

Department of Computer Science and Engineering
College of Engineering
University of Nevada, Reno

CS 426 - Senior Projects in Computer Science

Project Part 1: Concept & Management

February 9, 2016

Due: Thursday, February 18, 2016 @ 8:00 pm. Single PDF file named [P1_T##.pdf](#) or [P1_LastName.pdf](#), sent by email to the instructor at dascalus@cse.unr.edu

Points: 50

Weight in course grade: **Team option:** 6% **Individual work option:** 8%

Note: The project in this class is usually a team project, but a student has the option to work individually (not in a team) on his or her own software-intensive project. In this case --*individual work option*-- the requirements for the course will consist of project Parts 1, 2, 3, 4, 5, Project Poster, Test, and Class Participation, indicated in the course syllabus presented in class on January 19, 2016.

ALL: For this project part decide on an industry-strength software intensive project and write a concept document with the following structure:

A. Team Option

1. Cover page

- Department, University
- Project title
- [Team name,] team members
- Instructor
- External advisor(s) and their affiliation(s)
- Date

2. Abstract (100 to 150 words). Concisely and clearly indicate what your project is about, why it is important, and what exactly you intend to design and implement.

3. Project Description (200 to 300 words). Briefly describe the following:

- The main goals of the project -- what is your project about?
- Intended users and why this project will be beneficial to them?
- Main functionality and capabilities of the project that you will develop
- System hardware components, if applicable

4. Significance (300 to 400 words). Discuss the following:

- What makes this project worthwhile and interesting to pursue?
- How will the project help your professional growth?
- What are the new/innovative characteristics of your project?
- Similar or related projects or applications (make use of at least 4 references)
- Business, market potential, or open source value
- Potential for further development beyond CS 426

5. Estimation of time worked on project concept

Indicate how much time each team member worked on this project part since the beginning of the semester, and on which activities

6. Changes and progress since October 2015 (150 to 300 words). Briefly describe:

- Changes that have occurred since your early October 2015 project concept; explain the reasons for the changes
- Major developments so far
- Expected major developments by the end of the Spring 2016 semester

7. Project Management (250 to 400 words). Indicate the following:

- The main subsystems or components of your product (with short descriptions) and specific responsibilities of team members
Notes:
 - Each team member should have the main responsibility for at least one such subsystem or component, and the work should be balanced among all team members
 - A team member in charge of a subsystem or component should be responsible throughout the project for that subsystem or component, from concept, through specification and design, to implementation and demo
 - Collaboration on a project subsystem/component is allowed (that is, multiple people can work it) but the responsibility for the component will lie primarily with the team member in charge of that subsystem/component
- How responsibilities will be assigned for the *integration* of all project subsystems/components
- What version control system/software development code repository (e.g., github) you plan to use and how the team members will actually use it
Note:
 - This system/repository should be available upon request to the instructors, in case they need to check the contributions of individual team members to the project
- Indicate at least 3 risks related to the development of your project, and for each risk outline a strategy to manage that risk

8. Team Members (between 200 and 300 words). Provide information about:

- Each team member – brief background, specific interests and skills, professional goals

9. References (at least 4)

B. Individual Work Option

You are asked to complete the following items:

- 1 - Cover Page
- 2 - Abstract
- 3 - Project Description
- 4 - Significance
- 9 - References

as described in Section A above. For item 9, provide at least 2 references.