System Requirements Specification

for Go Zero Waste Website

Version 1.0

Prepared by

Karmela F. Castro

January 19, 2022

Table of Contents

List of Tables

List of Figures

1. Introduction

1.1 *Purpose*

The purpose of this document is to present a detailed description of the Go Zero Waste website. It will discuss the purpose, features, and interfaces of the website, what the website will do, and the constraints on its services.

1.2 *Intended Audience*

This document is intended for both stakeholders, which may include but not limited to researchers, organizations, casual users, and developer/s of the website.

1.3 *Intended Use*

This document will be used as a basis or a means to understand the idea and functions of the website and will serve as a guide for development.

1.4 *Scope*

This document will specify the requirements for the Go Zero Waste website. This website will be a Non-profit website for a client. It envisions to make zero waste a lifestyle that is built on respect for ecological limits and community rights, where resources are sustainably conserved. The website will be designed to reach a wide range of audience for the zero-waste advocacy, by providing a platform to publish articles and contents. The objective of the website is to provide more information about the causes and effects of pollution and the catalyst to the zero-waste movement.

The website will allow the owner to:

- Create and manage articles and contents to provide information.
- Connect with the people.

The website will allow the users to:

- access/read the articles/contents,

- search for article/content,

- be directed to petitions and donation sites,

- subscribe for notification of new contents,

- connect with the website owner through contact forms, and

- contact with the website owner via email address and/or social media accounts.

The articles, contents, and/or contact information will be stored in and can be accessed and retrieved in a database.

1.5 *Definitions and Acronyms*

Table 1. Definitions and Acronyms

Term	Definition
Article	A document published on the website and is stored in a database.
Database	It is where the collection of all information used by the website are stored.
Stakeholders	Any person with an interest in the project aside from the developer.
User	Anyone visiting or using the website to read and look for articles and/or contents.
Website Owner	A person that owns and manage the website.

2. Overall Description

2.1 *User Needs*

The website will be used by the users and website owner. The users can use the website for researching, reading, donating, and connecting with people who share the same advocacies. Users shall be able to search, access, and read articles, donate, subscribe to newsletter, and contact the website owner. In addition, the website owner shall be able to create and publish articles/contents, manage and control the website, and shall have the right to access the database.

2.2 *Assumptions and Dependencies*

The website is aimed to be able to provide key information relating to the environment and other relating issues, and is directed to the community of researchers, organizations, casual users, and others. Thus, the following assumptions will be made.

- The user is expected to be internet literate and has the common knowledge on how to navigate the website.

- The user is expected to be internet literate and has the common knowledge on how to use functionalities like the search function. Where the main and other pages will have the search function available at the footer section.

- The user is expected to be internet literate and is able to use the contact form and subscribe to newsletter feature.

- The user is expected to be internet literate and is able to use the sign petition and donation feature.

3. System Features and Requirements

3.1 *Functional Requirements*

This section defines the use cases for the website owner and users.

3.1.1 *Use Case for Website Owner*
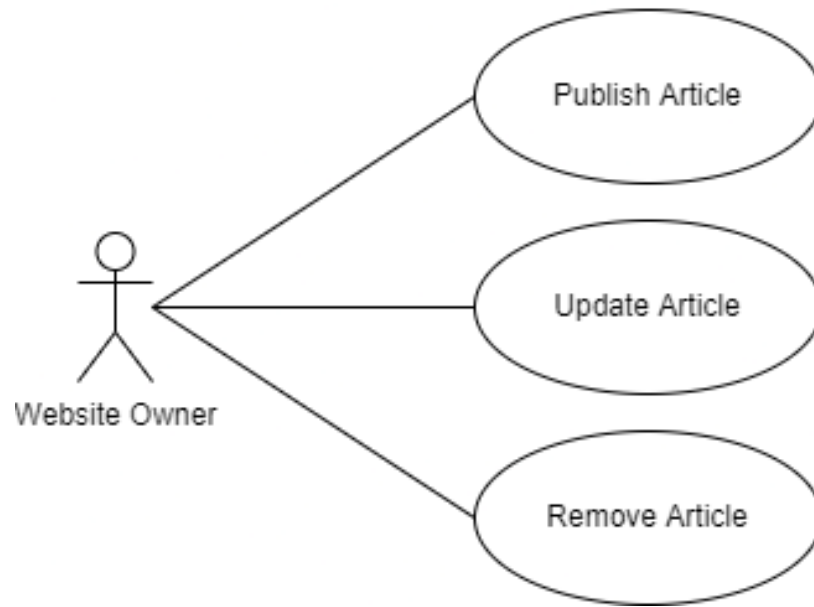
Figure 1. *Use case for website owner.*

3.1.1.1 *Publish Article Use Case (Website Owner)*

Table 2. UC-1 Descriptions.

