

CS 4390 - Software Development and Systems Programming

Project proposal guidelines

Prepare a project proposal in any format that fits 8.5x11 page (one side only). Proposals should include the following:

1. A brief descriptive project title (2-4 words), team member's name, course name, and instructor name.
2. Problem statement - A problem that forms the basis of a software engineering project for this class. In one paragraph, describe the problem and the motivation. This description should convince the reader that this is a difficult and interesting problem, worth spending time for development. State why it is a problem and why is the problem important for your team to solve.

In another paragraph, analyze the problem or idea to give more background and context. Do not just focus on the negative aspects of the current situation, but also identify some positive aspects that may be beneficial to retain. A few salient examples from existing systems or practices could be used to support those claims. Students usually make a mistake of describing at a very high level the problem, too generic, and then make a huge leap and dive deep into the tiny detail of their own solution. You must make effort to bridge this gap incrementally. Also state if the problem has been solved before. If yes, what were the different existing approaches used to solve the same problem.

3. Define the scope of the project. How long do you think it will roughly take to implement the solution? What are some of the critical aspects of the software?
4. Your proposed methodology to solve the problem – Briefly describe your thoughts in no more than 3-5 sentences on how you plan on solving the above stated problem. Answer questions like: What concrete results will come out of your project? Who can and will use the results of your project? What positive impact will the final deliverable have on the society?

In another paragraph, mention the Software Life Cycle Model(s) (SDLC) you will use to develop your project. Briefly in one or two lines give justification to your choice of SDLC model(s).

5. References – Provide a list of reference used to build this proposal document.