Project Proposal

Requirements and Assessment Guide

Bachelor of Computer & Information Sciences

Research & Development Project

Date	Version	Author	Notes
March 2014	1.0	Anne Philpott	This is broadly based on material from previous BCIS project assessment material.
February 2015	1.1	Anne Philpott	Minor updates
March 2016	1.2	Stephen Thorpe	Minor updates
Feb 2017	1.3	Stephen **Thorpe**	Updates to the assessment process
Feb 2018	1.4	Stephen Thorpe	Minor updates
Feb 2019	1.5	Sarita Pais	Minor updates - Proposal deadlines
Feb 2020	1.6	Sarita Pais	Minor updates - Proposal deadlines and weighting
April 2020	1.7	Sarita Pais	Minor changes to suit online delivery
July 2020	1.8	Sarita Pais	Minor changes to Learning outcomes
July 2022	1.9	Jacqui & Ramesh	General update
July 2023	2.0	Jacqui & Ramesh	Updated Canvas submission details and due dates
Jan 2024	2.1	Jacqui, Jing Ma & Ramesh	Updated Canvas submission details and due dates

1. Project Proposal

The project proposal involves preparing a **project proposal document** *and* an **in-person proposal presentation by the team** of their project proposal.

This document details the expectations and requirements for your team proposal assignment.

The project proposal is worth 10% of your final project mark.

Due dates and times

The proposal document is due Friday, week 6, @ 17:00 and must be uploaded to Canvas by one team member.

The proposal presentation must be conducted during week 7 (Monday to Friday)

Late Policy

Late assignments, without an approved extension, will be subject to a deduction of 5% (one grade e.g. from C+ to C) of the total mark available for each 24-hour period, or part thereof, up to a maximum of five calendar days. Assignments over five days late will not normally be accepted or marked and students will receive a DNC (Did Not Complete) for that assessment.

Background

The purpose of the project proposal is to justify that a project can be undertaken successfully by the team within the anticipated timeframe and resources. There are several objectives that a project proposal satisfies. It defines the goals, objective(s) and the scope of the project and justifies the approach that will be used to deliver the project outcomes. Presenting the proposal to a panel helps to ensure that the risks inherent in the project are identified and appropriate strategies suggested for dealing with these risks. The team and individual team members should have a clear idea of the goals and methods before starting. The proposal process verifies that the project's scope is appropriate for the hours the team members need to commit. The project proposal also helps students to start working on three of five learning outcomes associated with the R&D Project:

1. Show the ability to successfully undertake original work and demonstrate a professional attitude.

3. Communicate effectively with clients and sponsors in written and verbal presentations and group situations.

5. Determine an appropriate process and accompanying set of deliverables for their project by selecting and justifying an appropriate project management methodology for their project.

2.   The Proposal Document

Preparing for the Proposal

The proposal should describe the project's goal and objective(s) (based on a problem, a need, or a perceived opportunity) and the proposed approach the team will take to deliver the solution.

Your team will need to investigate and discover the project goals and objective(s) by meeting and consulting with the client. This requires having a meeting agenda and planning who in your team is responsible for what during the meeting. Everyone is responsible for taking notes. Your team should assign someone to write the official minutes, including identifying someone to proofread them before circulating the minutes. Minutes should always be circulated within 48 hours of the meeting.

Please note that after all meetings, your minutes must record the team's understanding of the discussion and any decisions that were made. Provide this record to your client and your mentor and ask for amendments or revisions. This step will help clear up any omissions or misunderstandings that could later derail your project. Revisit the minutes at the start of each new meeting. Anything outstanding should be carried forward to the next set of minutes.

The proposal must also present how the team plans to undertake the project. Hence, the project proposal must include relevant project plans. These project plans are taught as part of the IT Project Management (COMP600) course for the BCIS qualification. These plans will help your team justify that the project can be undertaken successfully and show that the project is necessary, feasible, and manageable. The templates for the various project plans are provided on Canvas.

The proposal must include a well-thought-out project management methodology and the roles/skills (technical and non-technical) that would be adopted, including the infrastructure required to deliver the project. The proposal must also identify project risks, artefacts, deliverables, and a project schedule. Use the knowledge you have gained from earlier papers in the BCIS qualification to consider a possible project management methodology and discuss it with your mentor. Make sure your team can identify the reasons for adopting a particular project management methodology and **why it matches** the needs of your project.

