ECS 192/199 Report Website

Contact Information

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Project Summary

The computer science department at UC Davis offers internship and research credit for students in the form of ECS 192 and ECS 199 (ECS 92 and ECS 99 for students of lower division standing). The department has taken steps to ensure that the process is more formal than it has been in the past since an increasing number of students are using either ECS 192 or 199 to meet their graduation requirements. In order to streamline the process the department has put one instructor (currently Christopher Nitta) in charge of coordinating all of the ECS 192 and 199 proposals and final reports. The current state of the proposal and report processing requires the coordinator to maintain a spreadsheet of students enrolled and to contact them via e-mail to obtain updates or to work on report editing. The goal of this project is to automate a significant portion of the coordinators processing through a web interface.

Request/Proposal Use Case

The current process for students to request ECS 192 or 199 credit is to fill out the request form (available here), write a 1 – 2 page proposal, and to provide employment verification (ECS 192 only). The documents are then e-mailed to the coordinator that checks that the students are receiving the appropriate amount of credit, the employment verification matches the student's statements, and that the proposal is sufficient to grant sponsorship. Once the sponsorship approved, the student zips up the files and e-mails them to csinternship@cs.ucdavis.edu with the appropriate subject and filenames. The coordinator (or faculty research sponsor) then e-mails that they are sponsoring, at such time the Instructional Assistant e-mails the student the CRN and directions to sign up for the ECS 192 or 199. The e-mailed files are automatically put into a box folder for archive purposes, but if students do not use the proper subject or filename there are problems with this part of the automation.

Current Issues

- Multiple e-mails are required between the coordinator (and/or sponsor), the student, and the Instructional Assistant
- The PDF form often is garbled when filled out, and requires students to fill out information that should already be obtainable from within UC Davis systems
- Filenames/e-mail subjects often do not match the requested format leading to manual work on part of CS staff

Desired Features

- Web interface that students login to using Kerberos authentication
- Web form that automatically populates the students, SID, e-mail, GPA, units, etc.
- Proposal entry forms capable of being edited by students or coordinator that have a consistent format
- Employment verification attachment form (ECS 192 only)
- Sponsor/coordinator interface that allows:
  - Editing of/commenting on proposal
  - Approval of sponsorship
- Automated PDF document generation (once proposal is approved)
- Automated e-mail (or text) generation for student being provided CRN
- Instructor Assistant interface to update instructors CRNs

Updates Use Case

The current coordinator requires weekly updates via e-mail for ECS 192 (it is expected that ECS 199 will meet with their faculty advisor on a weekly basis). Most students e-mail regularly and do not require reminders, but some students forget to notify the coordinator with the progress of their work. This requires the coordinator track the updates of each student, and to e-mail them if an update has been missed. In addition the coordinator is currently archiving the updates in Word documents, which requires manually copying/pasting the e-mails into the correct document.

Current Issues

- Students have to remember to e-mail an update on a weekly basis
- Coordinator needs to keep track of update and "ping" students that have missed updates
- Coordinator copies and pastes the updates into Word documents
- Updates are not uniform across all students
- Students often don't check their campus e-mail (alternative notification is needed)

Desired Features

- Notification system for students that have missed updates
- Notification system for coordinator to see current updates
- Update interface that prompts for several specific update types (what the student learned, what challenges the student had, etc.)
- Provides previous weeks update when entering the new one so that a consistent record can be kept
- Storage of all updates, and automated PDF generation at end of quarter

Final Report Use Case

The final report is required for both the ECS 192 and 199 students. The report needs to be in to the department by the beginning of finals. The report should reflect the work completed, and address if the initial goals were met (and why they may have not succeeded). The final reports often do not address the initial plan (there is some inconsistency between proposal and final report). In addition the coordinator needs to remind the students to get the reports in with enough time to do editing if necessary. When the report is received it may require multiple e-mails to do the editing necessary. Once the report is accepted, then the student creates a PDF and e-mails it to the department e-mail address.

Current Issues

- Students are often busy at the end of the quarter and forget to do the final report
- Coordinator needs to remind the student of final report
- Editing of final report requires multiple e-mails
- Final e-mail is error prone due to incorrect filename or e-mail subject
- No student notification that report is received and accepted

Desired Features

- Final Report entry forms capable of being edited by students or coordinator that have a consistent format
- Final Report form should provide students proposal as a reference for each of the prompts
- Sponsor/coordinator interface that allows:
    - Editing of/commenting on proposal
    - Approval of final report
- Automated PDF document generation (once final report is approved)
- Verification that student is enrolled in number of units requested

Advising/Recommendation Use Case

Currently when CS counselors are advising students or when they providing the college with a student's information for graduation they need to manually search through the files to know when the student took the 192/199 for elective credit. In addition when faculty wish to provide recommendations for students they must look through past e-mails, or files to they have related to the internship or research.

Current Issues

- Advisors/sponsors/coordinators cannot easily search for former students
- Difficult to determine the number of total units or quarter student took 192/199 for elective credit

Desired Features

- Provide advisor/sponsor/coordinator interface for reviewing past students records
- Provide search feature for finding students
- Provide advisor/sponsor/coordinator notes section to keep track of additional student information.