

Montana State University Computer Science Department

Senior Team Portfolio Instructions

Beginning in Spring Semester, 2009, all undergraduate Computer Science majors enrolled in CSCI 468 and in CSCI 483 are required, as part of the CSCI 481 requirement, to submit a portfolio of their work to the department office by the first day of finals week. This rule applies both to those who are registered in CSCI 481 in the same semester and also to those who will be taking it in the future.

There are two reasons for this requirement:

- You can make a copy of the portfolio for yourself. Many employers like to see a portfolio representing your work.
- The portfolio will become part of our assessment process for ABET accreditation.

One portfolio must be submitted by each CSCI 468 or CSCI 483 team. If you take both courses then your team must submit portfolios for both courses. The portfolio must contain a cover page and the seven sections described below. If you find that one or more sections do not apply to you (e.g., you have not written a technical paper as part of your senior project, so Section 4 doesn't apply) then include a single sheet for that section explaining briefly why it doesn't apply. The cover page should have course name and number, semester taught, and team member names, listed alphabetically.

Note: Submitting the portfolio is a pass/fail activity. Honesty and completeness in your answers will help us improve our program in the future.

Section 1: Program. Attach the source listing of the program that you wrote for your capstone course (CSCI 468 or CSCI 483). Include the specifications for the program.

Section 2: Teamwork. Describe how your team worked on this capstone project. List each team member's primary contributions and estimate the percentage of time that was spent by each team member on the project. Identify team members generically as team member 1, team member 2, etc.

Section 3: Design pattern. Identify one design pattern that was used in your capstone project and describe exactly where in the code it is located. Highlight the design pattern in yellow. Explain why you used the pattern and didn't just code directly.

Section 4: Technical writing. Include the technical document that accompanied your capstone project.

Section 5: UML. Attach the UML design diagrams for your capstone project that were created **before** you began coding your project.

Section 6: Design trade-offs. Describe a design trade-off decision (e.g. execution time vs. space requirements or compile time) in your capstone project and justify the design decisions that you made.

Section 7: Software development life cycle model. Describe the model that you used to develop your capstone project. How did this model help and/or hinder your team?