**SOFTWARE DESIGN TITLE**

"Design of a Clothing Brand Web System for Online Retail Operations"

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**Approval Sheet**

This design project entitled **"**Design of a Clothing Brand Web System for Online Retail Operations**"** prepared by **Luminario, Venice Lou Gabrielle M., Calica, Ljay L., Tan, Charles Dominic S., Gabuyo, Ivan Love D., Inverzo, Kyle D., Elpedes, Glen Jorge A., Aquino, Jester J.** of the Computer Engineering Department, was examined and evaluated by the members of the Student Design Evaluation Panel and is hereby recommended for approval.

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**SOFTWARE DESIGN PROJECT INFORMATION**

**2nd Semester, SY 2025-2026**

| | |
|---|---|
| **Student/Team**<br><br>**Team Glenn10** | Luminario, Venice Lou Gabrielle M. - Leader<br>Calica, Ljay L.<br>Gabuyo, Ivan Love D.<br>Inverzo, Kyle Andrei D.<br>Aquino, Jester J.<br>Tan, Charles Dominic S.<br>Elpedes, Glen Jorge A. |
| **Project Title** | Design of a Clothing Brand Web System for Online Retail Operations |
| **Project Concentration Area** | Web Systems, E-Commerce Technologies, Database-Driven Applications |
| **Design Objectives** | The general objective is to provide a comprehensive design and development plan for the clothing brand web system. This includes the features and system functions that will be implemented in the project.<br><br>Specifically, it aims to:<br>1. Design the system's overall structure and components, including:<br>• User interface layout for customers and administrators<br>• Product catalog organization<br>• Inventory and order workflow design<br>2. Develop the software components of the web system, such as:<br>• Front-end modules for user interaction<br>• Back-end modules for data processing<br>• Database management for products, users, orders, and inventory<br>3. Test and evaluate the system's accuracy and performance, ensuring that:<br>• All functions operate correctly<br>• The system responds efficiently<br>• Data is processed and displayed accurately |

| Constraints | |
|---|---|
| **Performance Constraints (Response Time)** | The web system must respond to user interactions (e.g., page load, search queries) within 3 seconds. |
| **Security Constraints (Data Protection Level)** | The system must comply with data protection regulations such as GDPR or CCPA, ensuring secure storage and processing of user and payment data. |
| **Scalability Constraints (Number of Concurrent Users)** | The system should be able to support up to 1,000 concurrent users without performance degradation. |
| **Budget Constraints (Development and Maintenance Costs)** | Total development costs should not exceed ₱3,000 and annual maintenance should stay below ₱5,000.<br><br>The money available for publication will range from ₱500 to ₱3,000. |
| **Technology Constraints (Technology Stack)** | The system must be developed using specific technologies, such as React for the front end and Node.js for the back end. |
| **Other constraints: These constraints do not affect each design; therefore, these were not included in selecting the best design.** | |
| **Constraint** | A constraint is simply a rule or limit that controls what you can or cannot do. |
| **Standards** | |
| **Standard A - WCAG 2.1 Level AA** | This standard makes sure websites are accessible to people with disabilities. In the project, it was used to improve text contrast, add text to product images, and ensure the site can be used with a keyboard. |
| **Standard B - OWASP Top 10** | This standard lists the most common security risks for web systems. In the project, it helped guide secure login, protect user data, and prevent issues like unsafe input or weak passwords. |

**For single pages, use "p." For multiple pages, use "pp."**
**Appendices should be italicized and referred to every time it is mentioned.**

**Abstract**

The design and development of a web system for a clothing brand that will facilitate online retail operations is presented in this project. The system's main goals are to create an intuitive user interface for administrators and customers alike, efficiently arrange product catalogs, and create a seamless inventory and order management workflow. A database system to manage products, users, orders, and stock levels, as well as front-end modules for user interaction and back-end modules for data processing, are all part of the project. Performance testing and functional assessments were carried out to confirm accuracy, responsiveness, and dependability in order to guarantee system quality. To improve user experience and safeguard sensitive data, accessibility and security standards, such as WCAG 2.1 Level AA and the OWASP Top 10, were implemented. The final design provides a scalable, safe, and effective web-based retail solution that is suited to a contemporary clothing brand's requirements.

