**DEPARTMENT OF COMPUTER SCIENCE**

**CECOS UNIVERSITY OF IT & EMERGING SCIENCES, HAYATABAD PESHAWAR, PAKISTAN.**

**FINAL YEAR PROJECT PROPOSAL**

 **PROJECT TITLE**

**Supervisor: NAME**

**Batch:**

**Group Members: (Names & Class ID)**

 1:

 2:

 3:

 4:

Supervisor Signature:

**Sample CAPSTONE PROJECTS Proposal Outline**

The following is a sample outline for CAPSTONE PROJECTS project proposal. Note that all questions for a section may not apply to your proposal, and should be used as a general guide only.

1. **Introduction** (1 or 2 paragraphs)
	* Motivation Sentence
	* Summarize the problem (1 or 2 sentences)
	* Summarize the solution (1 or 2 sentences)
	* Describe format of rest of proposal (sections, etc.)
2. **Motivation** (1 to 3 paragraphs)
	* What is the history of the problem?
	* Why is this problem interesting?
	* When and why does the problem occur?
	* Is the problem already solved? What is done now?
	* Are there any similar systems or solutions to the one you propose? If so, reference and very briefly explain them.
	* Are there are possible improvements to current solutions?
3. **Project Summary** (1 paragraph)
	* What in general will this project achieve? (Do not delve into details or timelines.)
4. **Project Details**
	* *Architecture and Environment* (2-3 paragraphs + figures)
		+ Describe the project environment (software, hardware, languages, organizations, etc.)
		+ Diagrams and figures are useful here if appropriate.
		+ What software, hardware, or tools will you use?
	* *Implementation Issues and Challenges* (2-3 paragraphs)
		+ What will be the most difficult issues and challenges in the implementation?
		+ How are you using or extending current tools/systems for your problem?
		+ What makes your project unique?
	* *Deliverables* (3-5 paragraphs - point-form may be used for some of the description)
		+ What will the project produce? (program, report, etc.)
		+ Describe in relative detail the features of each of the project's products.
		+ You may wish to separate deliverables into phases and indicate optional components given time.
		+ **Emphasize what your project contributes or achieves!**
	* *Timeline* (1 paragraph - point-form is suitable)
		+ Provide an estimated timeline of project deliverables and important dates.
5. **Conclusion** (1 paragraph)
	* Summarize the project including the problem, motivation, and proposed solution, and re-state important (planned) contributions.
6. **Time Line**
7. **References**
	* List references used to compile proposal and references that will be used for project (if already known).

 **Format guidelines for CAPSTONE PROJECTS Proposal**.

**Aspect Description**

1. Font for headings Boldface serif or sans serif: size in accordance with hierarchy
2. Font for text portion 12-point Times New Roman
3. Margins Standard, at least 1 inch
4. Layout One column, single-sided
5. Paragraphing Indented paragraphs, no line skip between paragraphs in a section
6. Page number Bottom centered
7. Figure names Numbered: Figure 1, Figure 2, Figure 3, and so forth
8. Figure captions Below figure in 10 point type
9. Table names Numbered: Table 1, Table 2, Table 3, and so forth
10. Table headings Above table in 12 point type

Things to Avoid

 Avoid jargon or any technical terms that most readers won't understand.

 Avoid abbreviations or acronyms that are not commonly understood unless you describe what they mean.

 Abstracts do not have a bibliography or citations.

 Abstracts do not contain tables or graphs.

 For most science projects, the abstract must focus on the previous 12 months' research (or less), and give only minimal reference to any earlier work.

 If you are working with a scientist or mentor, your abstract should only include procedures done by you, and you should not put acknowledgements to anyone in your abstract.

Why Is an Abstract Important?

Your science project abstract lets people quickly determine if they want to read the entire report. Consequently, at least ten times as many people will read your abstract as any other part of your work. It's like an advertisement for what you've done. If you want judges and the public to be excited about your science fair project, then write an exciting, engaging abstract!

Since an abstract is so short, each section is usually only one or two sentences long. Consequently, every word is important to conveying your message. If a word is boring or vague, refer to a

thesaurus and find a better one! If a word is not adding something important, cut it! But, even with the abstract's brief length, don't be afraid to reinforce a key point by stating it in more than one way or referring to it in more than one section.

How to Meet the Word Limit

Most authors agree that it is harder to write a short description of something than a long one. Here's a tip: for your first draft, don't be overly concerned about the length. Just make sure you include all the key information. Then take your draft and start crossing out words, phrases, and sentences that are less important than others. Look for places where you can combine sentences in ways that shorten the total length. Put it aside for a while, then come back and re-read your draft. With a fresh eye, you'll probably find new places to cut. Before you know it you will have a tightly written abstract.

**Project Success Criteria**

Project success criteria are **the standards by which the project will be judged at the end to decide whether or not it has been successful in the eyes of the stakeholders**. OK, I’m glad we got that sorted. Now let’s look at why we should care about project success criteria.

Why are project success criteria important?

We don’t document how we will know if a project has failed – what failure looks like – because thinking about failing is not a good way to motivate the project team when the work has only just started. The absence of a formal definition of failure makes it uncomfortably easy for internal and external stakeholders to brand projects a failure.

