**Your Project Title**

**Final Report**

Your Sponsor



Sponsor logo (if any)

**Mentor:**

(Your mentor’s name & Organization)

**Your Team’s Name & Logo**

(Provide a list of team members)

CptS 432 Cybersecurity Capstone Project

Fall 2025

**Note**: Recall that this writing assignment should follow these guidelines:

Length = minimum of 5 pages text + appendixes as needed - though, this should be \*MUCH\* longer than 5 pages if you leverage all of your prior documents in full. There’s no maximum page limit for this document, but be judicious in your screenshots that just fill space.  
  
Sections that do not count to content for page limit:

* Cover page
* table of contents
* pictures
* tables
* images
* diagrams

As shown in the Syllabus, this assignment carries a weight of 20% for the final course score.

Posted as a single self‐contained file (no links to outside resources that should be directly in this document itself. A link to your git repo == good. A link to something that says “see here for our detailed description”… not as cool.)

Posted as a PDF file.

Typed single‐spaced.

Typed with black text.

Typed with #11 font size.

Typed using Arial font.

Typed with one inch margins on sides, top and bottom.

**Please erase this page in your final document.**

**TABLE OF CONTENTS - (Estimated)**

[I. Introduction 5](#_Toc204868862)

[II. Project Requirements Specification 6](#_Toc204868863)

[II.1. Project Stakeholders 6](#_Toc204868864)

[II.2. Use Cases 6](#_Toc204868865)

[II.3. Functional Requirements 6](#_Toc204868866)

[II.4. Non-Functional Requirements 6](#_Toc204868867)

[III. Software Design - From Solution Approach 7](#_Toc204868868)

[III.1. Architecture Design 7](#_Toc204868869)

[III.1.1. Overview 7](#_Toc204868870)

[III.1.2. Subsystem Decomposition 7](#_Toc204868871)

[III.2. Data design 7](#_Toc204868872)

[III.3. User Interface Design 7](#_Toc204868873)

[IV. Test Case Specifications and Results 8](#_Toc204868874)

[IV.1. Testing Overview 8](#_Toc204868875)

[IV.2. Environment Requirements 8](#_Toc204868876)

[IV.3. Test Results 8](#_Toc204868877)

[V. Projects and Tools used 9](#_Toc204868878)

[VI. Description of Final Prototype 9](#_Toc204868879)

[VII. Social Responsibility and Broader Impacts 10](#_Toc204868880)

[VIII. Product Delivery Status 10](#_Toc204868881)

[IX. Conclusions and Future Work 10](#_Toc204868882)

[IX.1. Limitations and Recommendations 10](#_Toc204868883)

[IX.2. Future Work 11](#_Toc204868884)

[X. Acknowledgements 11](#_Toc204868885)

[XI. Glossary 11](#_Toc204868886)

[XII. References 11](#_Toc204868887)

[XIII. Appendix A – Team Information 12](#_Toc204868888)

[Team Members & Bios 12](#_Toc204868889)

[XIV. Appendix B - Example Testing Strategy Reporting 13](#_Toc204868890)

[XV. Appendix C - Project Management 13](#_Toc204868891)

# Introduction

Describe your project background, motivation, and goals in detail.

Draw from your project description writing assignment and other summaries for this.

* 1. Include information about your client and mentor
  2. Name, company, contact information
  3. Include a summary of what the company / client does

# Project Requirements Specification

From your revised “Project Requirements Specification” document include the following:

## Project Stakeholders

List your stakeholders, summarize their needs.

## Use Cases

Describe the major use cases

## Functional Requirements

Include functional requirements

## Non-Functional Requirements

Include non-functional requirements

# Software Design - From Solution Approach

This section should describe the final design of your software system.

Include sections III, IV, and V from your revised “Solution Approach” document. Please review these sections and make the necessary updates to reveal the changes in your project design since your revision.

## Architecture Design

Revise and include Section II from your Solution Approach report here. Provide the block diagram of your architecture and give a brief description of it.

### Overview

This section should describe the overall architecture of your software. The architecture provides the top level design view of a system and provides a basis for more detailed design work.

### Subsystem Decomposition

This section explains how you decomposed your system into subsystems.

## Data design

Describe all data structures (including the internal and temporary data structures), and the database(s) created as part of the application.

## User Interface Design

Provide a detailed description of user interface. The information in this section should be accompanied with proper images of your software’s GUI.

The emphasis of this section should be on the design decisions of your GUI rather than the final design. You will explain your final GUI in detail in section VI (Description of Final Prototype). Please avoid redundancy as much as possible in these two sections.

# Test Case Specifications and Results

## Testing Overview

Include a summary of your test objectives and test plans.

Describe the overall approach to testing and provide the overall flow of the testing process. An example is provided in an Appendix.

Are you using Continuous Integration (CI) and/or Continuous Delivery (CD) in your testing? What tools are you using, what kinds of testing do they provide? Unit tests, integration, system, user interface, speed/non-functional requirement testing, user testing, etc.

In all of these major categories, include at least some material about your implementation, how it is currently executing, and/or what future work would be needed to ensure it happens for this project

* Unit testing
* Integration testing
* System testing
* Functional testing
* Performance testing
* User acceptance testing

## Environment Requirements

Specify both the necessary and desired properties of the test environment. The specification should contain the physical characteristics of the facilities, including the hardware, the communications and system software, the mode of usage (for example, stand-alone), and any other software or supplies needed to support the test. Identify special test tools needed.

## Test Results

Include your prototype test results from your “Test Case Specifications and Results” document as updated with your current project status.

