The project should be housed in the user's vhosts folder. After editing hosts so that the browser resolves to the site via DNS, navigate to http://finalproject to begin.

If not signed in, the site will redirect you to login.php and prompt you to enter a username and password. New users should click register to sign up. While it would have been most convenient to implement a login system that used existing credentials (ex. Using a Harvard ID/PIN), this site is designed to be used by candidates for local political office in Massachusetts, which makes such a system less feasible.

After logging in, you are redirected to index.php, which is the "landing page" for the website. There is no interactive content here; rather, users click on one of the links in the header to get started with their session.

New users must first import the list of voters they will be using during the campaign. They can do this by navigating to the page import.php, or clicking on the link Upload Voter Roll. At this point, they would use the file selector to upload a CSV file that contains the standard voter roll information provided to them by the City/Town clerk in the town that they are running their campaign. For the purposes of this project, I have enclosed a small sample of what this file might look like. The sample voter roll is derived from an actual Massachusetts voter roll, but some information about the individuals has been changed. After clicking Submit, the CSV data is stored in a SQL database.

At this point, the candidate is free to begin using the website to manage portions of their campaign. One of the most important functions is Search, which is found at search.php. The user is able to search for voters by precinct number, gender, political party, last name, first name, and street name. Any combination of these search terms can be used and will return results. In the text fields, the database matches any occurrence of the search string. For example, searching "son" in the field last name will return any individual with a last name containing "son" (ie. Anderson, Thompson, etc.) This function has multiple uses. The user might use the Print function at the bottom of the page to output a page, which might get sent to a printer who is creating postcards to be sent to all voters in a precinct. Using the gender or party features, the candidate might more effectively target their message. They might also use the functionality to

find the Voter Registration Number of an individual, which will be important when they track their fundraising.

The next function is fundraising tracking. By law, all candidates are required to keep accurate count of all money they collect from private individuals. Additionally, they are required to keep track of the occupation and employer of all individuals who donate more than \$200 to the campaign. The Fundraising page, located at fundraising.php allows the user to track this data. As the candidate collects funds from voters, they can consult Search to ascertain the individual's Voter Registration Number. Ideally, candidates will ask donors for the occupation and employer on their donation forms. With this information, they will be able to fill out the fundraising form. After filling out the form, they will be given a confirmation page that lists the edited record will the data that they entered.

The next important page is the Reports page, located at reports.php. Upon navigating to this page, the user can select one of two reports to run. The first is titled Missing Donor Information. This report is used to comply with the requirement that the occupation and employer be collected from all individuals who donated more than \$200. This information might be missing from individuals who did not properly complete the donation form or who made multiple smaller donations that were cumulatively more than \$200. By printing this page, the candidate has an accurate list of all individuals they must reach out to and collect more information from. The second report is the Complete List of Donors and outputs all individuals who donated to the campaign. This can be printed and used by the candidate for a variety of purposes.

The final page is Election Commission Reporting, which is located at election_commission.php. This is a single report that is tailored specifically to a particular form that must be completed by all candidates on a regular basis to report their fundraising activity to the state. This form outputs a variety of figures in bold that must be copied to the reporting form. Additionally, the form requires that all donors who contributed more than \$200 be listed in a particular format and order. Simply by printing the page and appending it to the end of the reporting form, the candidate has fulfilled their reporting requirements.