

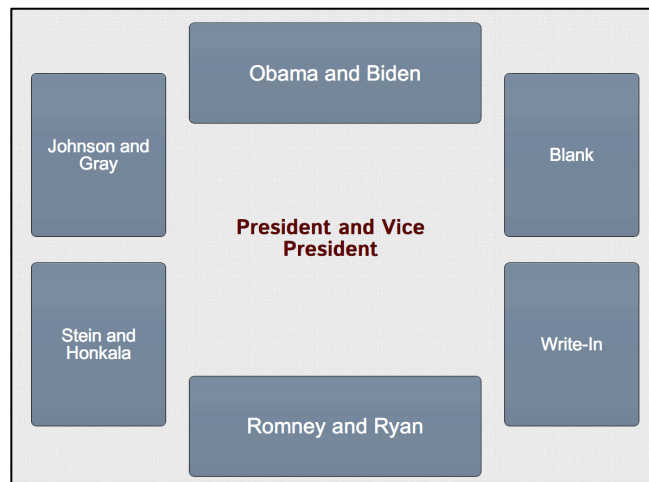
HW2 – Heuristic Evaluation

1. Good: **Consistent placement of the nominees** (Consistency & Standards)

Having the nominees, blank, and write-in buttons in the same locations allows the user to start moving the mouse in the proper direction quickly thereby increasing efficiency and ease.

2. Good: **Having which race is currently being selected for in the center of the buttons.** (Visibility of system status)

This makes it very easy for the user to know the current state of the system, which is great.



3. Good: **The large size of buttons** (Flexibility & Efficiency)

Having the large buttons is very useful since it allows you to press on them very quickly via mouse. Additionally, your user group includes elderly people who will very much appreciate the size of the button and text.

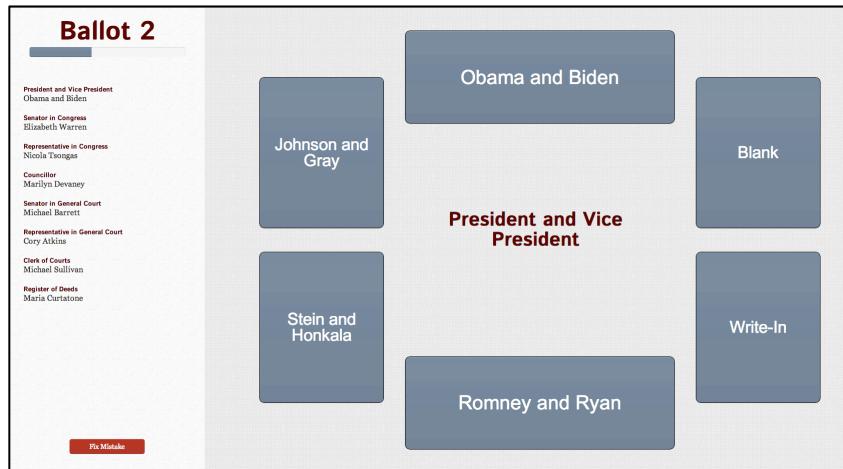
4. Good: **Use of modals on reset buttons** (Error Prevention)

Helps keep the user from accidentally reset the entire system accidentally. Additionally, having the modal blackout the reset of the page forces the user to pay attention to the modal itself.

5. Major: **Ambiguous moment you have completed all the races in a ballot and it jumps to the next ballot** (Visibility of system status)

When a user has completed all the races for a single ballot, the selections for the next ballot appear on-screen. However, the ballot counter on top still says it's the previous

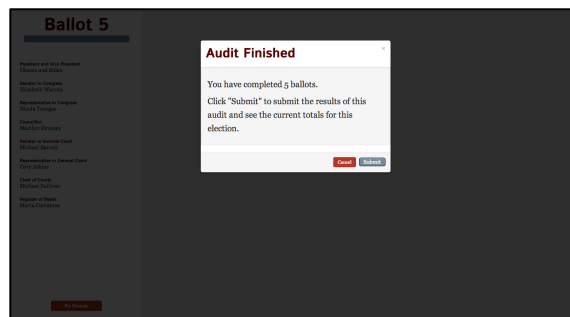
ballot. I imagine this is to allow for the fixing of a mistake on the previous ballot, but, at the moment, the page has the left sidebar referencing the previous ballot and the selection section referencing the current one.



