Final Project Progress Report

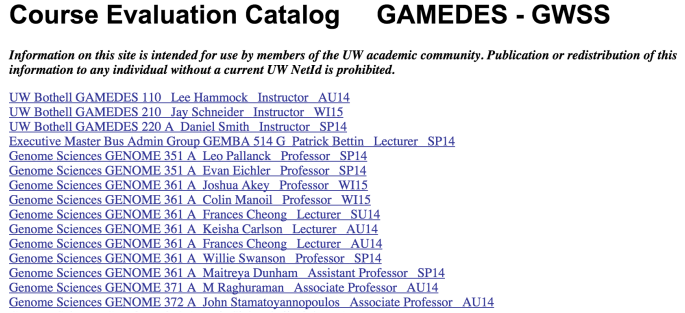
Project Summary

We plan to continue development on our Assignment 3 project, CourseRatings, which visualizes the Course Evaluation Catalog in a more intuitive and user-friendly way. Currently, CourseRatings provides the option to search and sort through the vast amounts of data. The goal for this tool is to provide a way for students and instructors to find relevant and useful information for courses taught at the University of Washington. This will allow students to find good instructors and it will hold instructors responsible for providing an active and enjoyable learning environment in the classroom.

Literature Review

UW Course Evaluation Catalog (CEC) [UW, 2015]

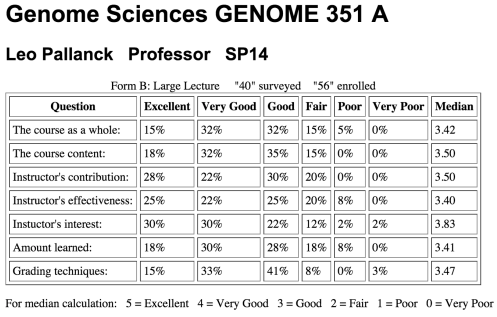
https://www.washington.edu/cec/toc.html



Course Evaluation Catalog GAMEDES - GWSS

Information on this site is intended for use by members of the UW academic community. Publication or redistribution of this information to any individual without a current UW NetId is prohibited.

UW Bothell GAMEDES 110 Lee Hammock Instructor AU14
UW Bothell GAMEDES 210 Jay Schneider Instructor WI15
UW Bothell GAMEDES 220 A Daniel Smith Instructor SP14
Executive Master Bus Admin Group GEMBA 514 G Patrick Bettin Lecturer SP14
Genome Sciences GENOME 351 A Leo Pallanck Professor SP14
Genome Sciences GENOME 351 A Evan Eichler Professor SP14
Genome Sciences GENOME 361 A Joshua Akey Professor WI15
Genome Sciences GENOME 361 A Colin Manoil Professor WI15
Genome Sciences GENOME 361 A Frances Cheong Lecturer SU14
Genome Sciences GENOME 361 A Keisha Carlson Lecturer AU14
Genome Sciences GENOME 361 A Frances Cheong Lecturer AU14
Genome Sciences GENOME 361 A Willie Swanson Professor SP14
Genome Sciences GENOME 361 A Maitreya Dunham Assistant Professor SP14
Genome Sciences GENOME 371 A M Raghuraman Associate Professor AU14
Genome Sciences GENOME 372 A John Stamatoyannopoulos Associate Professor AU14