**Keywords:** Web System Design, Online Retail, Clothing Brand, User Interface, Product Catalog Management, Inventory and Order Management, Front-End Development, Back-End Development, Database Management, System Performance, Accessibility Standards, WCAG 2.1 Level AA, Security Standards, OWASP Top 10, Scalable Web Solution.

## List of Tables

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## List of abbreviation

## Definition of terms

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# CHAPTER 1: THE PROJECT AND ITS BACKGROUND

Online shopping is now vital for clothing brands, but small and medium firms often struggle with poor order management, manual inventory tracking, and messy product catalogs. These problems cause delays, wrong stock info, unhappy customers, and security risks. The project's goal is to build a strong web system that fixes these issues and helps apparel businesses run smoothly online.

## 1.1 The Problem

Resources to explore:

- Define the Problem in Engineering Design https://www.sciencebuddies.org/science-fair-projects/engineering-design-process/engineering-design-problem-statement

- How to Write an Effective Problem Statement Example https://libguides.wmich.edu/iee1020/problem

- How do you frame a problem statement in engineering? https://static.nsta.org/ecybermission-files/helpdocs/ED%20Defining%20the%20Problem.pdf

## 1.2 The Client

The client for this project is **Mr. Dexter Luis Vega**, the owner of an established clothing brand that is currently operating without its own online retail system. To support the growth and digital expansion of his business, our team will be developing a web-based platform that aligns with the brand's operational needs and customer expectations.

Through the interview and data-gathering process, our team will identify the specific requirements of Mr. Vega's clothing brand. The planned system will provide structured product displays, real-time inventory management, secure customer transactions, and an organized order processing workflow. By creating this platform, the project will contribute to enhancing the brand's online presence, accessibility, and overall retail efficiency.

Table 1-1. Client and Engineering Requirements / Considerations

| Client Requirements / Considerations | Engineering Requirements / Considerations |
|---|---|
| **The system can** allow customers to browse and view clothing products easily. | Design a responsive, user-friendly UI using React; follow WCAG 2.1 Level AA for accessibility. |
| **The system can** securely store user accounts and handle online transactions safely. | Implement secure authentication, encrypted data storage, and OWASP Top 10 security practices. |

| Client Requirements / Considerations | Engineering Requirements / Considerations |
|---|---|
| **The system can** track inventory and update stock levels automatically when orders are placed. | Create a database with automated inventory management logic using backend APIs in Node.js. |

### 1.3 The Project

This project focuses on creating a web system for **Mr. Dexter Luis Vega's clothing brand** to help the business operate online. The system will allow customers to browse products and make purchases, while administrators can manage products, inventory, and orders efficiently. The system will have a **front-end** for users to interact with, a **back end** to process orders and update data, and a **database** to store product, user, and sales information. It will also follow **accessibility** and **security standards** to ensure it is safe and easy to use. By developing this system, our team will help the brand **expand online, improve operations, and prepare for future growth**.

### 1.4 Project Objectives

The primary objective of this project is to design and develop a comprehensive web system to facilitate the online retail operations of Mr. Dexter Luis Vega's clothing brand. The system will integrate functionalities for efficient management of product catalogs, inventory control, order processing, and user interaction.

Specifically, the project aims to:

- **Design** the system architecture and interface components, ensuring usability, accessibility compliance (WCAG 2.1 Level AA), and a scalable structure suitable for both customers and administrators.
- **Develop** the software modules encompassing both front-end and back-end functionalities, including dynamic product display, secure transaction handling, database management, and real-time inventory synchronization.
- **Test and evaluate** the system's accuracy, performance, security, and compliance with relevant standards to guarantee robustness, reliability, and data integrity.

### 1.5 Scope and Delimitations

This project focuses on designing and developing a web system for Mr. Dexter Luis Vega's clothing brand to support online sales and business operations. The system will include features for managing product listings, tracking inventory, processing customer orders, and handling user accounts for both customers and administrators. The system will follow important standards to ensure it is accessible and secure.

