

Engineering Design and Society Team Evaluation 4.0

Background

The Colorado School of Mines Engineering Design and Society Capstone Program encompasses 2,000 students every year in team-based projects. Peer/Team evaluations are performed twice every semester currently using CATME designed by Purdue University. Peer evaluations are critical to student development and problem mitigation. The CATME software license costs \$2/student and has limited functionality.

Project Description

Many project-based courses at CSM require students to evaluate their team members. Develop a web application for team evaluations. Because student information is sensitive, it is imperative that the system be FERPA compliant and only accessible through a secure sign-in. A domain RamblinWreckReviews.com has been established.

Beta version of this software will be piloted this semester. This will be the 4th and hopefully final CSCI 370 team working on this project. Per ITS compliance, the application is hosted on an AWS server under the Mines Amazon Enterprise account.

Basic functionality exists. However, there is still some work to be done. The basic functionality includes:

1. Allow administrator/professor to set up students, email and team definition with a CSV file
2. Allow administrator/professor to select evaluation questions from a list or uniquely create assessment questions
3. Allow administrator/professor to define a begin and end date/time for evaluation
4. Allow administrator/professor to send nag emails to all students who have not completed the evaluation
5. Allow administrator/professor to archive and access past evaluations for future reference
6. Allow students to provide confidential comments to instructor
7. Require students to provide feedback on every team member
8. Allow administrator/professor to release student comments to their peers via their Mines email
9. Allow administrator/professor to selectively prohibit a comment from being released
10. Create a CSV file of all student evaluations

More work needs to be done to accomplish:

1. Calculate a student grade based upon an administrator defined grading scale
2. Add/remove students without having to upload a new CSV file
3. Automatic nag emails for students who have not completed
4. Backend maintenance of data scrubbing data 5 years old
5. Upgrade from Bootstrap 4 to Bootstrap 5

Desired Skill Sets

1. Algorithm development and evaluation
2. Database structures
3. Django project (backend) Django application (frontend), & Django MySQL (database)
4. Amazon Web Service

Preferred Team Size

3-5 students

Location of Work

Mines Campus

Client Liaison

Donna Bodeau

dbodeau@mines.edu

303.514.1421



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