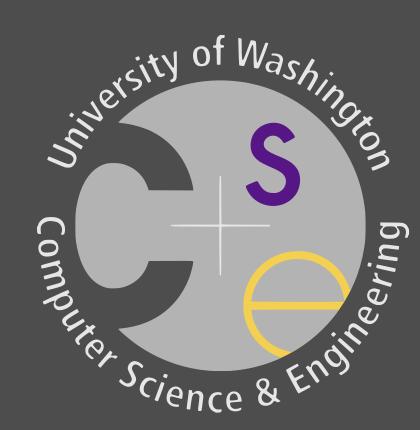
COURSERATINGS - A BETTER COURSE EVALUATION CATALOG

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PROBLEM & MOTIVATION

One of the most stressful times during the school year for a student is registration for the next quarter. Picking the best classes and more importantly the teacher for the class could change a student's experience for the course. At the end of each quarter, students fill out an evaluation form for instructors and the course as a whole. Currently, UW provides a Course Evaluation Catalog (CEC) for students to visit in order to see how students have rated a course.

| Genome Sciences GENOME 361 A | | | | | | | |
|--|-----------|-----------|------|------|------|-----------|--------|
| Frances Cheong Lecturer SU14 | | | | | | | |
| Form B: Large Lecture "79" surveyed "145" enrolled | | | | | | | |
| Question | Excellent | Very Good | Good | Fair | Poor | Very Poor | Median |
| The course as a whole: | 47% | 30% | 18% | 5% | 0% | 0% | 4.40 |
| The course content: | 46% | 33% | 15% | 6% | 0% | 0% | 4.37 |
| Instructor's contribution: | 71% | 18% | 10% | 1% | 0% | 0% | 4.79 |
| Instructor's effectiveness: | 62% | 25% | 8% | 5% | 0% | 0% | 4.69 |
| Instuctor's interest: | 57% | 30% | 9% | 4% | 0% | 0% | 4.62 |
| Amount learned: | 47% | 32% | 14% | 8% | 0% | 0% | 4.40 |
| Grading techniques: | 41% | 32% | 12% | 12% | 3% | 1% | 4.22 |
| | | | | | | | |

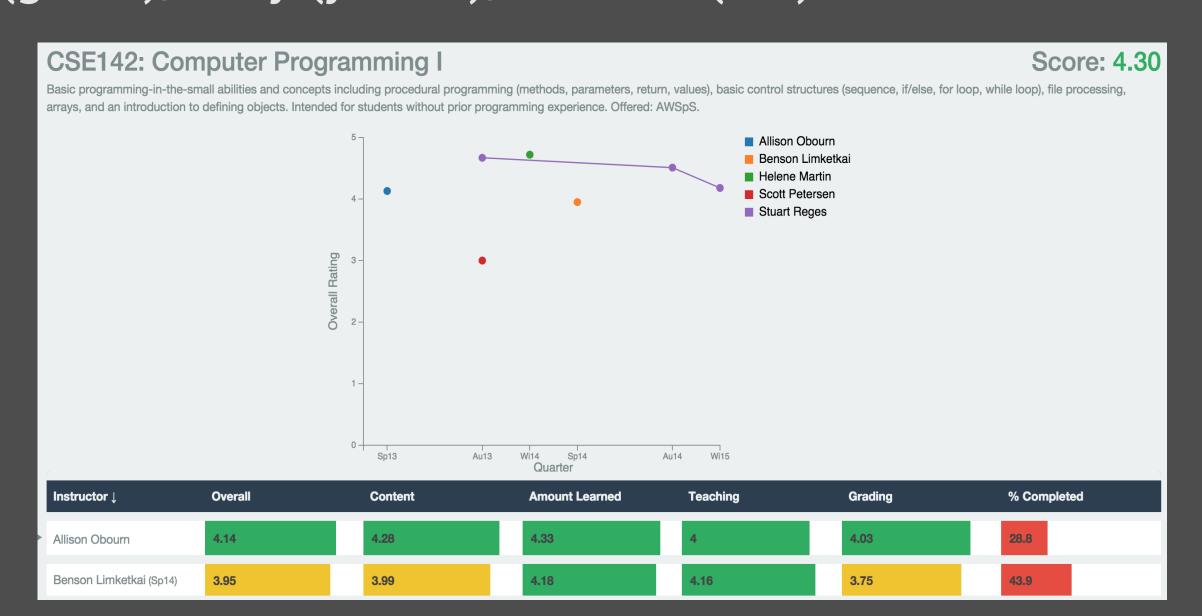
The layout is simply a list of evaluations (one for each course), which makes it quite difficult to compare ratings. The site does not directly elicit any average or aggregate information about courses or instructors over time. The catalog does not have any search capability causing users to resort to the browser's find functionality, which can yield bad results.

The underlying motivation for this project was the desire to have a tool that would be useful to students and instructors alike to look at evaluations. Our application reveals deeper insights and user-friendly visualizations that would be useful when deciding what course to take or which instructor to take a course from.