Genome Sciences GENOME 351 A

Leo Pallanck Professor SP14

Form B: Large Lecture "40" surveyed "56" enrolled

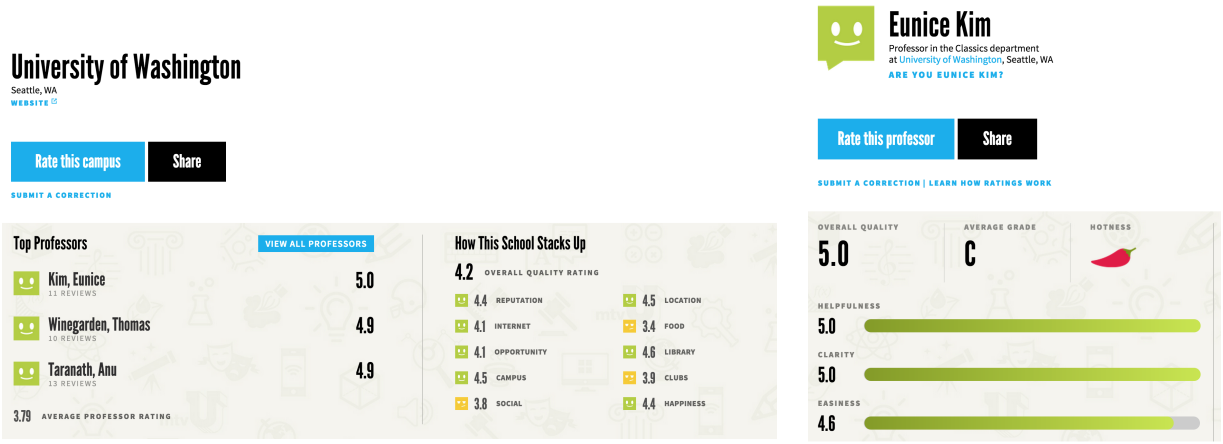
Question	Excellent	Very Good	Good	Fair	Poor	Very Poor	Median
The course as a whole:	15%	32%	32%	15%	5%	0%	3.42
The course content:	18%	32%	35%	15%	0%	0%	3.50
Instructor's contribution:	28%	22%	30%	20%	0%	0%	3.50
Instructor's effectiveness:	25%	22%	25%	20%	8%	0%	3.40
Instuctor's interest:	30%	30%	22%	12%	2%	2%	3.83
Amount learned:	18%	30%	28%	18%	8%	0%	3.41
Grading techniques:	15%	33%	41%	8%	0%	3%	3.47

For median calculation: 5 = Excellent 4 = Very Good 3 = Good 2 = Fair 1 = Poor 0 = Very Poor

The Course Evaluation Catalog is the main source for students at the University of Washington to check the reviews / ratings of a specific course that is offered at the University. At the end of each class, instructors are required to prompt a survey (either on-line in recent quarters or in class) that evaluates the instructor and the class on a number of different dimensions. This data is then posted on-line at some later date for the general public of the University to see. Unfortunately, only the past 2-3 quarters are kept on the site and the web application, if you could call it that, is incredibly difficult to use. Each entry is its own web page which contains a table displaying the information. The data that we use is scraped from this site (for the past 2 years).

RateMyProfessors (RMP) [Swapceinski, 1999]

