

Carnegie Mellon University

Silicon Valley

Practicum Project Proposal

Sponsor Guidelines

Introduction

The purpose of this document is to aid the Sponsors in creating an appropriate proposal document that will highlight the main details and issues regarding the proposed practicum project. The proposal will be made available to all Carnegie Mellon University - Silicon Valley Practicum students and faculty and will serve as the main information source prior to project selection.

The students choose the projects they will undertake for their practicum experience based on the proposals we receive. Thus, it is in the Sponsor's best interest to present the project information clearly and completely.

Definitions

Client - Sponsor's designated individual who interacts directly with the team. The client (or client's assistant) must be available at least twice a week (remotely is acceptable) for the initial weeks of the practicum to facilitate learning curves of new application domains, technologies, etc. Thereafter, the client should be regularly available at least once a week for the remainder of the project. The practicum is 12-14 weeks in length.

Sponsor / Sponsoring Organization - The Sponsor is the organization that a client represents.

Team - The team of 3 to 5 Carnegie Mellon University - Silicon Valley students, who will work part-time (15 to 20 hours a week) on the Sponsor's project. Some of our students are local to Silicon Valley, while others participate remotely, using phone, email, IM, and Skype or WebEx (or equivalent). The student team is expected to perform as a contract team that negotiates the scope and details of the project directly with the client.

Practicum - The opportunity in our curriculum for our students to refine and reinforce the skills they have acquired during the previous nine to

fifteen months of their master's degree program. Short-term, real-world projects, preferably outside of the university environment, are sought that can thoroughly exercise these skills in a fixed amount of time.

Proposal Elements

The proposal is to be submitted in one of the following acceptable formats: pdf, doc, ps, or html.

The **Proposal** should contain the follow:

- 1) **Title or Name of Project.** It's surprising that this is quite often left off! We have had several projects identified only by either the client's or sponsor's name.
- 2) **Abstract.** In one short paragraph, succinctly describe what your project is about in general terms.
- 3) **Background of Sponsoring Organization.** Introduce your organization, its purpose, etc. Introduce yourself and your role in the organization. (The proposal author is often the client, but this is not a requirement.)
- 4) **Project Proposal Details**
 - a) **Background and problem context.** Students unfamiliar with a new application domain need to understand enough background to appreciate the significance of your project especially within the short time constraint. This is not a description of the project itself, but could include a description of your industry or a particular set of problems within the industry.
 - b) **Overview of proposed project.** A brief description of what the project entails: why it is important, what is the relevance, what and who benefits, etc.
 - c) **High level description of project and scope.** Describe and illustrate the core problem that is central to the project. Keep details to a relevant minimum. Describe to what extent the team will participate. This is useful to know in case the scope is known to be beyond what the current team can accomplish within the fixed practicum timeframe. It may be the case that a successor practicum team can contribute additionally to the same project in a later practicum.
 - d) **List major project goals, sub-goals, and objectives.** Also describe major tasks and interdependencies between tasks, sub-goals, and goals, where possible.
 - e) **Technologies/skills expected and required.** List the expected familiarity with technologies and skill sets that the student team should have prior to the project start. Identify those skills that you expect students to learn during the practicum.

- f) **Expected team size.** List an estimated student team size (between 3-5). Remember these are part-time students, working for 12-15 weeks, approximately 20 hours per week. Some are primarily available in the evenings and weekends. Requirements for day-time meetings during the week must be explicit in the proposal.
 - g) **Currently known obstacles.** List whatever obstacles are currently known that the team will encounter; these could be technical or organizational, involve communication or schedule issues, etc.
 - h) **Currently known risks.** List whatever reasonable risks can be expected on this project.
 - i) **Team Roles/responsibility.** If the team will be working with a group from the Sponsoring Organization besides the client, describe the working relationship and what will be expected of the team during the project.
 - j) **Expected use of deliverables at project completion.** How and to what extent will the project deliverables be used and by whom? This project should provide value to the client and should produce valuable deliverables. Students are quite excited to be working on projects of value to companies and society, and to which they can proudly list on their resumes.
 - k) **Preliminary Project roadmap.** How does the client initially view the project? What are the major task sequences? (This is not a directive, but merely a preliminary work plan to give the student team an orientation and a sense of direction.)
 - l) **Criteria for measures of success.** List *desired* acceptance criteria and *minimal* acceptance criteria by which this project is deemed acceptable to the client. Try to include objective measures wherever possible. Due to limited time, this aspect of the project may require some flexibility.
- 5) **Issues and Constraints: NDA, Citizenship, IP, Locality.** Some students are fully employed. This sometimes creates issues with non-disclosure agreements (NDA), IP, and so on, as the team will be producing useful project deliverables to the Sponsor. Please list any real or potential conflicts that might exist. Indicate if students will be expected to sign NDA or IP agreements. If United States citizenship is required, please indicate that requirement along with the reason. If there is an issue regarding non-local student participation, please indicate that, also. If there is a concern about students from specific competitor companies, or classes of companies, list that also.

Details regarding ownership and use of work product, confidentiality, etc. will be handled via agreements negotiated directly between the Sponsor and each member of the student team. However, practicum Sponsors are expected to undertake certain obligations, including committing time to interact with the student team, providing feedback to the students' faculty/instructors, participating in final student presentations, and allowing faculty/instructors the opportunity to observe the student working with the Sponsor - with CMU NDA if needed.

Finally

Remember, this proposal not only presents what you want to accomplish in the practicum project, but it also introduces your organization to our students. You should strive to create an interesting and intriguing document that presents your project and your Sponsor in the best possible light, and that can attract enough attention to improve your project's chances for acceptance.