

The Proposal Template of Course Project

The proposal and the status reports during this semester build up to a comprehensive final report of course project. The proposal template emphasizes the Customer Needs and Project Goals sections. Material from these sections of proposal can be reused in later reports.

Note:

In this proposal and the reports, put information where it fits best. Avoid repeating the same information in a later section.

Descriptive Title Focused on the User Benefits

Team Name: Team Members

1. Introduction

Opening Paragraph

- What is the project?
- What is the motivation for this project?
- What is novel about it?
- Anything else to orient the reader?

Challenges

- Briefly describe the main challenges for the team.
- Briefly, how will you address them?
- Is the technology known or new to the team?

2. Customer Need

- Who is the primary customer, outside the team?
- Who are the secondary stakeholders?
- What do the stakeholders want? Why?
- What is their desired overall experience?

User Requirements

- Write SMART user stories based on the stakeholder needs and wants.

Use the “As a . . . I want . . . so that . . .” template.

- Write acceptance tests for the user stories, using the “Given . . . when . . . then . . .” template.

3. Project Goals

- What customer problem have you chosen to address?
- In implementation-free terms, what user benefit will the system provide?
- How will the benefit support the customer's desired overall experience?

Measures of Success

- Who outside the team have you tested the idea on?
- Describe the real outside customer, if any.
- How will you know whether the customer got their desired benefits?
- What are your customer-centric measures of success?

4. System Description

For this proposal, a rough draft of this section is enough.

- Draw a block diagram to show how the proposed system will interact with external services, databases, and so on. Clearly mark the boundaries of the system.
- Use the preceding diagram to introduce the system.
- What are the main elements of the proposed system?

5. Solution Approach

A brief rough draft of this section is enough for this proposal.

- Briefly describe how the system will work.
- What platforms, tools, libraries, and the like will you use?
- How will you test it?
- How will you evaluate the adequacy of your test strategy?

6. Project Management

Start a Change Log to track any changes to the project as described in this Proposal. For each entry in the Log, include four things: the date, description, motivation, and implications of the change.

- What development process will you use?
- What is a minimal working system that you plan to build in the upcoming iteration?
- What is your wish list of features for the proposed system?

Team Coordination

- How will you distribute and coordinate the work?
- How will you meet as a team? How often?
- What do you plan to accomplish during the meetings?

7. Team

Backgrounds

- What are the backgrounds of the team members?
- Any prior internships or work experience related to software development?
- Has anyone on the team built something like this before?
- Are the tools known or new to the team?

Roles

- What are the planned roles for the team members during this project?

8. Constraints and Risks

- Are there any social, ethical, policy, or legal constraints?
- Will you have access to the data, services, and resources you need?
- Is there anything else you might need?

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