The web system will be built using React for the user interface and Node.js for the server side, along with a database to store product and customer data. The system will be tested in controlled environments to check its accuracy and performance under normal use. This project covers only the web application and does not include developing a mobile app or connecting with external delivery or payment services beyond basic online transactions. It will support up to 10,000 users at the same time but will not include advanced performance tuning for larger traffic. Security will protect against common threats, but highly advanced cyberattacks are beyond the project's scope. Marketing, sourcing of products, and physical inventory handling outside the system are not part of this project. The user interface will focus on core functions without extensive design customization or branding details.

## 1.6 Design Constraints

### Constraint A – Performance (Response Time)

- Performance refers to how fast the system responds to user actions such as loading pages, searching products, or submitting orders.

- The metric used is **average response time**, which measures how long the system takes to react. It is obtained by timing system operations during testing and calculating the average duration.

- A lower response time means the system performs better and provides a smoother user experience.
  **Therefore, the design with the lowest response time is the best design.**

### Constraint B – Security (Data Protection Level)

- Security refers to the system's ability to protect user information, especially customer accounts and transactions.

- The metric used is the **number of security vulnerabilities found**, such as weak passwords or unsafe inputs.

- It is measured by checking the system against OWASP Top 10 risks during testing.
  A lower number of vulnerabilities means stronger protection and safer system use.
  **Therefore, the design with the fewest security vulnerabilities is the preferred design.**

**Constraint C – Scalability (Concurrent Users)**

- Scalability refers to the system's ability to support many users using the website at the same time without slowing down. The metric used is **maximum supported concurrent users** before performance drops.

- It is measured by load-testing the system under increasing user levels until response time exceeds 3 seconds.

- A higher supported user count means better scalability and system strength.
  **Therefore, the design that supports the most concurrent users is the winning design.**

**Constraint D – Usability (User Interface Accessibility)**

- Usability refers to how easy the system is to use for customers and administrators. The metric used is the **usability score**, based on WCAG 2.1 Level AA accessibility guidelines.

- It is measured through evaluation checklists, user testing, and accessibility tools.
  A higher usability score means the system is more accessible and easier to navigate.
  **Therefore, the design with the highest usability score is the best choice.**

**Constraint E – Cost (Development and Maintenance Budget)**

- Cost refers to the financial limits available for building and maintaining the web system. The metric used is the **total project cost**, which includes development tools, hosting, and yearly maintenance.

- It is computed by adding all expenses and comparing them with the assumed limits of **₱3,000 for development** and **₱5,000 for annual maintenance** based on our research.

- A lower total cost—while still meeting system requirements—is more desirable.
  **Therefore, the design with the lowest cost that stays within budget is the most suitable design.**

**Other constraints: These constraints do not affect each design; therefore, these were not included in selecting the best design.**

**Sustainability**

**Public Health**

**Welfare**

**Social**

**Global**

**Cultural**

### 1.7 Engineering Standards

The engineering standards used in this project ensure that the clothing brand web system is accessible, secure, reliable, and aligned with accepted practices for modern web applications. These standards support the system's design goals and help maintain quality throughout development.

**WCAG 2.1 Level AA (Web Accessibility Standard)**

This standard ensures that the website is accessible to all users, including those with disabilities. It supports the project's goal of creating an easy-to-use interface by guiding text contrast, keyboard navigation, readable layouts, and alt-text for product images. This directly strengthens the system's usability requirement.

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**OWASP Top 10 (Web Security Standard)**

This standard lists the most common web security risks. It connects to the project's constraint on data protection by helping identify and prevent issues such as weak authentication, unsafe input handling, and data exposure. This ensures that user accounts, transactions, and stored data remain secure.

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**ISO/IEC 25010 (Software Quality Standard)**

This standard guides how software quality is evaluated. It supports the project's testing requirements by defining expectations for performance, reliability, usability, and security. This connects to your objective of ensuring that "all functions operate correctly" and the system responds efficiently.