Think about some of the projects that have hit the headlines recently (in any country). Projects ‘fail’ in the eyes of the media and stakeholders because for people are left to guess what success looks like. Is it delivery on time? Is it delivery on budget? Perhaps those two things really don’t matter much to the stakeholders concerned if they get a great quality result and happy customers.

Successful organisations take the guesswork out of this process: they define what success looks like, so they know when they have achieved it. If you want project success, you have to define what success looks like for your project. Perhaps budget is the most important thing to your stakeholders, and quality is taking a back seat on the project. Perhaps customer satisfaction is essential, and you don’t care how many overtime hours the team has to work to get that end result.

Project success criteria are a great tool to use to manage stakeholders and to generate engagement. You can use them to define the project’s goals and track progress – and if your stakeholders stop caring about your success criteria you’ve got an early warning sign that you need to do more to continue to keep them on side.

Two types of project success criteria

So you want to know how you’ll know if your project has been a success? You need to identify what success looks like for you and your stakeholders. And the easiest way to do this is to brainstorm with your team.

During this process you’ll probably come up with success criteria related to the management of the project. These are the success criteria which you can refer to in project audits or the post-project review. They help focus your mind on the ‘business’ of project management and relate to doing the project right. They help you check that you’re hitting all the right targets and are applying project management standards appropriately. Examples would be things like:

 Hold a Project Board meeting once a month

 Complete project audits in line with the timetable published by the Project Office

 Ensure all timesheets are completed by the deadlines

 Achieve 95% compliance on project quality reviews.

Alone these success criteria are not sufficient. They help you measure whether you’re doing a good job but not whether you are actually delivering anything useful for your stakeholders.

Your success criteria analysis should also identify deliverable-based project success criteria which are strongly linked to the business case and the rationale behind doing the project. It’s hard to give sensible examples as they are tied so tightly to what your project is delivering but you should aim for things like:

 Achieve rollout of software to all users

 Train 95% of staff within the two week training period

 Improve customer satisfaction by 65% over the first three months

 Gain Centre of Excellence accreditation for Marketing department.

You get the picture.

So, to summarise:

 **Project management success criteria:** Related to the professional job of running the project e.g. Produce and gain sign off for project initiation document

 **Project deliverable success criteria:** Related to things delivered as a result of the project e.g. Distribute 6,000 instructional leaflets to households in our target area.

How to document your success criteria

Document your project success criteria in a list. I include the list in the Project Charter or Project Initiation Document so it’s easy to refer to.

Each list item should include:

 Name of success criteria

 How it is going to be measured

 How often it is going to be measured

 Who is responsible for measuring it

You can also capture the output of the measurements here if you want, or move that to another relevant project document. Personally I like to keep them separate, but I don’t see why it wouldn’t work to have your records all in one place.

How to measure project success criteria

You have two choices when it comes to measuring project success criteria:

 **Discrete: Yes/No** We did or did not do something Examples: Project delivered on time, company gained XYZ accreditation, new branch opened

 **Continuous: measurable on a scale** We did something to a certain extent, within a target range Examples: Improve customer satisfaction scores to between 75 per cent and 100 per cent, increase revenue by 8-10 per cent, rebrand 15-20 offices within Quarter Four.

Continuous measurements always include the possibility of being translated into discrete targets. If customer satisfaction was 75 per cent in May, and the target was 60 per cent, you reached the target. If it was 59 per cent, you didn’t. Monitoring benefits on a continuous scale is always better as it allows you to track changes over a period of time. If the customer satisfaction target was reached in May, that’s fantastic. But you cannot tell from a yes/no measurement if it was better or worse than April or what the trend into June is looking like. So go for continuous measurements wherever you can.

Baselining performance

It’s great knowing how you are going to measure success criteria going forwards, but how are you doing today? If you want to capture trending information then you have to take a baseline of current performance as soon as you can, preferably as soon as you have set the success criteria. The problem is that at the beginning of a project there’s normally so much going on that baselining current performance takes a back seat to doing improvements and delivering change.

Still, make time for it, or you’ll have a harder job later working out whether your project has made a difference. It’s great knowing that you are now calling back customers within 20 minutes, but if you don’t know what the call back time was before project was implemented you may very well have made the situation worse – you just can’t tell.

A performance baseline lets you identify the differences in performance in the post-project world related to the things you consider important measures – your project success criteria. Use the same calculations and tracking method to work out your baseline performance as you intend to do for measuring your success criteria later. Otherwise you are introducing even more variables into the mix – keep it simple.

When do I track success criteria?

You’ll take an initial performance benchmark as soon as you can in the project, as we saw above. Then you have to work out how often you want to measure your project success criteria. Each success criteria will have different requirements. Some you can track once a month, others you’ll only measure once more. Some you won’t track very often and then as soon as you hit delivery you might be measuring them daily (like daily quality targets or call handling times).

**Supervisor**

Once your supervisor has been confirmed, they will be your first contact in dealing with all academic and the majority of administrative matters associated with the Capstone Project subject. However, the initiative must come from you to make appointments and meet the published deadlines. The subject is designed to prove that you are capable of independent work at a professional level. Your supervisor will not necessarily have expert knowledge in the technical area of your topic. Their role is to guide you through the process and to challenge your assumptions. You should seek assistance from wherever it is available - fellow students, professionals at work, postgraduate students and academic staff (within consulting hours).

**Student Details**

Provide complete details relevant to each team member as demanded in template. No field should be left blank. Write complete Roll# in exact format.