3. Project Proposal Contents and Format

Contents

The following information should be included in your project proposal:

Cover Sheet: Title, client, team members, mentor's name, date, and version number.

Include a 1-page Executive Summary summarising the proposal and covering scope, time, method, risks and cost.

Project proposal details.

1. **Terms of reference** (provide the project purpose or business goals, the context for the project, introduce your client organisation and the problem, need or opportunity the project aims to address).

2. **Rationale for the project**. Why is this project needed? Describe any existing system or area of enquiry undertaken and explain what the key project issues or opportunities are.

3. **Objective and Scope.** Must include the project goal covering details of what products/objectives the project and team will deliver. Identify the scope of the project, i.e. the high-level requirements. The way these requirements are expressed will depend on the nature of your project (for example, a software development project might list high-level functional and non-functional requirements in a semi formal grammar). Must also identify technical infrastructure and skills required to deliver the high-level requirements, including the technical infrastructure that AUT or the client must provide.

4. **Skills Analysis.** Identify the skills and knowledge required to complete the project and the knowledge gaps in the team. List the IT-specific (specific to your BCIS degree) skills first, then add the full range of personal, professional and technical capabilities. Identify how and when you plan to acquire them. Make sure you include sufficient time in your project plan for upskilling.

5. **Team Roles.** List all the adopted team roles, tasks, and associated responsibilities

6. **Team Schedule for Part 1.** Provide a weekly schedule for offsite hours; the day/time for co-location for the offsite hours (client site or R&D lab) based on 12 to 15 hours per week. Must also provide a schedule for the mentor (weekly) and client meetings for the entire semester.

7. **Project Management Methodology or Approach.** Explain the chosen project management methodology and provide a WBS (PM methodology) which identifies phases and key activities (must also include project handover). Include a rationale and justification for why the choice matches the purpose or goal of the project. What phases/tasks/deliverables does it involve? Why does this chosen approach suit this particular project, team and client? Ensure that all material you use is appropriately referenced using APA 7 (i.e. you should be referencing a resource that your team will refer to during the project's lifecycle).

8. **Risk and Issues Management**. Explain the project's risk and issue planning including the monitoring and control process you propose to adopt.

9. **Project Plan- a schedule and milestone report for the entire project**. Set out your plan for the underline entire duration of the project (for example, use a Gantt chart that includes a timeline and resources). Ensure that it matches the approach or methodology you

have selected. Also, incorporate your AUT assessment items into your project plan along with the time and resources needed to complete them, i.e. your proposal and the preparation, your mid-project review and its preparation, your final poster, portfolio and reflective report etc.

Note: provide the high-level schedule showing phases and dates up front in the proposal **and** include the detailed schedule in an appendix.

10. **Estimate all costs incurred**. Do not forget to include any costs for resources required and have an estimate for your team labour for the number of working hours. Your mentor's hours can be costed out at $142+GST per hour (Note: this is not what they get paid, but what it costs the university to provide 1 academic hour).

11. **Attach a disclaimer as an appendix**, clarifying the nature of the relationship involved (see the Standard Disclaimer on Canvas).

Format

You will need to present this formal document to your mentor/moderator and/or a panel. You also must present a revised version to your client, revised on the advice of your mentor and the advice given in your proposal feedback. Ensure that your format, grammar and spelling are correct and that the presentation is of a professional standard. Reference all material from other authors correctly using APA. A guide to this referencing style can be found at: https://aut.ac.nz.libguides.com/APA7th.

Proofread your proposal before you submit it to your mentor and moderator.

4. Proposal Presentation

The project proposal is presented by your team, in week 6, to the assessors who will include mentor/moderator and/or a panel. Project proposal presentations are expected to take approximately 50 minutes. Please ensure that your team coordinates this with your project mentor and moderator.

It is your responsibility to agree on and schedule a time for your presentation with your mentor and moderator **before asking your team mentor to book a meeting room**. You should then send an Outlook appointment to the mentor and moderator and include the R&D teaching team.

Teams should bring printed copies of their proposal to the presentation for their mentor and moderator.

The presentation format could include:

- 2 minutes to enter the meeting room, hand out the printed proposals, and prepare systems.

- 10 minutes to present. Be aware this is not very long. Make sure it is shared equitably amongst the team and that all members get to speak. Make sure the important things get covered. Do not be concerned if the assessors are reading the proposal while you are presenting.

