Progress Report #1

Name: Colten Wendt

Reporting period: Milestone 1 - from 01/17/16 to 02/07/16

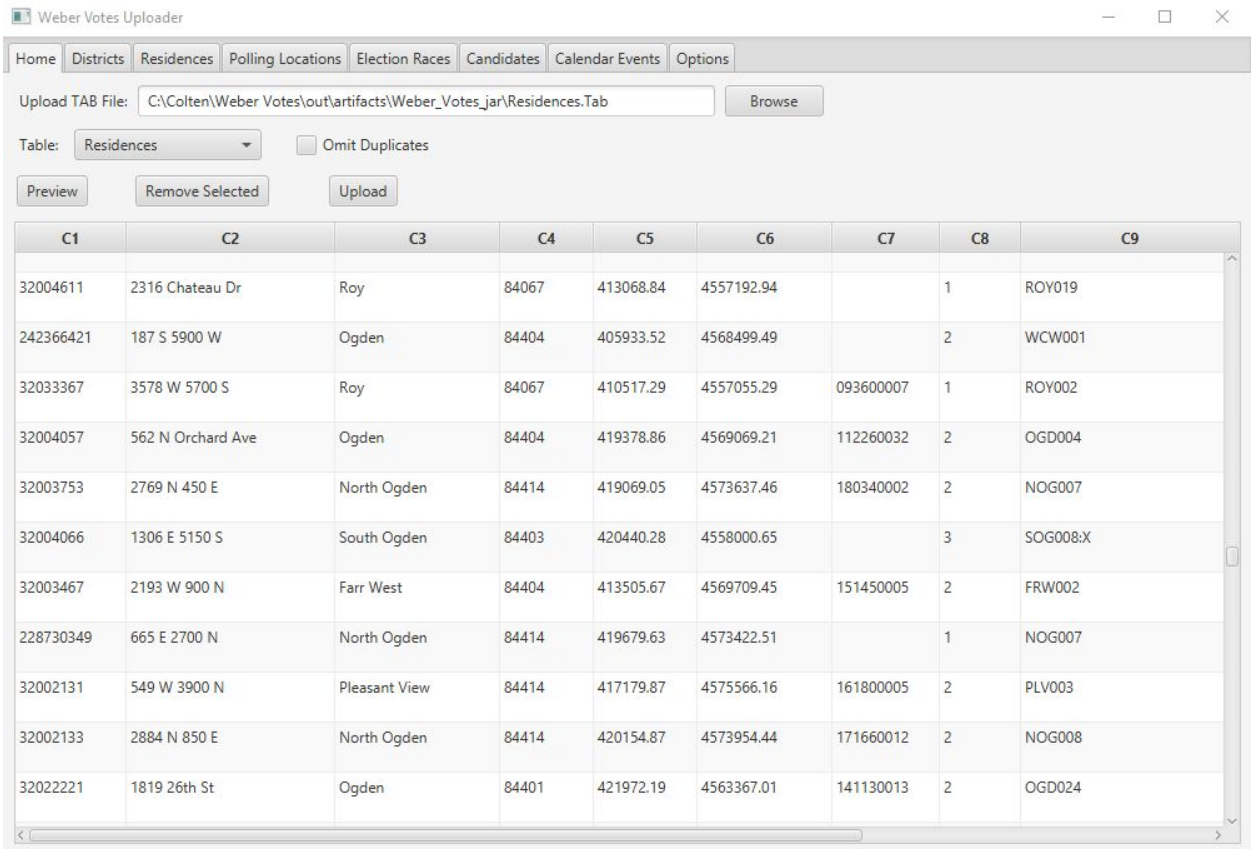
Total hours worked on this project: 24

What tasks did you have listed in your milestone to accomplish during this time period?

This milestone, we were tasked with the completion of the resident upload process and finalizing of the CRUD operations for the API used by the apps to communicate with the database. This included updating the desktop administrator app and server side code so that the elections office could upload, edit and delete data for Residences, Districts, Candidates, and Polling Locations without problems. We also needed to verify with the client that our plans matched up with the client's expectations and that our timelines were correct.

