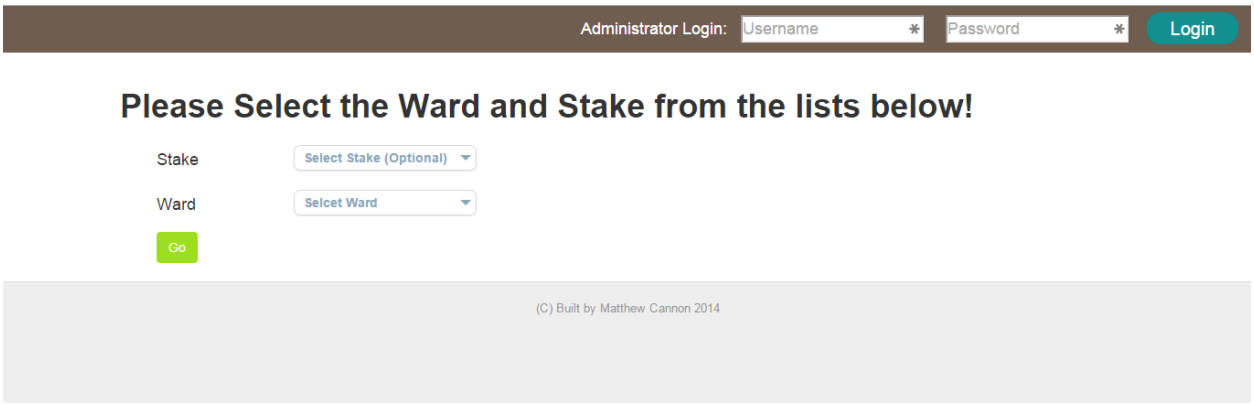
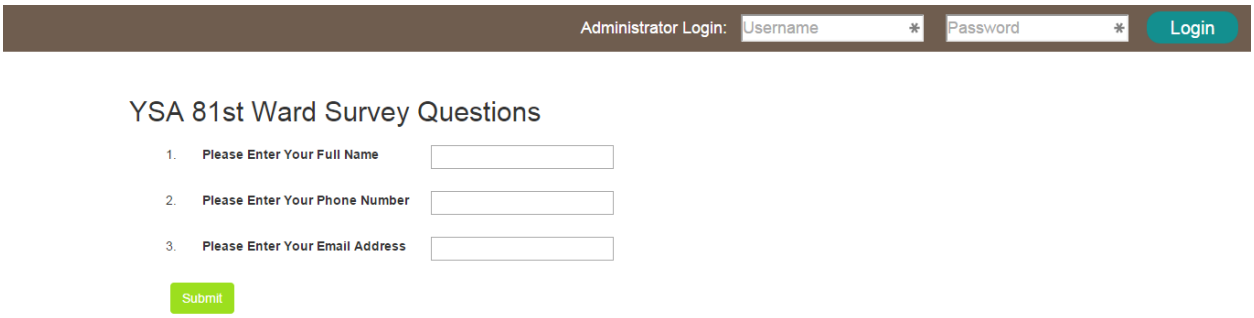
YSA Ward Directory Website

YSA Ward Directory was built to help YSA wards catch up to the 21st Century in how they collect data. There are wards that still collect data the old-fashion way of having everybody fill out a form and then leaders are left manually searching all the data themselves. The goal of YSA Ward Directory is to allow leaders to easily create custom surveys and provide an easy way for them to distribute it to their members. Collecting data in this manner provides several advantages to a paper based methods, such as allowing new members the convenience of filling out the survey at their leisure, making data searchable and maintainable, and can even remind administrators of member's birthdays and other important info. The vision of the website is that one day it can be the hotbed of information for the ward (such as storing event information) while having it distribute information to other various news outlets (such as posting reminder information to the ward Facebook Page, Twitter, and sending emails).

Currently only a subset of the intended features are available such as: Login for administrators and ward leaders, a default implemented survey, an interface for leaders to manage their respective surveys (such as opening and closing the survey), an interface for new members to take the survey, and an interface to add new administrators and leaders. I was also able to add https to the website to provide security (though the certificate is not trusted by firefox and some android operating systems). The following screenshots of the website will attempt to display some of this functionality.

