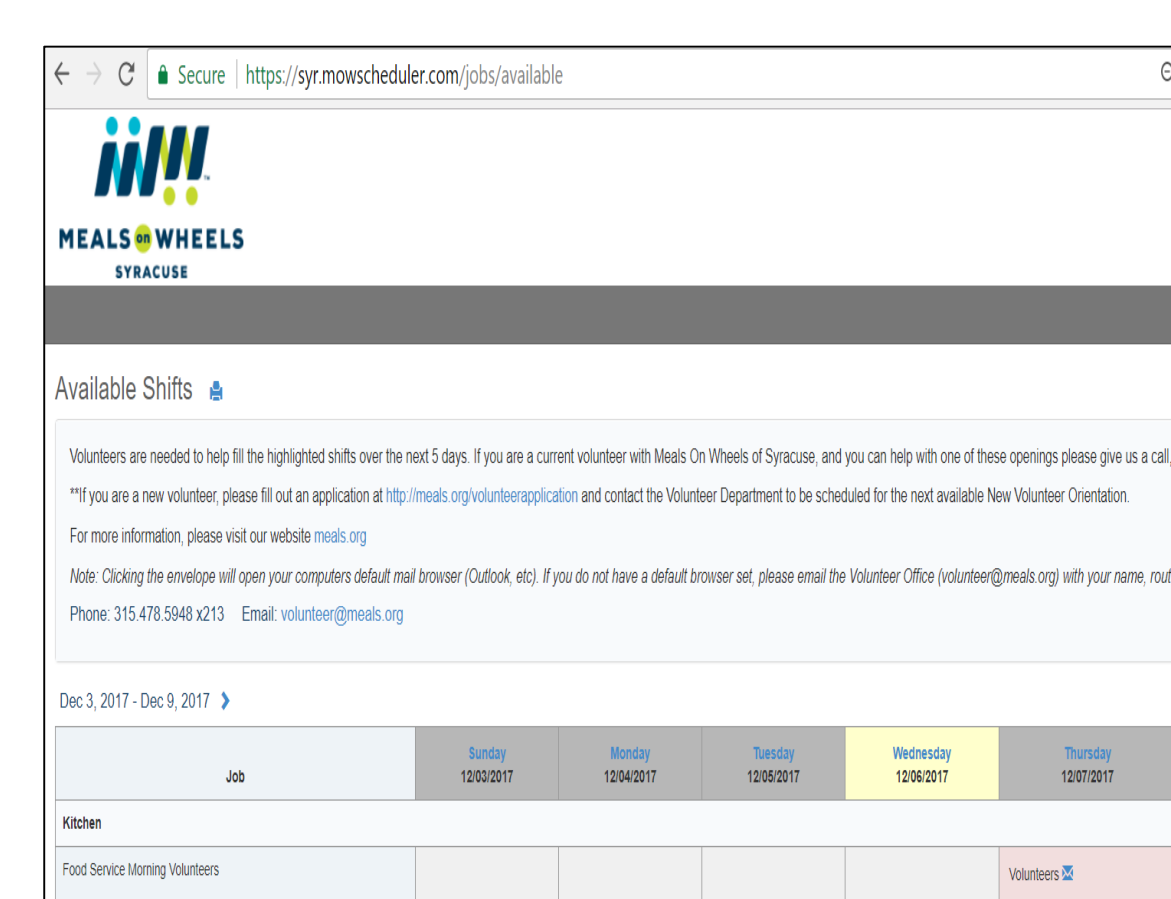


Fig. 5. Entity Relationship Diagram (Proposed System)

DESIGN

The following screens portray the added functionalities of the proposed system.

Existing System	Proposed System
	
Current system allows manager to export the requested number of volunteers to the excel file but not their contact details.	The new system consolidates volunteer details with volunteer credits and displays the same on volunteer credits tab.
	
In the current system, there was no option to send gratitude email to volunteers.	The new system will automatically send emails to food volunteers using the ‘Send Email’ button.
	
The current system did not display the link to fill the volunteer application form while choosing shifts.	The new system provides the choice of filling an optional form before picking up either a food or a driver shift.

REFERENCES

Hoffer J., G. J. (2014). *Modern Systems Analysis and Design*. New Jersey: Pearson