Project Assignment #1: Proposal/Concept

Thursday, September 26, 2024

Assignment Overview

Due: Monday, October 14 at 11:59 pm

• Points: 100

Weight in course grade: 8%

- File naming convention: a single file for each team, named CS 425_P1_TXX.pdf where TXX is your team number (T01, T02, T03, ...)
- Note: in the following <T3> means a team of 3 and <T4> means a team of 4 students
- Purpose of document:
 - Decide on a project topic for your team and write a project concept/proposal document
- You can add any other items that will strengthen your proposal.

O Cover Page

- Department, university
- Project title
- Team, team members
- Instructors
- External advisor(s) if available at this time, or TBD
- Date

1 Abstract/Summary

- Between 100 and 150 words
- Brief summary of your project

2 Project Description

- Between: <T3> 600 to 900 words; <T4> 800 to 1200 words
- Main goals and objectives
 - What are the goals of your project?
 - What is your project trying to achieve?
 - Why is it needed and/or significant?
- Main functionality and characteristics
 - High level requirements and characteristics
- Intended audience
 - Identify and describe intended users or user groups
- Key usability goals
 - How will users benefit from your project?
- Potential for further development/product enhancements
 - Describe future enhancements or additional products beyond CS 425

2 Project Description [cont'd]

- Challenges and obstacles
 - List potential challenges that you may encounter during the project's development. This can include technology, market acceptance, team skills and involvement, and other
- Technology description
 - Intended technology, e.g., platform, languages, libraries, tools, and devices
- Team overview
 - Team members: brief background information, specific skills, and expected involvement in the project
- Advisory overview
 - A brief note on current or potential external advisor(s)
- A note on how you expect this project will help your professional growth
- [Optional: Social and environmental impact/benefits]

3 Market potential or Open-Source significance

- All teams, between 250 and 500 words
- Market analysis
 - Describe market potential, commercial promise, or open-source value
 - Evidence of user interest (provide references)
- Competitive analysis
 - Notes on similar/related products (provide references)
 - Identify direct and indirect competition
- Competitive advantage
 - Novelty of your solution, innovative characteristics
 - What makes your solution better than the competition's

4 Time Worked on Project Concept

• Indicate how much time (in multiple of 0.5 hours*) <u>each</u> of the team members worked on this project part, and on what specific activities

*For example, 2.5 hours, 3.0 hours, 3.5 hours, 4.0 hours

5 Budget and Budget Justification [Optional]

- Up to one page and up to \$2,000
- Justify why it is needed
- Items purchased will belong to the University
- If working on a sponsored company project, materials needed should be provided by them (if possible)

6 Project Related Resources [Optional]

- A "problem-domain" book
- At least three project reference articles (journal, conference or web scientific publications)
- At least three project related websites with useful resources
- Please note that the project related resources are optional in this part of the project but will be required in Project Assignment #2, Project/Product Specification
- Note also that project proposals/concepts must be approved by the course instructors

Grading Rubrics

Project Assignment #1 Criteria Ratings Pts Cover page, formatting/presentation, English writing, and This area will be used by the assessor to leave comments related to 10 pts Section 4 this criterion. This area will be used by the assessor to leave comments related to Section 1 - Abstract 10 pts this criterion. This area will be used by the assessor to leave comments related to Section 2 - Project description 60 pts this criterion. This area will be used by the assessor to leave comments related to Section 3 - Market potential or Open source significance 20 pts this criterion.

Total Points: 100