

University of Nevada, Reno

Department of Computer Science and Engineering

## **CS 425 Software Engineering**

### **Project Part 1: Proposal/Concept**

September 28, 2021

**Due:** Friday, October 15, 2021 at 11:59 pm

**Points:** 100

**Weight in course grade:** 8%

**File name:** CS 425\_P1\_TXX.pdf where TXX is your team number (T01, T02, T03, ..., T33)

Decide on a project topic for your team and write a project concept/proposal document with the following structure:

#### **0 Cover Page**

- Department, university
- Project title
- Team, team members
- Instructors
- External advisor(s)
- Date

#### **1 Abstract/Summary** (between 100 and 150 words)

- Brief summary of your project

#### **2 Project Description** (between 750 and 1400 words). Indicate the following:

- 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 users will benefit from your project?
- Potential for further development/product enhancements
  - Describe future enhancements or additional products beyond CS 425
- 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** (between 250 and 500 words).

Address the following:

- 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 hours) each of the team members worked on this project part, and on what specific activities

### **5 [Optional] Budget and Budget Justification**, up to one page and up to \$2,000

### **6 [Optional] Project Related Resources**

- 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

Note that the project related resources are optional in this part of the project but will be required in Project Part #2, Specification. To the above, you can add any other items that will strengthen your proposal.

Project proposals/concepts will need to be approved by the course instructors.