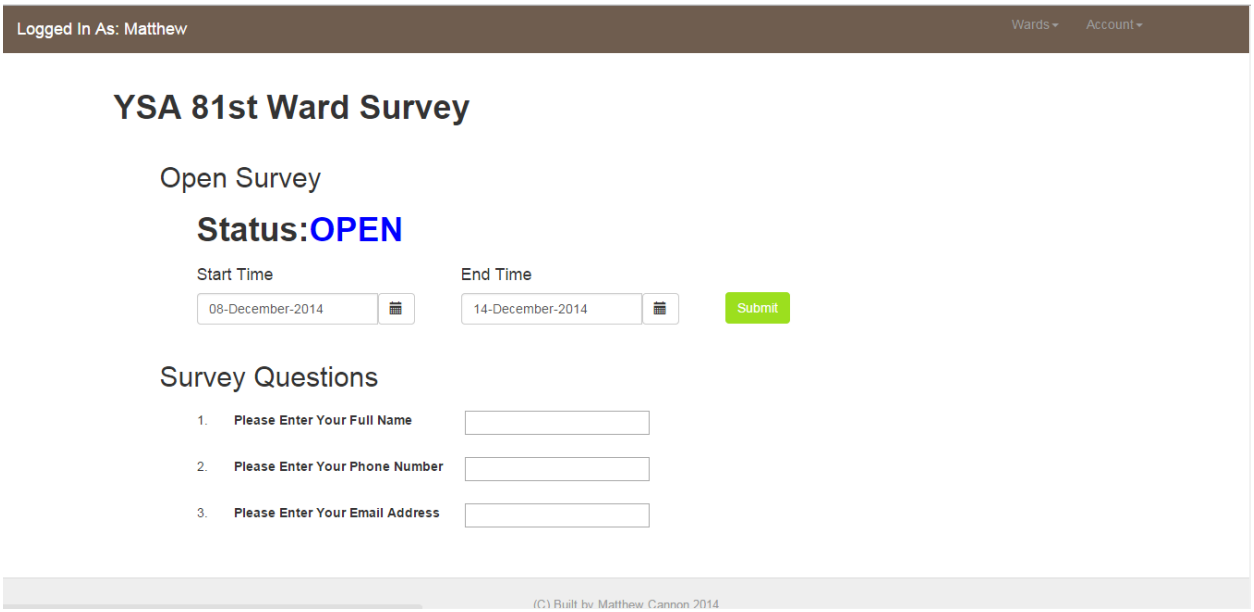


This part of the site allows new members to select a stake (optionally) and a ward to take that wards survey. This only displays open surveys and will display a friendly message if no surveys are currently available.

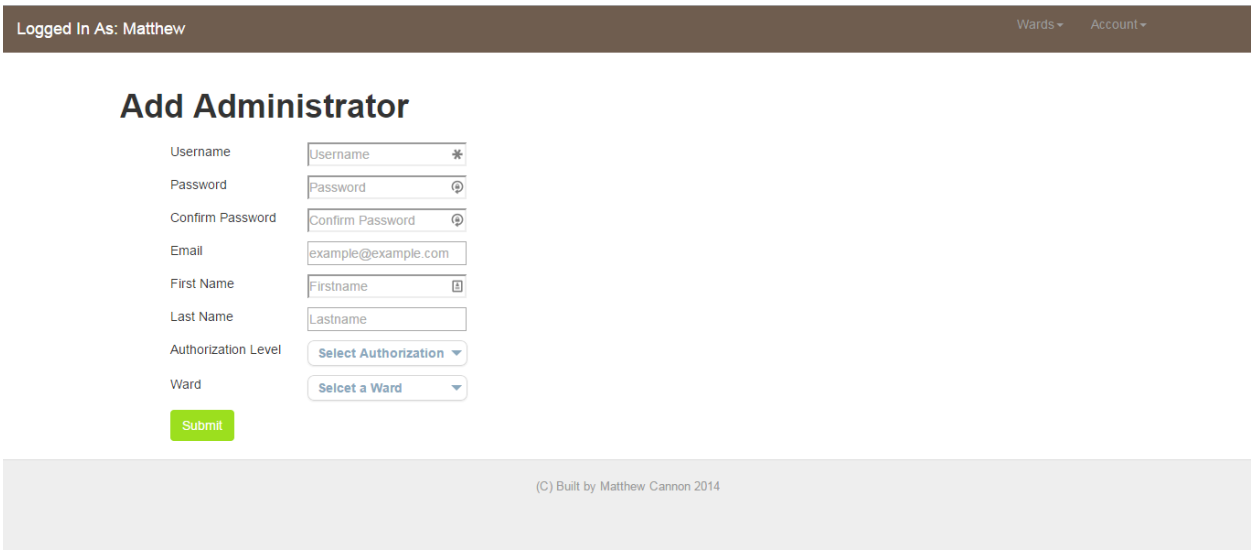


After selecting a ward survey to take, the new member is directed to this page where they take the survey and then can submit it. If they are missing any required information a modal window will open informing them of missing information. After submitted the new member is redirected to the main page and are displayed a modal window confirming that their data has been received.