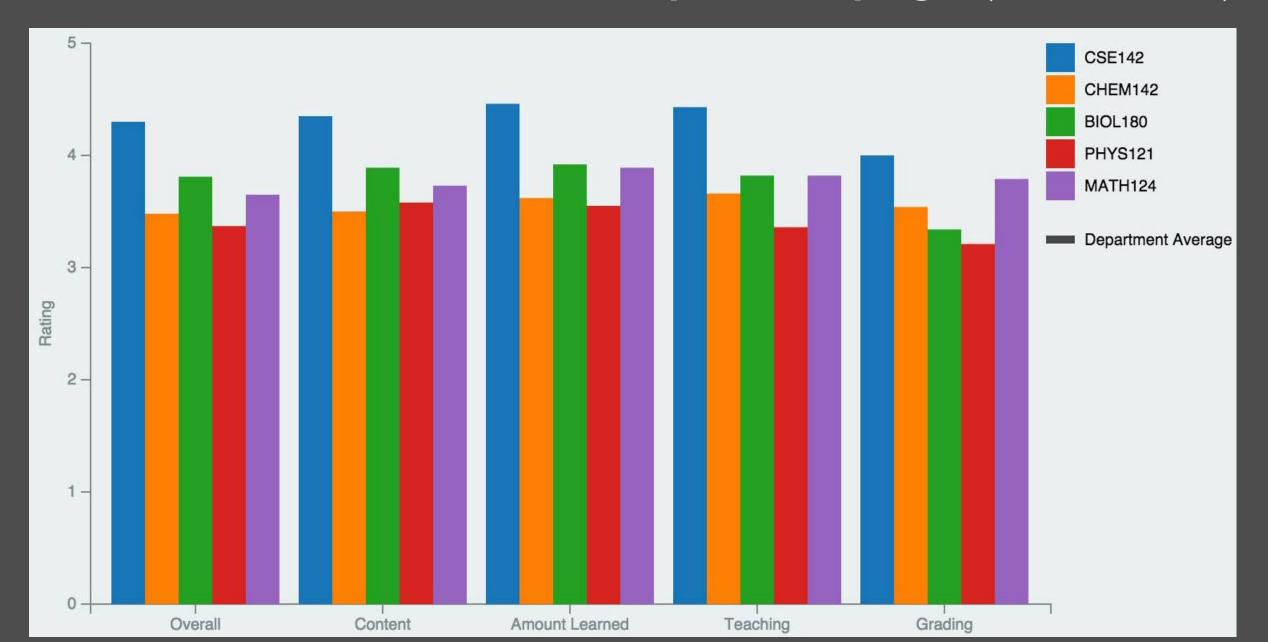


APPROACH & RESULTS

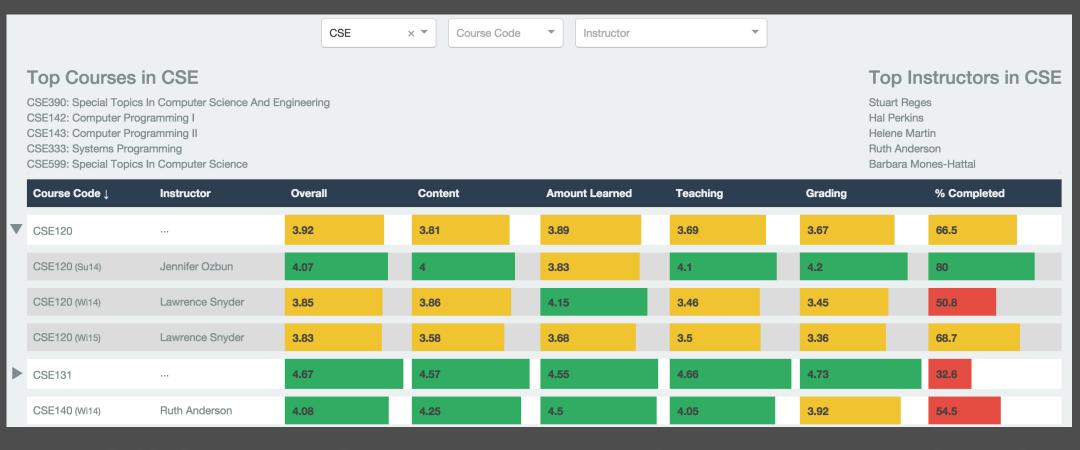
CourseRatings is built around three core features: search, table visualization, and D3 plots. The search is implemented as three searchable drop-down menus, which then computes an intersection of the selection. These data are then passed to a table where the courses / instructors are displayed as rows with their values as the columns. Color is used to convey good (green), okay (yellow), and bad (red) scores to the user.



D3 provides excellent mechanisms for displaying entries over the quarters. These plots are used on the Course detail and the Instructor detail page. D3 is also used in the Course Comparison page (see below).



Course Comparison page allows users to see the difference in ratings between various courses.



In addition to the Course and Instructor detail pages, there is also a Department page that displays all of the courses in the department. The Top Courses and Instructors are shown above the table. These are computed using a linear combination of the average Overall rating and the number of entries in the selection.

Similar entries (the same class over several quarters) are collapsed into a single row that averages each value. The user can click an arrow on the side of the row to expand it to show all entries within. Each instructor and course code may be clicked on to enter the specifc detailed page for that entry.



FUTURE WORK

- Better performance with querying and loading of the database into the browser.
- More integration with the Course Catalog (currently offered / offered next quarter).
- Continue to scrape CEC to gather more data on courses and professors in the future.