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**ISO/IEC 27001 (Information Security Standard)**

This standard provides principles for protecting sensitive information. It supports the project's need for secure data storage and processing, especially for customer information, orders, and administrator accounts. It directly connects to your security constraints and database requirements.

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**ISO/IEC 14543-3 (System Architecture Standard)**

Although originally intended for electronic systems, this standard is used here to support a clear and organized system architecture. It helps guide how system components communicate and work together, which connects to your objective of designing the overall structure of the system (front-end, back-end, and database).

## 1.8 Engineering Design Process

The image shows two people wearing stylish and comfortable clothes. Just like how clothing is planned and created, the Engineering Design Process also follows steps to make a good final product. It starts with finding a problem, thinking of ideas, testing them, and improving the design. This process helps make sure the result is useful, creative, and fits what people need.

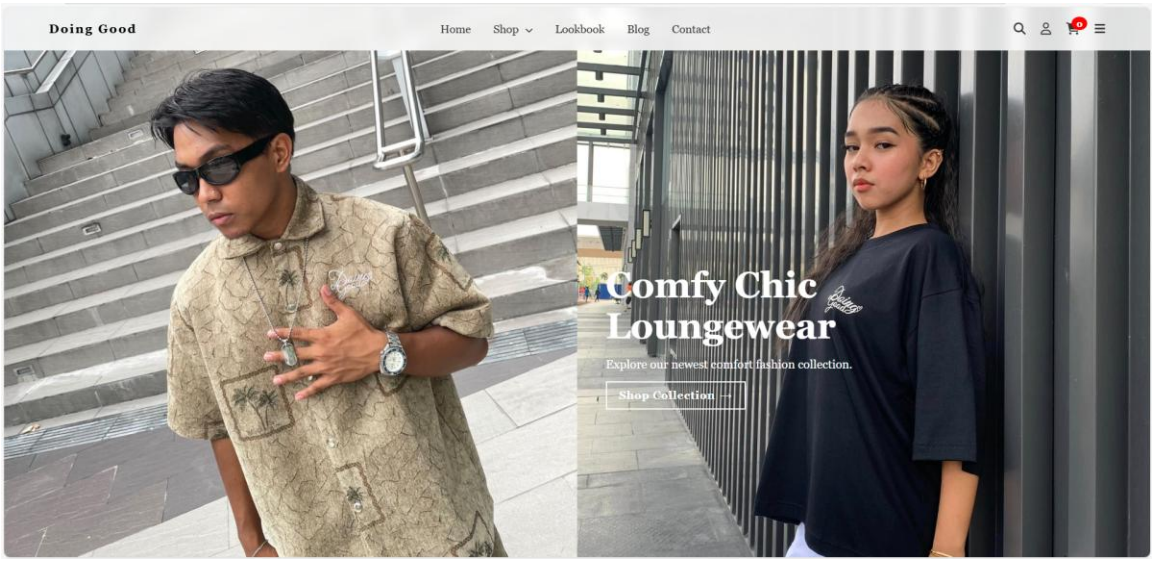


Figure 1.1 The Engineering Design Process (TeachEngineering, 2025)