After logging in administrators can view a directory and view specific people in the ward as well as their survey responses. Once the feature for uploading an image is added the leader will also be able to see the image of the member instead of a default image shown here. The user can easily navigate back to the ward by clicking on the Ward link just above the picture. Also in the upper left corner is shown the menu navigation window. The Wards drop down navigation menu will allow the user go to the main ward page for the ward they select (only wards that the user has permission to access are displayed). The Account drop down menu will allow the user to logout or add another admin as well as other features that will be added soon.



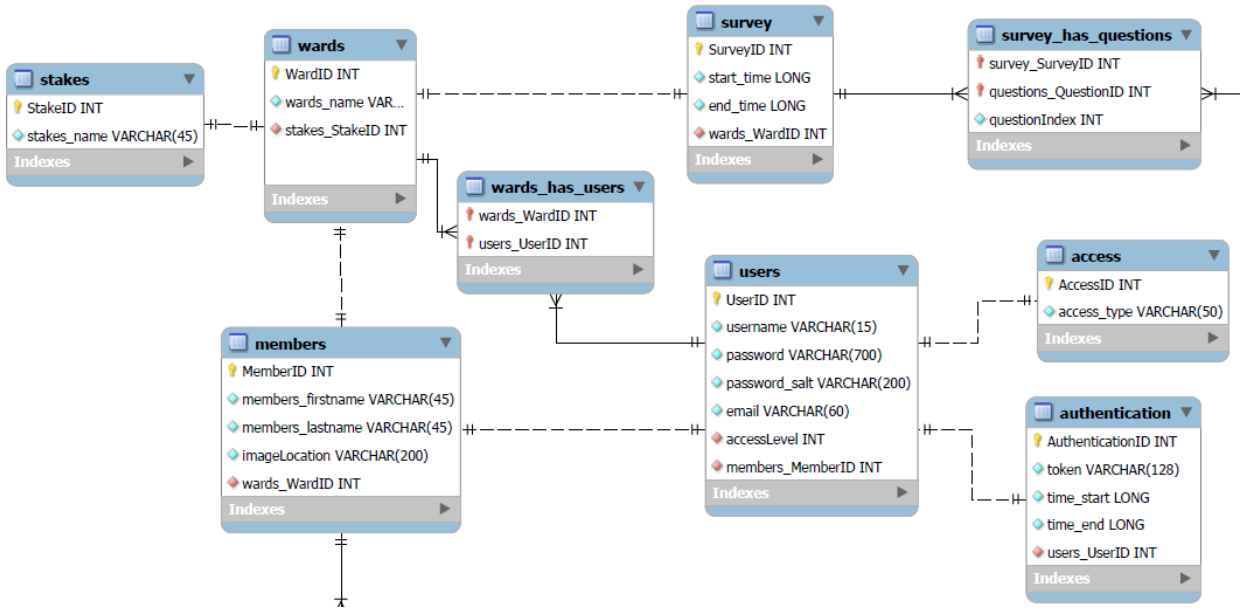
This part of the website allows the user the ability to manage the surveys for the selected ward. Currently the user has the option to change the open dates for the survey as well as shows the current status of the survey. When the survey is open it displays an OPEN status in blue and a CLOSED in red when it is closed. The user will eventually be able to edit the survey questions which they will be able to view below the survey status.



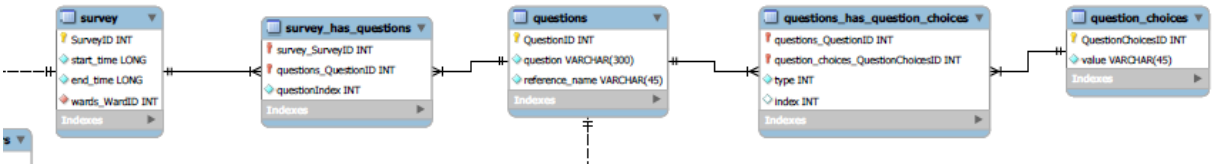
This part of the page allows the user to add a new administrator and will only allow the user to authorize the user up to the authorization level they have (so a bishop could not authorize a stake president) and can only add a user to a ward that he/she is already a part of. If information is missing the user is informed via a modal, the user is also informed if the email address and/or username is not available.