Recommendation: make it obvious that clicking on the selection buttons in this state will count for the current ballot.

6. Major: **Can't access 'Fix mistake' when we enter the last ballot**

Theoretically, we could press the cancel button at the modal, however, that takes us to the login screen once again. Although, this may have occurred due to the lack of depth for GR4.



Recommendation: Make sure that particular cancel button will allow you to fix mistakes on the last ballot.

7. Minor: **Fixing a mistake makes user have to re-enter all information** (Error reporting, diagnosis, and recovery)

If the user gets to the end of the ballot and realizes a race is in error near the top, the entire ballot needs to be re-entered. With only a few races and ballots, this is not an issue. However with many races and/or ballots, this could dampen the ease of error recovery.

You are about to restart from "Senator in Congress" on the current ballot.

You will have to re-enter all information after that. Would you like to continue?

Recommendation: allow for the changing of a single race in the ballot.

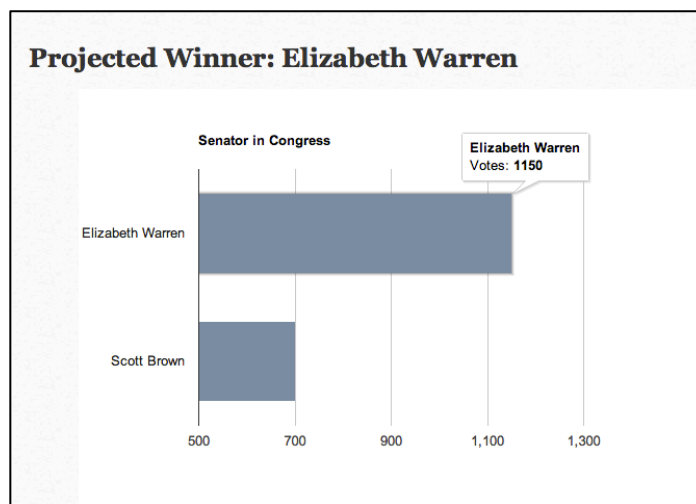
8. Minor: **Unclear how many ballots I have been given during the counting process and exactly how many I have to complete.** (Recognition, not recall)

We are told how many ballots we have in the beginning, but, during the counting, we only have "Ballot X" and a progress bar listed.

Recommendation: Within the progress bar, have a more explicit counter of progress, i.e. 2/5.

9. Minor: **Tooltip in the results page for number of votes** (Visibility of system status)

A disadvantage of bar graphs is that they blur the line on the exact number of votes. By using a tooltip, you get around that, but it is not readily apparent to the user that that affordance exists.



Recommendation: Explicitly put the number of votes on the page rather than use a tool tip.

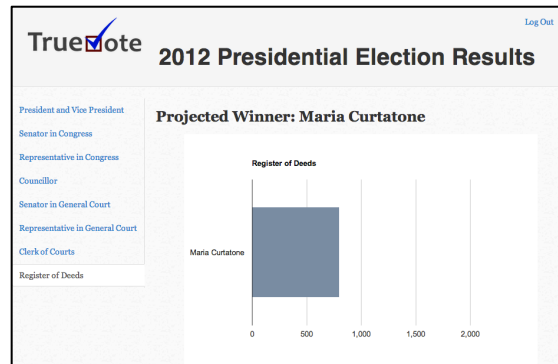
10. Minor: **Ambiguity about projected results** (Help & Documentation)

As a user, I am unsure if this projected results screen will show the projected results nationwide or simply locally. Further, it could actually just be the results of what you counted during the session.

Recommendation: Make it more obvious which of the above this screen is getting its data from.

11. Minor: **Account Information/Sign-out not visible** (User control & freedom)

The only see the logged in account at the start of the counting and only see a log-out button at the results page. In the general case, this might be okay since we want the counting to be done within a single session. However, situations can arise, granted mostly from external issues that would have need for a log-out button and/or the name of the logged in account.



Recommendation: Have account name and log out in the usual section, the top right corner of the page.

