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Proposal Form

Senior Project with Dr. Turner

1. Definition of Senior Project.

A senior project is a project which lets a student take what they have learned during their time at Cal Poly, and apply it to an idea that interests them. In computer science, students often choose to build a piece of software, because often in their studies they are focused only on certain topics and usually have trouble producing something of value in under ten weeks. Cal Poly's requirements for a senior project are loose, at best, bascially requiring a student to do something, by themselves or in a small group, that requires them to be in charge and to know when to seek help.

2. Type of Senior Project Proposed.

I would like to build a software system to help non-technical writers using Linux.

3. Expected Abstract of Senior Project.

Write up one or two paragraphs of abstract to describe what you think the finished project will be about and what you expect to conclude. One paragraph should describe facts and the main issue to be addressed, another paragraph to describe your expected solution or result. In the course of your project work, you may find another result or that your original thinking was totally wrong. This is not unexpected. This section should give some early hypotheses regarding the completion of your project.

4. Proposed Table of Contents

Give as detailed a picture of the Table of Contents as is possible at this point. The sections must include main sections: (1) Abstract; (2) Introduction where you generally describe your problem area; (2) Problem description where you carefully and in detail describe the problem you are interested in; (3) Survey of relevant work where you describe how others have looked at this problem or you describe the state of the world in your problem area; (4) your Contribution that consists of some (possibly small) variation on current solutions, a new synthesis or combination of solutions, an analytic criticism of some known solutions, a model to test some hypothesis about the solutions (software) or a mature description of open questions in the area; (5) Evaluation of contribution where you explain how your work has meaning in some context (you need not change the world but should show some improvement or novel evaluation for some element of your solution, experiment or survey, (6) Conclusion, and Bibliography. Note that if there is any ethical consideration to your work, you must detail it and explain your resolution explicitly somewhere in your writeup. Review the ACM/IEEE Software Engineering Code of Ethics and in cases where humans are part of your experimentation, contact the Human Subjects Review Board (IRB) on campus.

5. Proposed Process Model for Completion.

Here you must propose how you plan to carry out your project. It should include a timetable with proposed work schedule (timesheets are required: remember to expect 10 â’ 15 hours per week to work on the project). It must show the synchronization points for evaluation of work (by you and by me.) The process model also needs to include features such as change management and alternative considerations (such as if your original idea totally fails.)

6. Senior Project Basic Requirements.

You can think of this proposal as an extended requirements document for your Senior Project. It should begin with a set of Professional Goals (where would you like to go with your Cal Poly degree?) Exactly what do you expect to accomplish with your Senior Project? You should include a rich set of â’ nonfunctionalâ’ requirements that apply to your project.

7. Senior Project Test Plan.

You must have some idea how to tell when you are â’ done.â’ You must also have some way to evaluate your work and your results so that you can manage your expectations for completion and for grade evaluation. A test plan will guide such an effort: it will be based on your Senior Project requirements. The test plan should include a proposed set of acceptance tests. It should also include a way to evaluate quality attributes and the resulting grade assignments you would think would be fair.

8. Resources List

the resources youâ’ ll need and include everything you can imagine. Include time off from work, reduced courseloads, extra computing resources, hardware, time with Professor Turner, time with other consultants, books, papers, library time, and access to anything special you need. It is important to be explicit at this point. This section should include your bibliography so far, and note that the bibliography needs to be annotated.

I will need:

- Time with Dr. Turner
- A Ruby book (Obtained…)
- A book on coding user interfaces with Ruby
- Coffee
- 10-15 hours a week to code
- a gitHub account (Already have…)
- Someone (Maybe Dr. Turner…) to talk to about open-source software liscences.