# Projects and Tools used

Include a summary of the libraries, frameworks, and tools you used to implement your project. For example, you could have used some web frameworks, a database, a network message passing tool, graphics generation libraries, and various operating system platforms. Please list these out with a short one sentence note about what it was used to build/support in your project.

|  |  |
| --- | --- |
| Tool/library/framework | Quick note on what it was for |
| Bootstrap | Generating layout and visual rendering on web interface |
| RabbitMQ | Intercommunication between our modules |

As a quick survey, let me know what languages you wrote some of the project in. This is anything you wrote yourself, not just used in libraries. This includes both programming languages and markup languages.

|  |  |  |  |
| --- | --- | --- | --- |
| Languages Used in Project | | | |
| C | C++ | JavaScript | Erlang |
| Java | Python | PERL | Go |
| HTML5 | LaTeX | BASH shell |  |

# Description of Final Prototype

In this section provide a **detailed** description of your final prototype.

(If applicable) Include a brief user manual for your final software where you provide step by step instructions for using your system. Explain the major use case scenarios. You may include screenshots of the user interface.

\*\*\*This is the first section that is somewhat really new for this document\*\*\*

Describe your final prototype implementation. Please format this section according to what you think is the best way to describe your prototype. The following is just a suggestion.

I recommend to include plenty of images and pictures of the following where appropriate:

- any diagrams/figures that visualize various features of your prototype;

- the screenshots of your user interfaces;

- the screenshots of your test programs;

- pictures of your team testing and debugging the devices, programs, etc.

A well-thought and clear diagram is better than long and descriptive text.

If your document starts to be very long due to screenshots and diagrams, please put at least some of them into an appendix to this document.

# Social Responsibility and Broader Impacts

Social responsibility: identify informed judgements that you made for this project based on legal and ethical principles. Discuss if those judgements are in line with your responsibilities as a computing / software / cyber engineer. If not, what prompted you to make judgements that are contradictory to your professional responsibilities?

Broader impacts: highlight how your work aligns with the WSU EECS’s goals of benefiting society and broadening participation in STEM. Describe not only how your project addressed a real-world problem (briefly state the problem) but also emphasized accessibility, inclusivity, and/or educational outreach. If you engaged with local communities through user testing and feedback sessions, mention that. If you collaborated with multiple teams from various departments or groups, mention that. If you documented your project and released it freely to support open-source missions, mention that. If your project outcomes contribute to technological innovation and provide a foundation for future student-led research, community-based applications, mention that.

# Product Delivery Status

When was/will the project be delivered to your client? Was it demonstrated and who did you hand it off to?

Also include project location information here. This is for both the instructor and your client as future reference. This should include:

1. Source repositories
2. Equipment storage location - where did you leave any client or course materials
3. Any other materials needed to rebuild your project from the ground up

Ensure that either here or in your detailed description you include any instructions or where the instructions are to install and setup your project so future users know where to start.

# Conclusions and Future Work

## Limitations and Recommendations

Include a brief description of the limitations of your current prototype that you are aware of, and discuss possible solution approaches to overcome those limitations.

Please keep the discussion brief. 1 page text should be sufficient for this section.

Note that there might be overlap between the Limitations and Recommendations section and the Future Work section. “Future Work” should discuss the possible ways to extend the project, where as “Limitations and Recommendations” should be more detailed and should discuss the problems and missing features in the final prototype and should describe the possible solution approaches.

## Future Work

Include a conclusion and discuss the future work. Future work should include discussion on how to extend this project. For those of you who are self or EECS sponsored, discuss commercialization possibilities.

# Acknowledgements

Thank the people who have contributed to your project. Also thank to your sponsors.

# Glossary

Define technical terms, acronyms, and anything else the reader might need to look up as they go through your document

# References

Cite all your references here. For the papers you cite give the authors, the title of the article, the journal name, journal volume number, date of publication and inclusive page numbers. Giving only the URL for the journal is not appropriate.

Use either Chicago, IEEE, or ACM style citations

-- Note: you can find many articles on scholar.google.com, which includes a link for each article’s citation in various formats.



# Appendix A – Team Information

List your team members here and provide a team photo.

# Team Members & Bios

Include an entry in a narrative form for each of your team members (See alpha prototype for starting material & update as required). The goal is to demonstrate the team’s skills and project coverage. This is not just a pasted in resume, but a summary of your involvement in the project, and your technical interests. Include:

* Name
* Degree plan
* Project role - which aspects you’re responsible for
* General areas of experience and technical interests

Example:

Joe Cougar is a computer science student interested in artificial intelligence, satellite development, and clock making. His prior projects have include smart homes, radio controlled dirigibles, and programming clocks. Joe’s skills include C/C++, Python, RabbitMQ, Genetic Algorithms, and delinting. For this project his responsibilities include developing the Gamma Module, leading user experience feedback, and delivering sandwiches.

# Appendix B - Example Testing Strategy Reporting

1. Identify the requirements being tested
2. Either link to available online test results and/or take screenshots of the various system testing results
3. User testing can be demonstrated via survey results or quotes and a discussion of the feedback received

# Appendix C - Project Management

Describe your team’s weekly schedule, i.e.,

* weekly meetings with the instructor/ mentor
* weekly meetings only with the team members
* other meetings and project related team activities.

Explain the purpose of each of the above activities and describe the routine agenda for each.

Please comment on which team activities/meetings were the most beneficial to your team.

Please include any planning documents you may have used. Examples could include:

* Gantt charts
* GitHub projects - Screenshots & a figure description
* GitHub issues - Screenshots & a figure description
* Notes on team tools used:
  + Email
  + SMS/IM
  + Slack
  + appear.in or other video conference tools
  + Trello
  + etc.