

## sdmay19-37: Are Cross Country Courses Avoiding Hills?

Week 10 Report

November 25 - December 2

### Team Members

Connor Smith — *Ground Truth Engineer*

Thomas Chambers — *Ground Truth Engineer*

Ryan Hilby — *Data Handling Engineer*

Jacob Feldman — *Data Handling Engineer*

David Kirshenbaum — *Data Analysis Engineer*

Andrew Mumm — *Data Analysis Engineer*

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### Summary of Progress this Report

In this final week of the semester, most of our work consisted of tying up loose ends in preparation for our design review. While the ground truth team and Ryan continued their research of historical XC course routes for the sake of testing our hypothesis and alternative difficulty rating systems, the software team was entirely focused on getting the web app demo working. We also convened an all-team meeting to completely review and revamp our Project Plan and Design Document, and this iteration of the design process led to some new revelations and helped us reevaluate some design choices as we move in to the next semester.

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### Pending Issues

We are struggling to get replies from the Iowa XC officials we have been emailing for help in getting old course routes. We may have to seek alternative routes of communicating with these individuals.

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### Past Week Accomplishments

- Connor
  - Researched tullyrunners.com “Speed Rating” system for high school cross country performances
  - Explored Milesplit’s Venue List tool to find variations in individual course routes over history
- Thomas
  - Researched Iowa XC courses and high school officials to contact
- Jacob
  - Worked on finishing web app demo
- David
  - Worked on completing the web app by establishing communication between the front end and back end.
  - Improved the website by adding a home page and laying groundwork for the scorecard page by integrating chart.js into our project.
- Andrew
  - Worked on connecting front and back ends of app
- Ryan
  - Read energy cost study of going up and down hills

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### Plans for Upcoming Reporting Period

This is the final status report for 491. We will be spending the remainder of the semester focusing on our design review presentation before break before we all meet again for 492 :)

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### Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Connor Smith	Research in to other course ratings system and historic route changes	4	61
Thomas Chambers	Researched Iowa XC courses and high school officials to contact	3	40
Ryan Hilby	Read energy cost study of going up and down hills	3	40
Jacob Feldman	Worked on finishing web app demo	8	51.5
David Kirshenbaum	Worked on improving web app and getting it demo ready	10	51
Andrew Mumm	Worked on connecting front and back ends of app	7	41

### Gitlab Activity Summary

Nothing to report.

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