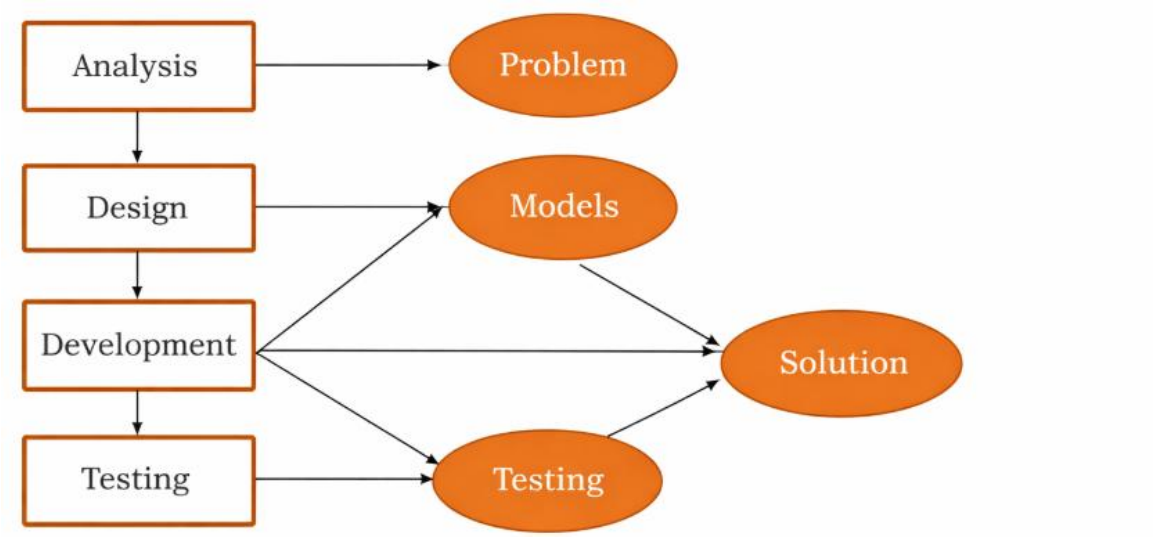


Figure 1.2 The Engineering Design Process (TeachEngineering, 2025)

The picture depicts two individuals dressed comfortably and stylishly. The Engineering Design Process follows steps to produce a high-quality final product, just like clothing is planned and made. These steps are clearly depicted in the diagram. Analysis is the first step, where we comprehend the issue or requirement. After that, we proceed to the Design stage, where concepts and models are developed. These concepts are then transformed into actual products during the development stage. Lastly, testing verifies that everything functions properly. These procedures aid in enhancing the design and guarantee that the finished product is practical, imaginative, and meets people's needs.

<Explain the figure>

### 1.8.1 Ask: Identifying the Need and Constraints

This step entails figuring out what the client needs and comprehending the main issue. A fully functional clothing brand web system that facilitates online retail operations is required for this project. Constraints like performance limitations, security needs, financial limitations, and accessibility requirements are identified by the team. By posing crucial queries, such as "What should the system do?" Who is going to use it? What limits must it follow? —the group creates a strong basis for the design.

### 1.8.2 Research the Problem

The team collects pertinent data and examines current systems after determining the need. This entails examining industry standards like WCAG 2.1 and OWASP Top 10, evaluating existing e-commerce platforms, and conducting client interviews to gain a deeper understanding of operational requirements. Technologies like React, Node.js, and database structures are also covered in research. This stage guarantees that the project is based on well-informed choices rather than conjecture.

### 1.8.3 Imagine: Develop Possible Solution

The group imagines and brainstorms different solutions in this step. This could include different database designs, inventory tracking strategies, and user interface layouts for the web system. Here, the team is encouraged to be creative and can freely explore ideas without worrying about constraints right away. To determine the most promising system structure, a number of design options are drafted.

### 1.8.4 Plan: Select a Promising Solution

### 1.8.5 Create: Build a Prototype

A working model or preliminary version of the web system is created during this stage. Simple versions of the front-end and back-end interactions, the basic UI framework, or the initial database setup are examples of prototypes. The objective is to develop a working prototype that shows how the finished system will function, not to achieve perfection. Early on in the development process, this prototype aids in identifying possible problems.

### 1.8.6 Test and Evaluate the Prototype

Once the prototype is created, it undergoes performance, usability, and security testing. The team examines whether the system meets the client's requirements and satisfies constraints such as response time, accessibility, and data protection. User feedback and testing tools help uncover errors, weaknesses, and areas for improvement. Evaluation ensures that the design functions reliably before moving to full development.

### 1.8.7 Improve: Redesign as Needed

Based on test results, the team revises and enhances the design. Improvements may involve fixing bugs, optimizing performance, strengthening security features, or reorganizing the interface for better user experience. This step reflects the iterative nature of engineering: the design is refined repeatedly until it meets the required standards and delivers a high-quality final pro

# CHAPTER 2: SOFTWARE DESIGN

<Brief description of chapter 2>

## 2.1 Description of the Design Solution

### 2.1.1 General Description

This section provides a general perspective/overview of the entire design solution.

