SKI MAPS

Alpha Version Write-up

GUI Programming II Spring 2016

March 8, 2016

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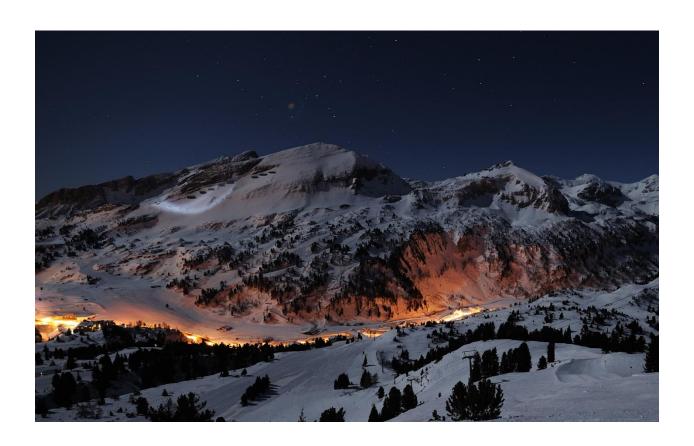
Table of Contents

Project Goal

Ski Maps will dynamically display ski conditions and trail statuses at multiple ski resorts on easy-to-view maps. Those will be viewable on all Internet connected devices for easy access wherever the user happens to be.

Goal Reviews

We are progressing in a timely manner through our project. Currently we have successfully pulled three of the six maps' data, and have one map fully operational. We are in the midst of debugging the first map and having it dynamically update itself. Once we figure out all of the issues, and bugs with the first map, completing the other ski maps would become much simpler and quicker. We plan on continuing our progress sometime over break and are on track with our original schedule, and should achieve our end goal/product.

New Issues

There were a few issues that aroused since the project proposal that caught our attention during the class demo. Here are the list of issues/bugs that we considered and changed for the alpha version.

- Font size is too small, visibility was lacking (Fixed)
- Lack of menu or navigation bar, hard to navigate to different maps (Fixed)
- Ski Map logos' size lacked consistency (Fixed)
- Update the formatting, spacing for pictures, buttons etc. (Fixed)
- Transparent background for the homepage so the page isn't all black (In Progress)
- Improve web page loading speed and optimizing JavaScript and CSS (In Progress)
- Modernize website, current formatting looks outdated, change color scheme to match the sport of Skiing (In Progress)
- Create About page (In Progress)

Work Evaluation

We currently are still producing acceptable work for our Alpha Phase. We are now able to successfully navigate across the homepage and other various mountain map pages with the implementation of the navigation bar. Our first working map for Waterville successfully highlights open trails, closed trails, open ski lifts, and closed ski lifts. We have yet to implement this onto other maps as we decided as a group it was best to debug and work with one map first. This will reduce the amount of human error and also improve our group's efficiency. By completing and debugging the first map, we will potentially figure out all of the bugs and potential issues that will arise. Which then leads to a smoother transition to applying what we know to the other five maps. We plan on fully completing the first map in the near future, possibly in a week or two, and then begin implementing the other five maps.

Feasibility

As for feasibility, everything that we have planned so far is 100% feasible. Jason is in the midst of completing the python script that will pull data from the ski resorts' web pages. He currently already has three of the six maps completed and have already stored their data into a JSON file. Implementing the remaining three will just need a few hours that he plans on completing over spring break. The only potential issue here is time, since the ski season is rapidly ending especially due to the warm winter this year. As for creating the map images for the remaining five maps, that is also feasible. We have already assigned each other specific maps to work on, so completing the remaining five maps among four people is definitely feasible. As for the GUI and format of the web page, that can be done in a matter of a few days once we come to a conclusion of how we want our website to look like. We are planning on finalizing our website's theme and appearance that we are striving for in the next few days. The

only potential feature that may be out of reach is displaying two dynamic map on the same page similar to a comparison page.

Contingency Plan

As discussed earlier, the ski season is rapidly ending and this year's warm winter is not helping. Lack of snow means less skiers and with that many ski resorts may have an intent of closing down early to cut back cost. This will pose a problem for us because we depend on these ski resorts to be open, and to be constantly updating their ski map data. We can't do that if the resorts are closed. At the rate that we are progressing the likelihood of this happening is low, but to be safe we have agreed to reuse data, or fake data if this were to happen. Another plan that we devised was mainly for the comparison page. If time becomes an issue again and we fail to successfully display two dynamic maps onto one page, we have decided to just scratch the feature altogether. Instead, we would try to implement a new way to make it easier for the user to switch from map to map. This can be done by the navigation bar with a drop down feature, or add a "next" and "previous" button to move to the next map or to the previous map.

Schedule Plans

We plan on finishing our project on time and without any major issues. After we finalize the design and fully implement the first map (Waterville), we will then implement the remaining five maps the same way. This is a bit different from our original plan which was to have two to three maps semi-functional. This was a team decision as we thought we would be more productive and precise to do so. As for the reformatting of the webpages and the general layout of our site, we are on schedule and those shouldn't take too much time.

Additional Resources

We are in the mist of checking out other bootstrap libraries for the layout and theme to make it look more professional and modern. A resource we used to find out the best design and color theme was Lavish Bootstrap. Also we are looking into a JS library to test to let us resize the image for multiple different devices such as Image Map Resizer.

Scrapped Original Ideas

There were a few ideas that we ended up scrapping from the beginning of testing out our site. One was being able to load all of the maps on one page in order to view them without flipping pages but this would take up a lot of space and would be tough to implement nicely on mobile phones. We also had all of the trail names on the side of the map but after implementing this it seemed like a waste of space and this wouldn't be important for most users as it offers nothing more than information that the user already knows from the map.

Final Look and Feel

This goes hand in hand with the bootstrap libraries that we are currently deciding on. We want the website to look professional with a navigation bar on the top with links to a page for each mountain and also an about us page. Also we want the images to be nicely drawn out and resize depending on the screen resolution.

Project Schedule

Date	Task	Assignee
1/27/16	Create GitHub repository for the project and add the three other group members to it.	Jason
2/3/16	Create OneDrive group for sharing and creating the Project Proposal	Jason
2/3/16	Work on the Project Proposal and edit	Jason, Brendan, Huy, JT
2/10/16	Alpha Version - have a working client side version of two or three ski resorts to display the main idea of the project.	Jason, Brendan, Huy, JT
2/17/16	Begin working on the backend, and setup the server for use with the project.	Jason, Brendan, Huy, JT
2/24/16	Have multiple maps working	Jason, Brendan, Huy, JT
3/2/16	Toggle between open and closed trails	Jason, Brendan, Huy, JT
3/8/16	Finalize alpha version	Jason, Brendan, Huy, JT
3/16/16	Show trail status in table format alongside map	Brendan, Huy, JT
3/23/16	Automatic updating of trail status	Jason, Brendan, Huy, JT
3/30/16	Allow multiple mountains to be viewed at once	Jason, Brendan, Huy, JT
4/5/16	Finalize beta version	Jason, Brendan, Huy, JT
4/18/16	Prepare for class presentations	Jason, Brendan, Huy, JT
4/27/16	Prepare final submission	Jason, Brendan, Huy, JT

Criteria for Acceptability

This application should allow users the ability to:

- Smoothly navigate across home page and the various mountain map pages.

- Highlight open and closed trails.

- Highlight open and closed ski lifts.

- Highlight specific trails for each mountain.

- Show prices pulled from each mountain website.

- Select mountains to view on the same page.

- Automatically update the trail and snow conditions.

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