Database Schema

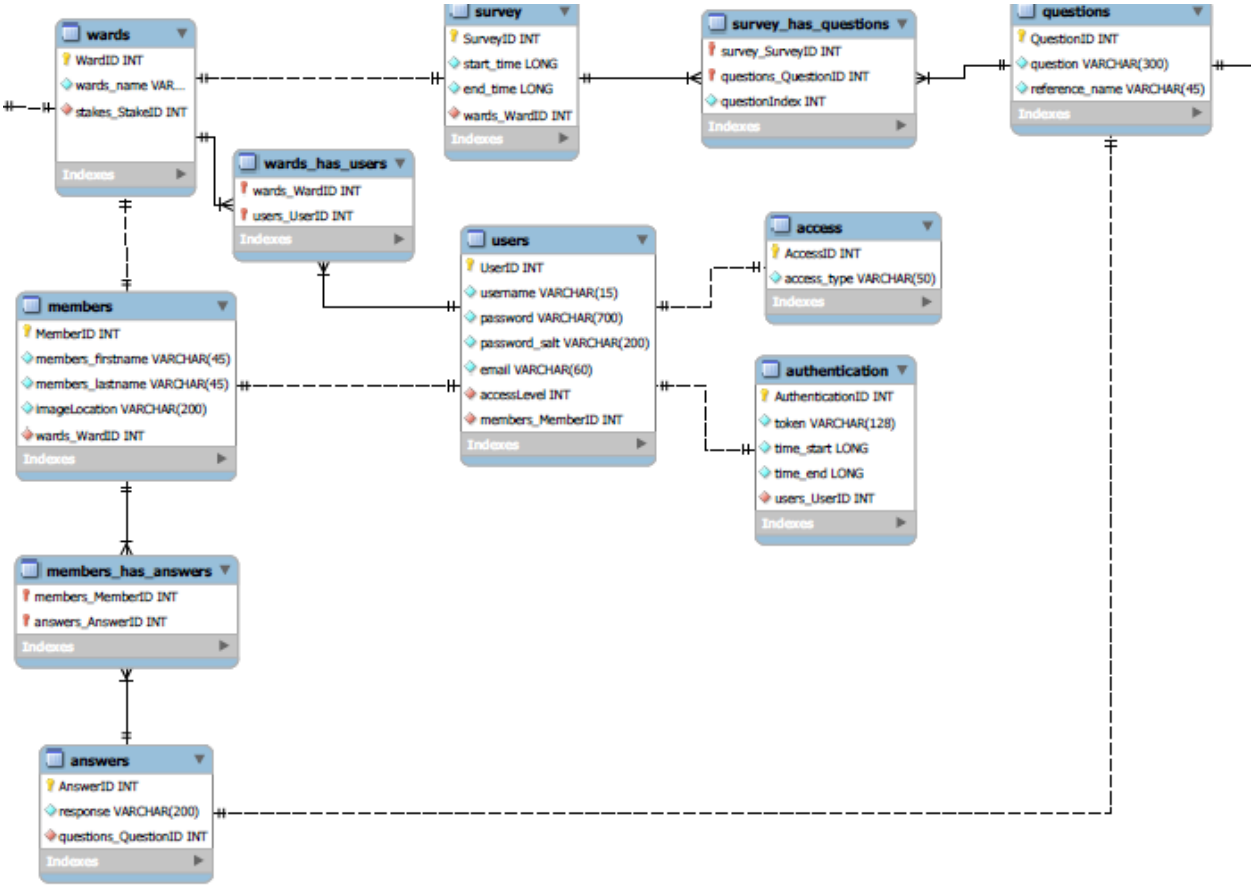
The following pictures depict the various components of the MySQL database I used and how the tables interact with one another.



I used a basic authentication scheme. The users tables contains the username and password as well as other relevant information. Upon login the website will automatically create a cookie that stores the token and userID and that token will be stored in the authentication table so the user does not have to enter in their username and password every time they wish the perform a privileged action. The user also has access to various wards and is also required to be a member.



The picture above depicts how the survey and questions are stored. This is the framework that will eventually allow the user to create custom surveys and store them.



This third part of the database is how the answers are stored. There is a many-to-many relationship between members and answers and this is how the responses are populated on the directory part of the page. Note that not all members are required to have survey responses (this is to accommodate admins adding users which have to be members, this feature will likely be removed in latter versions so that the new admin/leader has to be a member of a ward).

Future Work

The website in its current state will obviously need some major revisions for the long term. The first feature that will be added is a more extensive survey as a new semester is approaching and several ward leaders have expressed interest in using this to collect responses. After that an extensive code overhaul will take place, not to change features, but to change the file structure and split of files to help promote maintainability in the long-run (due to my lack of experience, working by myself, and the need to implement features quickly has led to this problem). Another feature I would like to see added soon is the use of the back button. This is a singular page app and so the user is never redirect to a “new” page but rather different information is displayed and thus the back button would bring the user off the page and it also make navigation rather difficult. These three features I would consider the most-urgent and will probably receive the most attention in the coming weeks.

In the next year or so I plan on implementing the rest of the account management functionality (such as changing your password and having user defined settings) as well as provide image uploading (for both users and administrators), provide image compression (so that the ward directory will load faster and it will not make the server seem slow to other users who might be using it at the same time). I would also like to make the survey responses searchable.

In the long-run, I would like to add login information for members so they can view ward specific information (but restrict their access to sensitive information). First all of the admin features would need to be added and then I would need to assess the user experience and see question them to find out other features they would like to be added.