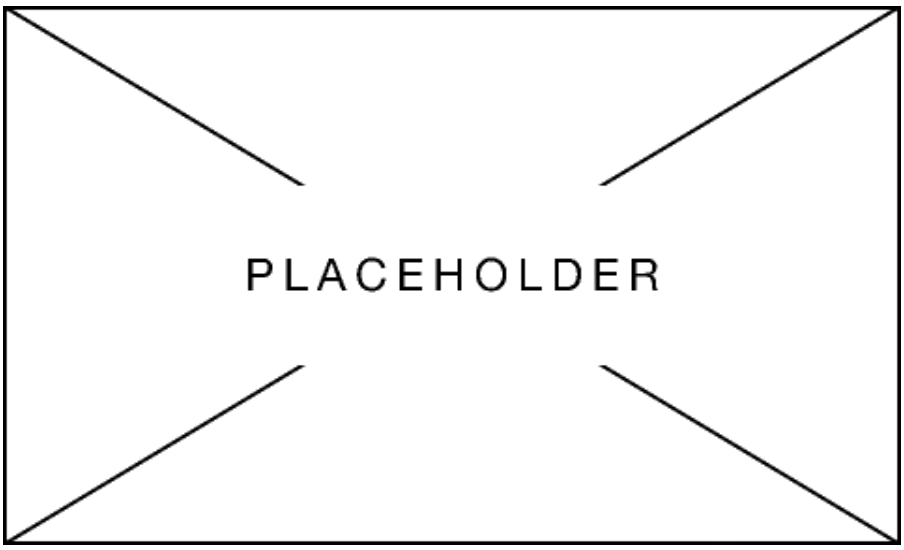


Figure xx Illustrative Diagram of the System

Provide an explanation/analysis of the illustrative diagram.

### 2.1.2 Engineering Principles Involved

Short introduction of the section.

**Engineering Principle**

Explanation of relevant studies to the principle used.

### 2.1.3 Prior Art Analysis

Discusses the existing solutions with existing patents (and other similar registrations) and compares it with the design project.

Features of existing solutions that are particularly of interest should be discussed. Not necessarily aligned completely with the title; what sets your project apart?

Matrix Format is preferred, in addition to narratives. Explain the table.

Table xx Prior Art Analysis Matrix

| Design | Features | | | | |
|---|---|---|---|---|---|
| | Feature A | Feature B | Feature C | Feature D | Feature E |
| Prior Art A | X | | X | | |
| … | | | | | |
| Prior Art *n* | | X | | | |
| PROJECT | X | X | X | X | X |

**2.2 General System Architecture**
This section does NOT cover definitions of the architectural elements. (that was already done earlier)
Rather, this section talks about HOW the engineering concepts / elements was implemented.

**2.2.1 Hardware Elements**

**2.2.2 Software Elements**

**A. Embedded Software**

**B. Application Software**
Software implemented in web, desktop, mobile devices should be discussed here.
Libraries, platforms, frameworks, languages should also be included.
If a UI has been developed in the device(i.e. Phone app), then it should be included here as well.

**C. Key Algorithms Used (Optional)**

**2.2.2 System Algorithm**

**2.2.3 Data, Datasets, and Processing**

**a. Datasets**
This section describes the data you used, including data sets that you have acquired from external sources, data you have generated, and data you (may have scraped or mined).
Include in your discussion the detailed PROCESS on how you acquired your data.

**b. Data Processing Scheme and Algorithms**
This section talks about the processing (including pre and post).
Show the raw dataset, the dataset after pre-processing, and the final dataset.
Include the pre-processing steps on the data.

Discuss also where these processes are applied in your design.

Note: If your alternative designs are focused on algorithms (ML/DL technologies), then you should not mention them here. Alternatively, if your designs do not involve ML/DL but they are used in the SOFTWARE DESIGN, then this is where they have to be mentioned.