Use Case ID	UC-1
Requirement Name	Publish Article
Trigger	The website owner decided to add an article in the Published Articles database and publish it on the website.
Precondition	The website owner accessed the Manage Articles page.
Basic Path	1. The website will display an add/publish an article button.

	2. The website owner clicks the button.
	3. The website will display fields that needs information about the article such as title, date of publish, author, and the contents.
	4. The website owner then submit the completed information.
	5. The website prompts the website owner to confirm the publish.
	4. The website owner confirm the publish of the article.
Alternative Path	None.
Postcondition	The selected article is now added in the database and published on the website.
Exception Paths	The website owner may leave the operation at any time.

3.1.1.2 *Update Article Use Case (Website Owner)*

Table 3. UC-2 Descriptions.

Use Case ID	UC-2
Requirement Name	Update Article
Trigger	The website owner decided to update the content of an article in the Published Articles database and on the website.
Precondition	The website owner accessed the Manage Articles page, and the article already exists in the database.
Basic Path	1. The website will display a list of all published articles, by the most recent ones at the top.
	2. The website owner selects an article to update.
	3. The website will display the information about the article.
	4. The website owner then update the content of the article.
	5. The website prompts the website owner to confirm the update.

	4. The website owner confirm the update and republish the article.
Alternative Path	None.
Postcondition	The selected article is now updated in the database and will automatically update the article on the website.
Exception Paths	If the article doesn't exist in the database, the operation will be cancelled. The website owner may leave the operation at any time.

3.1.1.3 *Remove Article Use Case (Website Owner)*

Table 4. UC-3 Descriptions.

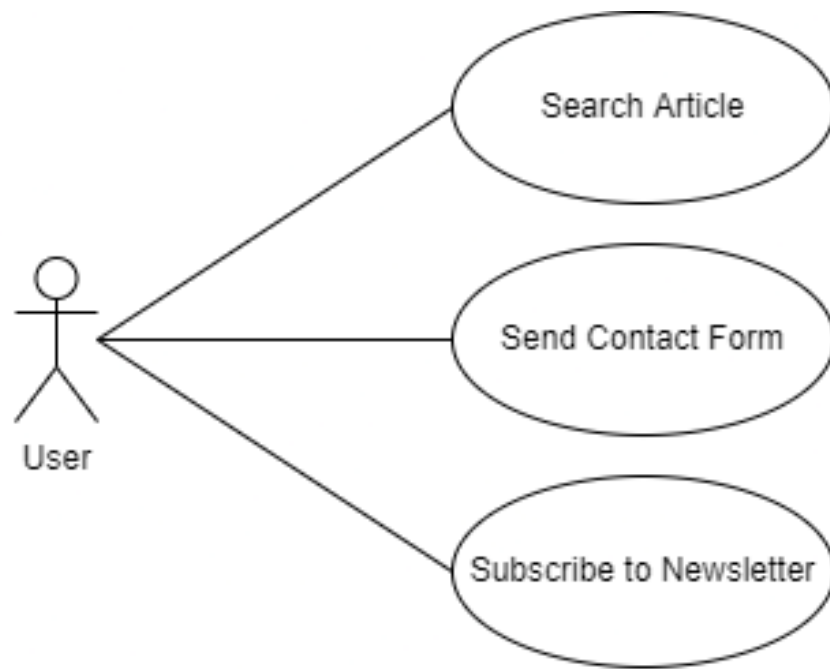| Use Case ID	UC-3
Requirement Name	Remove Article
Trigger	The website owner decided to remove an article from the Published Articles database and on the website.
Precondition	The website owner accessed the Manage Articles page.
Basic Path	1. The website will display a list of all published articles, by the most recent ones at the top. 2. The website owner selects an article. 3. The website will display the information about the article and prompts the website owner to confirm the deletion. 4. The website owner then confirm the deletion.
Alternative Path	None.
Postcondition	The selected article is removed from the database and on the website.
Exception Paths	The website owner may leave the operation at any time.