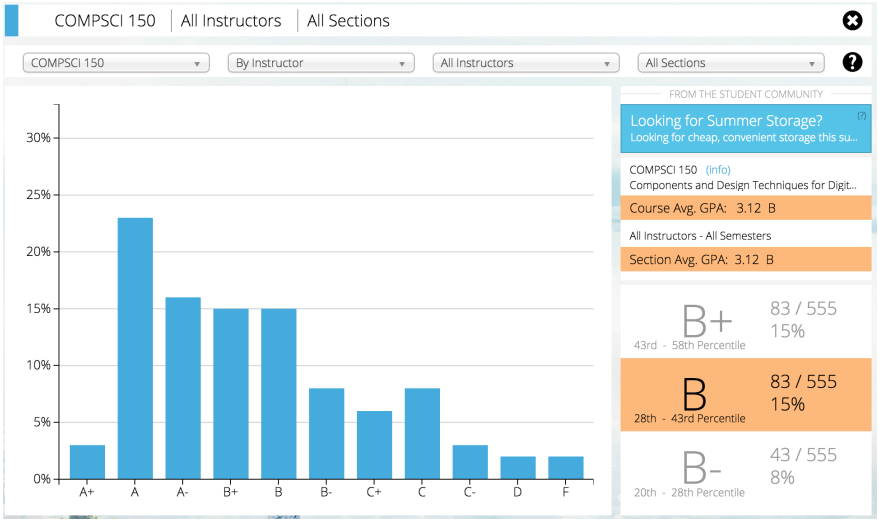
http://www.ratemyprofessors.com/



RMP was a tool created a while ago to encourage students to rate their teachers and professors since most Universities did not have publicly accessible data on the matter. It became quite popular and is still widely used today. RMP has been extensively criticized for having a poor representation of instructors and the student body that is doing the rating [Coladarci and Kornfield, 2007, Felton et al., 2008, Sonntag et al., 2009]. This is largely because the students that take the time to rate a specific instructor tend to have had a good or bad experience with him or her. This drives the aggregate rating towards the extremes. Another problem is that there tends to be a lack of data (< 10 entries) for most instructors at most universities (including the University of Washington). This means there is not enough data to reliably make a decision since there aren't enough entries for a instructor for the "wisdom of crowds" effect to take place.

berkeleytime (BT) [Yuxin Zhu, 2012]

http://www.berkeleytime.com/



BT was brought to our attention after explaining this project to fellow colleagues that happen to be in Berkeley's Computer Science Department. 3 undergraduates were able to convince the school to allow them access to the entire schools catalog of courses, which also happens to include the grade distributions of every

class. This is the main use of the tool. Students can search for classes and directly see the grades that everyone received and then they can break it down by the instructor that taught the class. Unfortunately, the University of Washington does not provide this kind of data and it is highly unlikely that they ever would. Because of this, CourseRatings relies on the ratings of the class and not the grade distribution (although it could be said that these two quantities could be correlated).

Final Project Plan

5/21 Final Project Progress Presentation

- Receive feedback from peers on what can be improved or added in the design.

5/25 Increase Quality and Amount of Data

- Update web scraping scripts (which broke on the CEC's latest update) to get the most recent quarter's data.
- Write a scraper for the course catalog to get the most up to date names of all the classes as well as their descriptions.
- Add a column in the results that indicates the percentage of students who filled out the survey.
- Add a description to each course's page that includes the newly scraped description.

6/3 Implement New Features

- Collapse identical courses: entries with the same course number will be collapsed into a single entity, which will display the average of each entry within it. An arrow or button of some kind will indicate that this row can be clicked to expand all of the records of the course.
- Search redesign: Three separate drop-down boxes, each with the ability to search, will be used for Department / Course Code / Instructor. In addition to this, each search box will support auto-complete, which will filter the selections possible in the drop-down box by what is currently typed in its search field. Lastly, the drop-down box will only display options that are in agreement with the other 2 search boxes.
- Department visualization: if only a department is selected, create a visualization that shows general information about that specific department (for example: average overall rating, average grade, etc.).

6/6 Small Modifications

- Reevaluate what we have created and make any small improvements / corrections.
- Present to friends and colleagues for feedback to be used in the final writeup.

6/8 Final Poster Presentation

- Working demo of what we created.
- Final poster depicting the thought we put in to the problem we solved and the project.

6/11 Final Deliverables

- PDF of poster we created for the poster presentation.
- Finished paper about our project.
- Final code.

References

[Coladarci and Kornfield, 2007] Coladarci, T. and Kornfield, I. (2007). Ratemyprofessors. com versus formal in-class student evaluations of teaching. *Practical Assessment, Research & Evaluation*, 12(6):1–15.

[Felton et al., 2008] Felton, J., Koper, P. T., Mitchell, J., and Stinson, M. (2008). Attractiveness, easiness and other issues: student evaluations of professors on ratemyprofessors. com. *Assessment & Evaluation in Higher Education*, 33(1):45–61.

[Sonntag et al., 2009] Sonntag, M. E., Bassett, J. F., and Snyder, T. (2009). An empirical test of the validity of student evaluations of teaching made on ratemyprofessors. com. *Assessment & Evaluation in Higher Education*, 34(5):499–504.

[Swapceinski, 1999] Swapceinski, J. (1999). Ratemyprofessors.

[UW, 2015] UW (2015). Course evaluation catalog.

[Yuxin Zhu, 2012] Yuxin Zhu, Noah Gilmore, A. I. (2012). berkeleytime.