**c. Other Data Utilized in the Design**
This section talks about data that are not necessarily used in the data analytics part, (i.e. Database of patient names, constants used in calibration, etc.)
Including mock data.

**2.3 Design Alternatives**

**2.3.1 Rationale for Design Alternatives**
Discuss here why THESE are the design alternatives you used. Why are these critical for the design? Why do these design alternatives matter?

Note: This is similar to the previous "Discussion of Alternative Designs," make sure to keep the content of this section concise. No need to discuss the designs in great detail here as long as you follow the guide questions above. Each design has a section for your extensive discussions.

**2.3.1 Design Alternative 1:**

**A. Engineering Principles of Alternative**
Contains discussions (with references) of the technologies, principles, and concepts utilized (i.e. Machine Learning, Convolution, Kinematics, etc).

Note: This repeats for all 3 designs. It must not mention the principles mentioned above but instead those specific to the design alternative.
**B. Architecture of Design Alternative**

Discuss how key components, sub-systems, algorithms, of this design alternative are implemented.

**C. Constraints**

Constraint A

Constraint B

Constraint C

Constraint D

Constraint E

**iv. Evaluation Results (if model)**

### 2.3.2 Design Alternative B

i. Engineering Principles of Alternative

ii. Architecture of Design Alternative

iii. Evaluation of Constraints

**Constraint A**

**Constraint B**

**Constraint C**

### 2.3.3 Design Alternative C

i. Engineering Principles of Alternative

ii. Architecture of Design Alternative

iii. Constraints

**Constraint A**

**Constraint B**

**Constraint C**

## 2.4 Standards Involved in the Design

This section presents the standards followed by the design, including their references. Matrix may be used to show how standards are used in each specific design.

Table xx Summary of Standards Involved in the Alternatives

| Standard | Brief Description | DESIGNS | | |
|---|---|---|---|---|
| | | DESIGN A | DESIGN B | DESIGN C |

| | | | | |
|---|---|---|---|---|
| IEC 60950 | Product Safety Standard for electronic and computing products. | Used in enclosure, power supply leakage, ESD, wiring, and connectors. | | |
| Philippine National Standards for Drinking Water (PNSDW) | Standards for drinking-water quality, water sampling and examination and evaluation. | Used in conditional statements to determine if water is drinkable. | | |
| IEEE 1309-2013 | Standard for Calibration of Electromagnetic Field Sensors and Probes | NA | NA | Calibration of sensor used in detecting heavy metals. |
| IEEE 1858-2016 | IEEE Standard for Camera Phone Image Quality | Reference for image processing camera. | NA | NA |

Explain this table and end with a summary.

# CHAPTER 3: DESIGN TRADEOFFS

## 3.1 Summary of Constraints

Explain table xx below in this paragraph.

Table xx Summary of Design Constraints

| Designs | Constraints | | | | |
|---|---|---|---|---|---|
| | Constraint A (Metric) | Constraint B (Metric) | Constraint C (Metric) | Constraint D (Metric) | Constraint E (Metric) |
| Design A | | | | | |
| Design B | | | | | |
| Design C | | | | | |

Synthesize for the next section.

## 3.2 Trade-offs

Table xx Preference and Importance of Constraints

| Constraints | Preference | Importance (raw) | % Importance |
|---|---|---|---|
| | | | |

Explain the use of Pareto Multi-Criteria Decision Making (MCDM).

$$Minimization = 9 \times \left(\frac{Max\ Value - Raw\ Value}{Max\ Value - Min\ Value}\right) + 1$$ Equation No. xx

$$Maximization = 9 \times \left(\frac{Raw\ Value - Min\ Value}{Max\ Value - Min\ Value}\right) + 1$$ Equation No. xx