3.1.2 *Use Case for User*

Figure 2. *Use case for user.*

3.1.2.1 *Search Article Use Case (User)*

Table 5. UC-4 Descriptions.

Use Case ID	UC-4
Requirement Name	Search Article
Trigger	The user accesses the Go Zero Waste website.
Precondition	The website is displayed with a search box.
Basic Path	1. The user can enter any keyword or phrase in the search box. 2. The website will direct the user to the Search Results page and display the results of all articles/contents relating to the keyword based on the results from the database. The results will display the most recent articles at the top.

	3. The user selects an article.
	4. The website will display the article on a different page.
	5. The user may read the article or return to the search results page.
Alternative Path	None.
Postcondition	The selected article will be displayed to the user.
Exception Paths	The user may leave the search at any time.

3.1.2.2 *Contact Form Use Case (User)*

Table 6. UC-5 Descriptions.

Use Case ID	UC-5
Requirement Name	Contact Form
Trigger	The user accesses the Go Zero Waste website.
Precondition	The website is displayed with a contact form.
Basic Path	1. The user can enter their information on the fields such as name, email address, contact number, and message.
	2. The user send the message.
Alternative Path	None.
Postcondition	The website will display a message that their message was successfully sent and to please wait for a reply.
Exception Paths	The user may leave the contact form at any time.

3.1.2.3 *Subscribe to Newsletter Use Case (User)*

Table 7. UC-6 Descriptions.

Use Case ID	UC-6
Requirement Name	Subscribe to Newsletter
Trigger	The user accesses the Go Zero Waste website.
Precondition	The website is displayed with a Subscribe to Newsletter feature.
Basic Path	1. The user can enter their email address on the field. 2. The user subscribes.
Alternative Path	None.
Postcondition	The website will display a message that the user had successfully subscribe to the newsletter of the website.
Exception Paths	The user may leave the Subscribe to Newsletter at any time.

3.2 *External Interface Requirements*

3.2.1 *User Interface*

      The frontend or GUI of the website shall be designed in HTML, CSS, and/or PHP, since these are common and easy to implement and will allow different users to access the website. While the backend of the website shall use JavaScript, PHP, and MySQL.

3.2.2 *Operations*

      The website shall only allow the website owner to modify, manage, and/or control the operation of the website. The website owner can accept suggestions, feedbacks, or comments about their operation through the contact form.

3.2.3 *Hardware Interface*

      An internet connection is needed to allow the browser to connect to the internet to access the contents of the website.

3.2.4 *Software Interface*

      Any known operation system that will allow the use of a browser to view web pages. For example, Windows 7-11, Linux, and macOS. The MySQL Database will also be used to store and manage information of the website.

3.2.5 *Communication Interface*

      Any recent versions of known browsers such as Google Chrome, Mozilla Firefox, and Safari will be used to allow a remote access of the website via the internet.

3.3 *System Features*

This section defines the system features of the website.

3.3.1 *Frontend*

    a. Search Articles

    b. Fill in Contact Form

    c. Subscribe to Newsletter

    d. View Article

    e. Sign Petitions

    f. Donation Links

3.3.2 *Backend*

    a. Publish Articles

    b. Update Articles

    c. Remove Articles

    d. Manage user subscriptions

    e. Manage user contact form messages

    f. Manage and organize petitions

3.4 *Nonfunctional Requirements*

3.4.1 *Performance*

The performance of the website may depend on the user's hardware and software aspects. However, to assure that the website will run in good performance, the website shall be able to support up to 1000 users at the same time and regularly update the database to avoid future problems.

3.4.2 *Safety*

A backup copy of the database will be regularly updated to be able to restore and recover the possibly lost data, in case of any problems such as data loss, system failure, or other unanticipated situations.

3.4.3 *Security*

The server of the Go Zero Waste website will use will have its own security to prevent unauthorized modification to the website or database. No restrictions will be imposed on the reading or accessing of articles. The PC the website owner uses will also have its own security, and only the website owner has the access to the computer and the website. Every data collected from the user will be protected as mandated in the Data Privacy Act of 2012.

3.4.4 *Quality*

The website will only publish and share articles or contents that had undergone an extensive process of fact-checking and editing. The website will also assure that information and the overall operation of the website will be kept updated for better user experience.