

# General Writing

**Audience:** Know your audience. The target audience for your report is a future project group of students. Thus, they are WPI students, well trained in many of the same skills your peer have, Internet and tech savvy, but not familiar with your project specifics and probably not familiar with your project tools. Think of this another way - what would you needed someone to tell *you* before you started your project in order to understand what you ended up doing.

**Abstract:** Abstracts the whole paper in one paragraph. (See one pager)

*Tip:* Typically, this will be written last.

**Introduction:** Introduces the problem, but also excerpts the approach and results. (See one-pager)

*Tip:* Typically, this chapter will be written last.

**Background:** Technologies relevant to your MQP that you want to provide details on so a reader will understand your approach/methodology. (See one-pager)

**Related Work:** What have other people learned/done to tackle this problem. (See one pager)

*Tip:* Background and Related Work may sometimes be combined into one chapter, depending upon the project and focus.

*Tip:* These chapters are often written first.

**Methodology (and Architecture):** An outline of your solution and system diagram if you are building a system. Describe the process used to address the problem. State assumptions if any of your solution, talk about how you will evaluate your solution (e.g simulation, etc). If your work is experimental, present your hypothesis which your experiments will prove or disprove.

*Tip:* Figures of architecture and process are often illustrative and make it easier to write the document.

**Implementation:** This section is necessary only if you designed a system architecture above. You should talk about what languages, technology, you used and how you brought it together to solve the problem. This section should contain details that would allow a reader to implement a similar system if they wanted to.

**Experiments/Evaluation:** Describe means used to evaluate the solution, often through experiments for a scientific contribution. Experimental design, including setup (hardware and software), independent variables (those that you will vary), dependent variables (those you will measure). Include experimental conditions and tools used. Should also include design rationale (why specific aspects were chosen), for any system assumptions in setup.

**Results:** Present sample screen shots, performance tables of results and graphs produced while evaluating your system. e.g. performance numbers. If you have specific design or simulation assumptions state them before presenting your results. For all graphs presented, provide a descriptive caption, a figure number and refer to the figure number in the text. Graphs need to be described, telling the reader what the axes and trendlines/data points are. Especially important is the message the reader should take away from the graph.

**Discussion:** What did you learn from your results, implications and take-aways of your main results. Also discuss limitations, bugs, etc.

*Note:* This section is not always included in a report.

**Conclusion and Future Work:** Revisit the main motivation and problem statement and conclude if the problem was "solved". (See one-pagers.)

**References:** Include full bibliographic information. (See one pager)