### 3.2.1 Tradeoff 1: Constraint A (Metric)

3.2.1.1 Design 1: Normalization of Constraint A (Metric)
<Introduce>

Table xx Evaluation of Three Design Alternatives based on Constraint A

| Design | Constraint (Metric) |
|---|---|
| | |
| | |
| | |

<Analyze>

3.2.1.2 Design 2: Normalization of Constraint A (Metric)

Table xx Evaluation of Three Design Alternatives based on Constraint B

| Design | Constraint (Metric) |
|---|---|
| | |
| | |
| | |

3.2.1.3 Design 3: Normalization of Constraint A (Metric)

Table xx Evaluation of Three Design Alternatives based on Constraint C

| Design | Constraint (Metric) |
|---|---|
| | |
| | |
| | |

### 3.2.2 Tradeoff 2: Constraint B (Metric)

3.2.2.1 Design 1: Normalization of Constraint B (Metric)
3.2.2.2 Design 2: Normalization of Constraint B (Metric)
3.2.2.3 Design 3: Normalization of Constraint B (Metric)

### 3.2.3 Tradeoff 3: Constraint C (Metric)

3.2.3.1 Design 1: Normalization of Constraint C (Metric)
3.2.3.2 Design 2: Normalization of Constraint C (Metric)
3.2.3.3 Design 3: Normalization of Constraint C (Metric)

### 3.2.4 Tradeoff 4: Constraint D (Metric)

3.2.4.1 Design 1: Normalization of Constraint D (Metric)
3.2.4.2 Design 2: Normalization of Constraint D (Metric)
3.2.4.3 Design 3: Normalization of Constraint D (Metric)

### 3.2.5 Tradeoff 5: Constraint E (Metric)

3.2.5.1 Design 1: Normalization of Constraint E (Metric)
3.2.5.2 Design 2: Normalization of Constraint E (Metric)
3.2.5.3 Design 3: Normalization of Constraint E (Metric)

## 3.3 Summary of the Normalized Values of the Three Designs

| Designs | Constraints | | | | |
|---|---|---|---|---|---|
| | Constraint A (metric) | Constraint B (metric) | Constraint C (metric) | Constraint D (metric) | Constraint E (metric) |
| Design A | | | | | |
| Design B | | | | | |
| Design C | | | | | |

## 3.4 Designers Raw Ranking for the Three Designs

Table xx Designers Raw Ranking for the Three Designs

| Decision Criteria | Criterion's Importance | | Ability to Satisfy Criterion | | |
|---|---|---|---|---|---|
| | Scale (0-10) | Percentage (%) | Design A | Design B | Design C |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| | | | | | |

### 3.5 Sensitivity Analysis

### 3.6 Influence of the Design Tradeoffs in the Final Design

# CHAPTER 4: FINAL DESIGN

**4.1 Final Design**
**4.1.1 Software Application**
**4.1.2 Hardware Design**
**4.2 Test Procedures and Evaluation**
**4.2.1 Test Procedures**
**4.2.2 Test Evaluation**
**4.3 Test and Evaluation Results**
**4.3.1 Test Results**
**4.3.2 Evaluation Results**
**4.4 Conclusion**
**4.5 Impact of the Design**
**4.5.1 Societal**
Target UN SDG.
**4.5.2 Ethical**
In compliance with known ethical codes/standards
**4.5.3 Legal**
National / Intl Laws
**4.6 Sustainability Plan**

## CHAPTER 5: BUSINESS PLAN AND MODEL

**5.1 Business Plan**
**5.1.1 Executive Summary**
**5.1.2 General Company Description**
**5.1.3 Products and Services Offered**
**5.1.4 Marketing Plan**
**5.1.5 Marketing Strategy**
**5.2 Business Model**
**5.3 Intellectual Property (IP) Reports**

## REFERENCES

Note: This must be done using APA format. Check the guide for more details: https://www.scribbr.com/apa-style/apa-seventh-edition-changes/

Covey, S. R. (2013). *The 7 habits of highly effective people: Powerful lessons in personal change*. Simon & Schuster.

# APPENDICES

Include standards preview, certification from experts/clients, code snippets, patent reports, and other long and detailed documents here. Format is as follows below:

## APPENDIX A: TITLE OF THE SECTION

<figure>

Note: No figure number. Standards must be followed with a paragraph explaining its contents and purpose.