10. Technology Report Evaluation

Technology Reports are evaluated using three checklists: The Prescreening Checklist, the Report Mechanics and Structure Checklist, and the Report Content Checklist. In order to achieve a “Satisfactory” result on the Technology Report, candidates must achieve 100% on the Prescreening Checklist, 60% on the Report Mechanics and Structure Checklist, and 60% on the Report Content Checklist.

**Prescreening Checklist**

1. Has a Proposal for a Technology Report been submitted and accepted and a copy of the approved proposal included in the Technology Report?

**Yes**

2. Has the Technology Report been submitted within one year since the proposal was approved?

**Yes**

3. Is the Technology Report consistent with the Proposal (as approved and with the comments and suggestions made by the proposal reviewer)?

**Yes**

4. Is the Technology Report typed, double-spaced and justified left?

**Yes**

5. Has a 12 point Arial, Univers, or similar Sans Serif font been used?

**Yes**

6. Is the body of the report a minimum of 3,000 words?

**No**

7. Are the components included and in the following order: Title Page; Declaration of Authorship; Approved Proposal; Abstract/Executive Summary; Table of Contents; Lists of Illustrations/Diagrams; Body of the TR; Conclusion(s), and if applicable Recommendation(s); Bibliography/Technical References; and Appendices?

**Yes**

8. Is there a signed Declaration of Authorship?

**Yes**

9. Is the report dated?

**Yes**

10. Is the Technology Report current? (The Technology Report should be less than 5 years old.)

**Yes**

11. Is there a Title Page?

**Yes**

12. Is there a Table of Contents?

**Yes**

13. Does the Table of Contents correctly reflect the Components: Headings, Illustrations/Diagrams and Appendices?

**Yes**

14. Are the pages numbered with appropriate page breaks?

**Yes**

15. Is there an Abstract/Executive Summary and Introduction?

**Yes**

16. Does the body of the report contain Section Headings?

**Yes**

17. Are there Conclusion(s), and if applicable, Recommendation(s)?

**Yes**

18. Is there a Bibliography with appropriately cited Technical References?

**Yes**

**Report Mechanics and Structure Checklist**

This section evaluates the structure, formatting and writing techniques used in the TR. Fulfillment of this criteria leads to a TR that looks professional, is easy to read and is representative of the formatting standards of the industry.

1. Does the Title, in ten words or less, inform readers of the precise subject matter contained in the TR?

**Yes**

2. Does the Abstract or Executive Summary provide a brief overview of the report in approximately 75 to 100 words?

**Yes**

3. Does the Abstract or Executive Summary summarize the Conclusion(s), and if applicable, the Recommendation(s)?

**Yes**

4. Does the Introduction state the reason the work was undertaken? What is the industry, organization or context? What is the problem?

**Yes**

5. Does the Introduction cover the scope of the report? What is included and /or admitted, and what procedures are used?

**Yes**

6. Do the headings and subheadings in the Body adequately and accurately describe the section or subsection content?

**Yes**

7. Does the Body include information regarding the methodology?

**Yes**

Does it indicate materials, equipment and procedures used and why they were selected over alternatives? Is there sufficient detail so that that the methodology can be duplicated by others?

**Yes**

8. Does the Body include recent research findings?

**Yes**

9. Does the Body include results/data from the study?

**Yes**

10. Are illustrations, tables, diagrams and charts clearly drawn, labelled and numbered?

**Yes**

11. Is each Conclusion, and if applicable, each Recommendation, stated in a separate paragraph and in a positive way?

**Yes**

Conclusions should not be qualified with “it seems”, “probably”, “it may be”, or other words that dilute the strength of the conclusion.

12. Are the References/Bibliography complete?

**No. We might have missed some references.**

All materials referenced in the TR should be represented in the list of References/Bibliography.

13. Do the Appendices support the study?

**Yes**

Do the Appendices include substantiating data and calculations? Extraneous material should not be included.

14. Is the spelling correct?

**Yes**

Has either the Canadian or USA spelling system been used consistently through the TR.

15. Is the language free of jargon?

**Yes**

Are acronyms properly introduced? Are abbreviations appropriate and correct? Can someone without specific expertise in the field read and understand the TR?

16. Is the same voice (I, one, person, etc.) used consistently throughout the Technology Report?

**Yes**

There should not be any switching from third person to first person or vice versa.

17. Do the grammar and punctuation follow normally accepted rules of use?

**Yes**

Use Ron Blicq's text Technically Write or a similar grammar reference as a guide.

18. Are thoughts and illustrations/diagrams/charts that do not belong to the writer properly identified and footnoted in the text?

**Yes**

Are quotations indicated correctly? Are the authors referenced in footnotes and/or reference list? Do they include the author's name, the title of the article/book, the date of publication, and the publisher?

**Report Content**

This section evaluates the quality of the work completed when addressing the problem statement/hypothesis. Fulfillment of these criteria leads to a TR that makes a contribution to the field under study.

1. Are the Problem Statement and Hypothesis significant to the current state of the field/industry?

**Yes**

2. Is the Methodology scientifically sound?

**Yes**

3. Are the engineering technology and applied science principles used in the Methodology and Analysis appropriate to the subject area?

**Yes**

4. Are the Data and/or Results complete?

**No. We were unable to read/write with all of our sensors into the database.**

5. Have the Mathematical formulae been applied appropriately?

**Yes**

6. Are the Mathematical calculations done correctly and accurately?

**Yes**

7. Are the Illustrations/Diagrams/Charts technically correct?

**Yes**

8. Is the Analysis of the results correct?

**Yes**

9. Is the Analysis complete?

**Yes**

10. Are the Conclusion(s), and if applicable the Recommendation(s), free of discussion, explanation and opinion?

**Yes**

11. Do the Conclusion(s), and if applicable the Recommendation(s), relate to and resolve the Problem Statement and/or Hypothesis?

**Yes**

12. Are the Conclusion(s), and if applicable the Recommendation(s), logical?

**Yes**

13. Does the report make a contribution to the industry/field of study?

**Yes**

## Conclusion

The project we tried to complete was a very in demand in the market as the whole world is turning into a technological world and the Internet of Things now slowly becomes the norm. The project main goal is to provide a smarter home for us by incorporating sensors readily available and cheap with a simple mobile application. We were able to learn database integration with the project as well as the main points of IoT devices, a wireless connectivity. Skills were developed on making a mobile application, programming sensors, and prototyping for this project. Although we might not have been able to fully complete our project it showed us and taught us on how to make a project overall.