THE AUSTRALIAN NATIONAL UNIVERSITY
College of Engineering and Computer Science

ENGN8170 Systems Engineering Project
Second Semester 2014

Project Initiation Document

The project initiation document (PID) formalises the beginning of the project by establishing its scope and direction. It can be thought of as the project's foundation, and if the foundation is weak, then so too is anything that builds upon it. It is a crucial element in the planning phase of a project and the team must therefore place considerable effort into it to ensure they arrive at the correct solution to the *right* problem. Anyone outside of the project should be able to read through the PID and understand identify the key stakeholders, their expectations, and what your basic strategy is for satisfying them. The team's progression beyond the PID is subject to approval by programme management who will use it to gauge whether or not the project is worth pursuing.

Summary of Content

The PID should contain the following information:

i. **Project title and team name.** A project is unique and should be given an identity. The same goes for your team.

ii. **Contact information for the client and management team.** You should include a name, phone number and e-mail address at a minimum.

iii. **Project mission.** A concise statement that defines the project and it's purpose.

iv. **An analysis of the project's business needs.** Identify relevant markets and opportunities, and determine the business reason that ultimately drives the project (e.g. increased profitability, improved productivity).

v. **A preliminary (yet comprehensive) analysis of stakeholder expectations.** You should begin by identifying gaps in your understanding of what the customer truly wants. Once you know what information is missing you should engage with the customer to fill these gaps in. It is critical for the success of the project that you understand what each stakeholder expects from the final solution.

vi. **Known constraints.** Any known boundaries that will limit the design or the design effort (e.g. time, budget, human resources, regulations, compliance laws).

vii. **A list of expected milestones, deliverables, and desirable outcomes.** This includes all submission deadlines for the course and anything else you deem appropriate.

viii. **A list of relevant stakeholders.** Any person / organisation that has an interest in the project ranked in descending order of relevance / importance.

ix. **Details of the project team.** This should include team structure, names, positions held, contact information, formal qualifications, and technical abilities and skills (both academic and other). Use this information to determine the strengths and weaknesses of the team and compare this to what you think will be necessary to successfully complete the project. If your project scope contains work that your team has no expertise in then you should consider limiting the project's scope to avoid over burdening yourselves. Only commit to work that you can realistically complete at a high standard.

x. **A summary of existing solutions / technologies.** The client is not always aware of any existing solutions that may satisfy their requirements.

xi. **The proposed strategy / methodology for completing the project.** Despite how obvious it may seem, you should state that you will be employing the systems engineering method during this project. This should not be solution specific.

xii. **Schedule.** Your schedule should be detailed for near term objectives and relatively vague for long term objectives. The management team will be assessed on the validity of the schedule, and whether they adhere to it (or update it) throughout the project. You can use online tools such as Asana and Redbooth to complete this.

xiii. **Risk analysis.** You should establish a risk register early on in the project to identify and track key risks. You should state the standard you will employ (e.g. ISO 31000:2009), and include details of how you arrive at specific risk classifications (risk assessment matrices and corresponding definitions). Do not neglect this section. Any unknowns are a risk, and the more you know the better you can prepare for them. Risks are often transformed into opportunities.

xiv. **An indication of what resources will be required to complete the project**. This will include human resources, time, software licenses, facilities, etc. You do not need to indicate your expected salary.

You can structure the PID however you want. It should flow logically, introducing relevant information in the correct order (that is, do not introduce a stakeholder's expectation before identifying who the stakeholders are). Be creative. Be innovative. We expect you to establish a high standard for yourselves.

Assessment Criteria

The PID is worth 5% of your total grade and will be assessed out of 20 marks. Marks will be awarded for i) content (15 marks):

- **Accuracy:** Is the information presented correct?
- **Depth:** Is there sufficient detail?
- **Succinctness:** Is the content concise? Does the document contain superfluous padding?
- **Relevance:** Is the content relevant?
- **Clarity:** How clearly are ideas communicated?
- **Completeness:** Has each section in the list above been completed?

and ii) presentation (5 marks):

- **Structure:** Does the document have a logical structure?
- **Quality of English:** Is it obvious that this was written by multiple authors? Are there spelling errors and grammatical mistakes?
- **Layout/Format:** Is the document's format appealing / attractive? Does it distract the reader from its content?
- **Professionalism:** Would this document be accepted for release to the public (without editing) by a major organisation?