- 25 minutes for questions from the assessors.

- 10 minutes for the assessors to confer.

5. Assessment Guidelines

While the project proposal is worth 10% of your final project mark, its cumulative effect is much more important than the allocation of marks would suggest. Gaining a good understanding of your project goals and objectives, selecting a suitable approach, and starting the planning process will lead your team to success.

You will receive a mark for your proposal and written feedback from your mentor via Canvas.

On the day, you will be verbally given an outcome of your presentation. Possible outcomes include:

Approved: **Approved subject to specified conditions** (which may need to be completed to your mentor's satisfaction) or **Declined**.

If the mentor and moderator (panel) decline your proposal, your team must revise and resubmit later. A failure to gain approval at the first presentation results in a grade of 'D' for the proposal. A failure at a second proposal presentation will result in a failure for the R&D Project paper and require re-enrollment in the R&D Project Part 1 the following semester.

Feedback on your written proposal will address the content items above and the overall quality of the proposal – see the marking schedule in Appendix A. The grading will be moderated, and your team should receive the marks and feedback within three weeks of the presentation (provided you do not need to represent).

Once your proposal has been approved, you can formally commence work in collaboration with your client and your mentor. You can expect that your understanding of the project and its goals will develop and change over time and that your plans will need to be adapted as an improved collective understanding occurs.

Most teams will have some feedback items that they are expected to address in a new version of their proposal. Evidence of this is required for your Mid-Project Review assignment in Week 12. An updated proposal together with the original version which was submitted for the proposal assessment must be placed in your portfolio.

Marking Schedule:

Research & Development Project Proposal

Criteria	Mark [10]
Rationale: The proposal identifies the problem that the project will solve or the business opportunity to be taken	
Objective: The proposal identifies the central project objective(s) and what the team will deliver (software and features, hardware, or report)	
Scope: The proposal clearly outlines the project's scope in the form of high-level expressions of the core requirements, including functional and non-functional requirements, and a scope statement document. These requirements align with client requests (project-related and product-related artefacts) and the rationale and objectives of the project.	
Risks: a risk register is provided that considers and captures all the relevant and realistic potential risks associated with the project, such as ones related to scope, schedule, technical, tools, client, team, environment (such as covid, online/remote team processes), data availability/quality, etc.	
Project Feasibility: The proposal includes an analysis of the project's feasibility. Information included should consider the required infrastructure, tools, technologies, roles, and skills. The report must include evidence of alternatives that were considered and a rationale/justification for the path ultimately taken. Note: Even if the project is a continuation of an existing project, the feasibility of the next phase and the proposed activities within the next phase must be evaluated.	
Skills: missing skills are identified, and a comprehensive training plan to acquire those missing skills is reported. The training plan should identify appropriate resources and approaches the team will use to fill any gaps in knowledge and skills. Time should have been allocated in the PM plan for skills acquisition.	
Project Management Methodology: The project management method chosen is justified. Appropriate WBS or phases are identified along with the key activities and the methods and/or practices adopted to conduct each phase.	
Estimated Project Costs: A realistic and *researched* estimate of the project costs is presented based on the resources needed to complete the project. Note: A detailed budget is not required. However, the budget must be supported with citations to references/resources used to inform costs.	
Project Schedule: Proposed actions (with deliverables) identified and justified. The plan should cover all project phases, identified activities and deliverables. Adequate time should have been allocated for the identified activities. *Key milestones* must be included. The plan must also include the part 1 and part 2 assessment deliverables as key milestones in the project plan.	
Effective Communication: The proposal document is presented professionally, and conventions of academic writing (e.g., citations, references, etc.) are followed. The language contains few, if any, errors in grammar or vocabulary. The meaning is clear, and ideas are expressed clearly and concisely.	
Proposal Elements: The proposal includes all the expected elements (such as an Executive Summary) as stated in the Proposal Assessment Guide. All relevant and required documents are included as an appendix or within the proposal. These will differ to some extent depending on the nature of the project. Documents *may* include various project plans, stakeholder register, team contract, team culture document, conflict resolution process, risk register, issue register, QA plan, QC processes, communication management plan, project schedule, project charter, etc. The supplied documents must be relevant to the chosen PM methodology and development methods and be necessary in that they have value in terms of project tracking, quality assurance, communication, etc.	