COSC 340: Software Engineering

Course Project: Proposal

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Project Proposal Outline

- Heading: Title, Team Name, Team Members
- Section 1: Introduction
- Section 2: Customer Value
- Section 3: Proposed Solution & Technology
- Section 4: Team
- Section 5: Project Management

Project Proposal: Heading

- Descriptive Title for the Project
  - Pick a title that will be meaningful on your resume
- Team Name
  - Your choice: pick something fun or something professional or both
- Team Name for Github
  - To be assigned, as teams are formed
  - Team under class organization will be created
  - Members of the team added to it
  - Team repository (of the same name as the team) will be created
- Team Members

Project Proposal: Introduction

- Overview
  - What is the project?
  - What is the motivation for the project?
  - Place your project in the context of the market
    - Is your project idea novel? If so, what need does it fill?
    - If not novel, what existing software does it resemble? How is it different?
  - What are the backgrounds of the team members?
  - Is there anything you'd like to include to orient the reader?

Project Proposal: Customer Value

- Customer Need
  - Who is the primary customer?
  - What does the customer want?
  - Why? What is their underlying problem to solve or experience to have?
  - Place your software in the context of the market.

- Proposed Solution
  - From the customer's POV, what will your solution deliver?
  - How will the customer benefit from your proposed solution?
  - Does it provide a new capability or is it much better, easier, faster …?
  - Have you tested the idea on anyone?

- Measures of Success
  - How will you know if customers got the benefits you want to provide?
  - What are your customer-centric measures of success?

Project Proposal: Technology

- System: technology you deliver
  - From the developer's POV, what will your software do?
  - What are the main components of your system? What do they do?
  - What is a high-level block diagram of the architecture of the system?
  - What is a minimal system that would have some value to the customer?
  - What are some possible enhancements that customers would value?
  - How will you test your system?
- Tools: technology you use to build what you deliver
  - What will you use to build the system?
  - Are there available tools you can leverage?

Project Proposal: Team

- Skills
  - Has anyone on the team built something like this before?
  - Are the tools known or new to the team?

- Roles
  - What are the roles of the team members?
  - Will the roles be fixed or rotating?

Project Proposal: Project Management

- Schedule
  - Is completion of the system feasible?
  - When and how often will you meet? Face to face?
  - Write a (tentative) week-by-week schedule for project tasks and deadlines
- Constraints
  - Are there any regulatory, or legal constraints?
  - Are there any ethical or social concerns?
- Resources
  - Will you have access to the data you need?
- Descoping
  - What will happen if the full functionality can not be implemented
    - Will the reduced functionality operate?
    - Will it be useful (at least partially solving the problem)?