What tasks have you accomplished during the time period?

We have successfully solved the remaining issues with the residence uploads and have finalized the server code involving Residences, Districts, and Polling Locations. Candidates have some work left to be done involving a secondary table that will be needed for an in-between step from user candidate submission to publishing that submission via the administrator's desktop application. All other code for candidate uploads has been finalized and works without this added on feature. We also had a meeting with the client regarding their expectations for the remainder of the semester, checked up on the prototype desktop app that they were given and addressed some bugs that they reported while using the app.



C1	C2	C3	C4	C5	C6	C7	C8	C9
32004611	2316 Chateau Dr	Roy	84067	413068.84	4557192.94		1	ROY019
242366421	187 S 5900 W	Ogden	84404	405933.52	4568499.49		2	WCW001
32033367	3578 W 5700 S	Roy	84067	410517.29	4557055.29	093600007	1	ROY002
32004057	562 N Orchard Ave	Ogden	84404	419378.86	4569069.21	112260032	2	OGD004
32003753	2769 N 450 E	North Ogden	84414	419069.05	4573637.46	180340002	2	NOG007
32004066	1306 E 5150 S	South Ogden	84403	420440.28	4558000.65		3	SOG008:X
32003467	2193 W 900 N	Farr West	84404	413505.67	4569709.45	151450005	2	FRW002
228730349	665 E 2700 N	North Ogden	84414	419679.63	4573422.51		1	NOG007
32002131	549 W 3900 N	Pleasant View	84414	417179.87	4575566.16	161800005	2	PLV003
32002133	2884 N 850 E	North Ogden	84414	420154.87	4573954.44	171660012	2	NOG008
32022221	1819 26th St	Ogden	84401	421972.19	4563367.01	141130013	2	OGD024

What new knowledge or skill did you learn? (Describe briefly)

I learned a little bit more about how to troubleshoot a REST API and the server that it is on so that we minimize demand on both the server and client-side communication. One of the problems that we had to focus on fixing this milestone was that the program had trouble loading in larger files to upload. What brought this on was the inclusion of a mass submission to our server. Originally, we had a single submission per resident. However, it became apparent that this would be insufficient as the elections office has an entry in the residence table for each resident in Weber County and we would be posting far too many times, and very inefficiently. The solution was to allow many entries to be submitted in a single http post. However, too many entries bogged down the client side app and, in the case of the temporary hosting solution we are currently using, exceeded the capacity of our server. Finding a solution that allowed the server to process as many submissions as possible in a reasonable amount of time while also not bogging down the desktop app required that we make several posts that held about 5000 resident entries each.

What have you learned in classes that you have applied to the project during this time period?

I am taking the Java capstone class. We are learning about how Java works on the server and how work with Java in an online environment. While our server side code is not written in Java, this is the first that I've had the opportunity to work with server-side code for school (the student who did most of the server code is no longer on the team and the source code was handed to us to work with). Learning a little bit of the best practices and how to run a server in general helped me to better understand what exactly our code is doing and how it interacts with both the desktop and mobile applications.

What difficulty occurred or what mistakes did you make? What did you do to correct it?

At one point, during our testing with the http post requests, the hosting server identified me as an attacker and blocked my communications. Although this is unlikely to occur on the server that we will be releasing on (as it is owned and operated by the Elections office and they're unlikely to block communications from their own office) it helped us to realize that we were likely putting too much demand on the server at once. After my communications were allowed again, we programmed in a timer that would wait between posts so that the server would have a chance to process each request before we sent off the next one.

How would you rate your own performance this milestone?

I believe that my performance for this milestone is acceptable. It did take a little bit of time for me to get back into the feel of working on this project after the break and I feel like my performance could have

been better. However, after I got my wheels spinning, I was able to solve the problems we had identified with our code and we were able to complete most of what we had planned to get done for this milestone.