Software Engineering Project Proposal

Length: approx. 3 pages per student

Project Title:

Student Name:

Student ID:

Supervisor Name:

Project Category/Topic:

- Software Engineering

Project Aim:

- In no more than three sentences, describe what you wish to achieve.
- Significance and relevance: Why is the project important and how is it relevant to your chosen software engineering pathways? See the below paths.

Related work:

- List the most relevant work in the area (with the help of the supervisor).

Project Objectives/Deliverables:

- 4-6 concrete and measurable project objectives: you may wish to split the focus on the research and/or implementation contributions of your work. For guidance, you may follow one of the below pathways:
- **Pathway 1 - Software Development:** If your work is purely engineering/development, this may include the major features of your system. You may wish to highlight the most signficant requirements, the preliminary architecture and design that you envision, along the approach that you will be taking to implement and evaluate your software product. It is expected that your final thesis will provide systematic reporting that will further elaborate on the software engineering of your product, covering requirements, design and architecture, implementation, testing and evaluation.

  Pathway 2- Research-Based Software Systems Engineering: If your work is research-based, you need to include the major research work that will be carried out to meet your project aims (e.g. developing a new model; conducting an empirical/experimental investigation; research and implementation of a technique etc); coverage of the related literature and how it can support your research; sensible plan to evaluate your contribution.

Pathway 3- Research into Software Tools and Implementation Prototype: If your work will be a mix of research and implementation prototype (i.e. as proof of concept), you may need to include the most significant element of your research and features of your planned prototype and how it intends to serve your research.

- For each objective, a one-line description of how you measure successful delivery; this should tell us about your likely approach that you will take to evaluate your research and/or software product.

- Explain why these objectives are sufficient to achieve your project aim.

Methodology:

- Description of approach to solve the problem.

Project plan:

- Feasibility: Explain why your skills/expertise and the available resources are sufficient to complete the project in time.
- Gantt chart with tasks and milestones, reflecting the project objectives/deliverables.
- Explanation of Gantt chart

Risks and contingency plan:

- What might happen that would prevent you from reaching the project objectives?
- What are the particularly difficult aspects of the project which you are worried about completing?
- What is your contingency plan if there are problems?

Hardware/Software Resources

- What HW/SW resources will be required to complete the project?
- Does the student/supervisor have access to these resources?

Data

- What datasets (if any) are required to complete the project?
- Does the student/supervisor have access to this data?

References