

# Section-by-section PM paper outline

## Overview

For PM, your deliverables include a paper that describes your experiences of project managing projects throughout the quarter. This paper mirrors what the project paper looks like, but is customized for the PM role.

## General Guidelines

The paper should be delivered as single spaced text (using Times New Roman 12 or equivalent), with white space between paragraphs, 1" margins.

In addition:

- Avoid passive voice. Passive voice often introduces ambiguity about who did what when, is less interesting to read, and weakens your prose.
- Avoid FUTURE tense "will". Use the present tense, until you get to the results and conclusions, then use past tense.
- Use sub-headings under these larger primary section headings to help the reader navigate your writing.
- Use 1st POV singular (I, me, my, mine) to represent yourself; use 1st POV plural (we, our, us, ours) if you're working in a group project.
- For every figure, diagram, photo, illustration, include:
  - Include a caption.
  - Size the artifact to minimize the area necessary to communicate what is important for the reader to know.
  - Explain in the text what the reader should attend to in that artifact. It is your job to make sense of the artifact for the reader, connecting it to the prose and highlighting the important aspects of the artifact to attend to.
- Avoid using determiner words such as "this" and "those" which introduce ambiguity for the reader. Instead, use the noun you are referring to.
- For each claim or assertion you make:
  - Provide evidence to support the claim.
  - Beware of making claims that are stronger than can be supported by the evidence. If necessary, use a qualified claim to appropriately weaken your claim.
- The clarity of your use of language and terminology reflect upon the clarity of your thinking. Just as in programming, it is important to use consistent terminology with consistent capitalization and wording. Avoid using multiple terms for the same concept. Refactor your terminology as you evolve your understanding of the system you are designing and building.

- Strive for consistency within your document.

## Section-by-Section Guidelines

Each section of the paper has its own specific purpose(s), as described in the following subsections.

### Title Page

Purpose: To introduce your work. Include a clear title, your name, degree, minor, date, course and anything else (e.g., picture/illustration) that will bring the reader into your written work.

### Table of Contents

Use Styles for all the headings so that you can easily generate a Table of Contents (TOC) after the Title Page. Click on References tab, then Table of Contents. To adjust the look of the TOC, use styles and adjust the look of the TOC1, TOC2, TOC3.

### Introduction

Purpose: To define your PM goals. *In this section, you:*

- Provide a context for your work
- Relate your work to your minor.
- Identify the stakeholders, i.e., the groups who will benefit from your project. Best done as a bulleted list with an explanation.
- Define central concepts or terms
- As you discuss your PM work, you use the present tense.

### Background or Literature Review

Purpose: To explain your work in relation to other work that's been done. In general, *this requires you to:*

- Summarize previous relevant work (could be research, but not necessarily), relevant applications, other activities related to your work
- Explain how your work builds on, expands on, reflects, differs from, etc. the other work
- As you discuss your work, you use the present tense.
- Be sure to CITE all your sources and include them in your Bibliography.

### Methodology / Architecture

Purpose: To explain your methodology and/or architecture so clearly that others in the field can both understand it and replicate or borrow your process. *This requires you to:*

- Describe methodology, design, and data collection strategy in order to allow others to replicate your results
- Articulate your customer requirements (these ought to be reflected in the goals of your project)
- Describe quality metrics and target values so that you can reason about the quality of your results
- Narrate key junctures in the decision-making process, including the rationale for the major design decisions you made, and why these were advantageous
- Describe any alternatives you considered, and explain why these were ultimately rejected in favor of your design choice
- Explain how you plan to measure your results based on the desired quality
- As you discuss your work, you use the present tense.

## Results

Purpose: To present your results of your method/design/architecture. Specifically, *this means that you*:

- Explain/Demonstrate the results of your work (how successful you were in meeting your goals and achieving the desired level of quality)
- Acknowledge, detail, and attempt to explain any unexpected or surprising results
- Explain how your results measured against your quality desired
- As you discuss your project, you use the PAST tense, since it's done and you're discussing what happened (past tense).

## Conclusion

Purpose: To reflect on your work and offer “next steps”. *This means that you*:

- Summarize the key results and takeaways (lessons) learned in your work. Use this as a section to be self-reflective about your work and your learning and to discuss the implications of your results beyond this moment.
- As you discuss your work, you use the PAST tense, since it's done and you're discussing what happened (past tense).
- Heading2: Limitations
  - As separate bullets, acknowledge and discuss limitations of your work for the field and/or research area
- Heading2: Future Work
  - As separate bullets, propose areas for future work
  - Here, you could use the future tense to refer to your work or what could be done in the future.

## Bibliography

- Use a citation system consistently. I'm used to MLA, so it works for me.
- All sources must be in alphanumeric order.

- Be sure to have a publishing date (or n.d.) and an access date for URLs for when you got the information.
- Include ALL the annotations from the beginning for the quarter.
- Make these entries hanging indents with white space between entries. Select entries, right click, select paragraph, select "hanging indent" under "special". Adjust the "before" and "after" spacing to, say, 6 pt so that there's white space between entries.