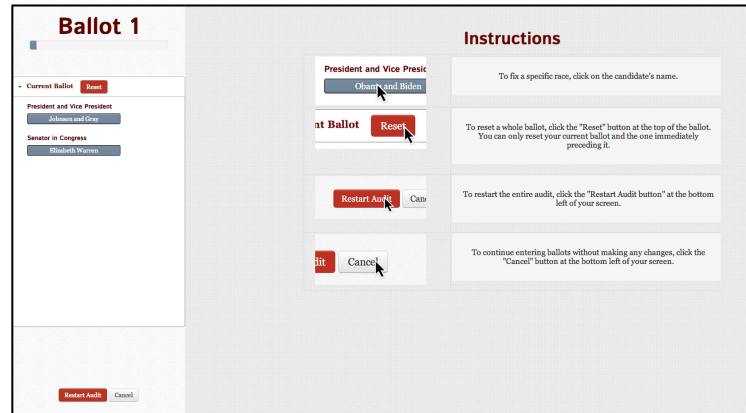
12. Cosmetic: **Progress bar ambiguous of progress in this scenario** (Match the real world)

We are given a certain amount of votes, in this case 5, which serves as our indication of progress. As such, a ballot is either fully counted or not. Thus, having the progress bar increase after each ballot, instead of selection, might make more sense.

Recommendation: increase progress bar after each ballot.

13. Cosmetic: **Reset screen instructions a bit unnecessary** (Aesthetic & Minimalist Design)

On the reset screen, the instructions portion can be completely taken out with slightly longer button text and a few more buttons.

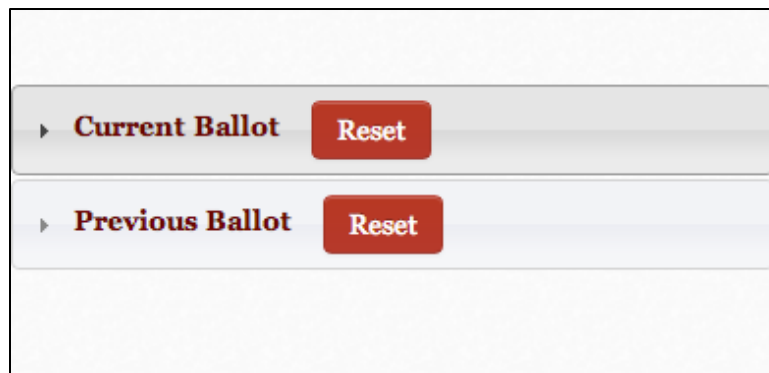


Recommendation.

'Reset' can be changed to 'Reset current ballot'. 'Restart Audit' to perhaps 'Restart Entire Audit'. Add 'Fix mistake on race' buttons beside each race. With these changes, you can then simply darken the selection section of the screen during a reset.

14. Cosmetic: **Accordion during reset screen** (Aesthetic & Minimalist Design)

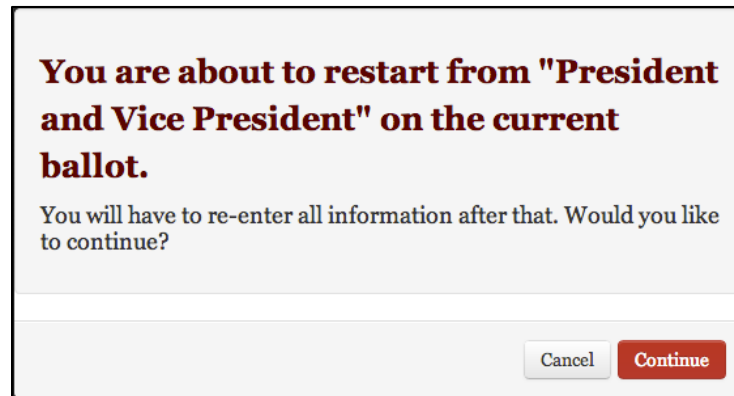
The accordion can have both views 'current ballot' and 'previous ballot' closed simultaneously. This is a feature that should not really be necessary since we would want to be looking for at least one of them at any given moment.



Recommendation: Set the accordion to have only one view open at any given time.

15. Cosmetic: **Not using the body of the modal** (Aesthetic & Minimalist Design)

When you click on a specific race to be reset from, you are putting all of the text into the header of the modal.



Recommendation: Make use of the body itself to get rid of the random white bar in the modal and to separate out sub-information.