

# ZISWAHIB Processing Website Design (Zakat, Infaq, Alms, Waqf, Grants) at the North Sumatra Branch of Orphans House Using the Bootstrap Framework V.5.1.3

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## ABSTRACT

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Era 4.0 is the era of human digitization in the development of technology and information, ease of access and ease of obtaining information are advantages for many people. Not only used for individuals, but technology and information can be used to support the needs of an agency, institution or company. Like a website that is equipped with a database, the website will be useful for storing data or being able to view data that has been saved. Information systems can not only be used for large companies or agencies, all companies must have an information system to speed up the work of the employees of the company or agency, moreover the Orphan House is engaged in the socio-religious field. This research methodology uses a qualitative methodology with a system development method using the waterfall method. This website is built with bootstrap framework V.5.1.3. This website can make it easier for employees at Rumah Yatim to manage ZISWAHIB (Zakat, Infaq, Alms, Waqf, Grants) to work faster and more efficiently.

### *Keywords:*

ZISWAHIB, Website Design, Bootstrap, Orphan House

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## 1. INTRODUCTION

Era 4.0 is the era of human digitization in the development of technology and information, ease of access and ease of obtaining information are advantages for many people. Not only used for individuals, but technology and information can be used to support the needs of an agency, institution or company. Like a website that is equipped with a database, the website will be useful for storing data or being able to view data that has been saved.

Information systems can not only be used for large companies or agencies, all companies must have an information system to accelerate the work of the employees of the company or agency, moreover the Orphans House agency is engaged in the socio-religious field, which is ZISWAHIB (Zakat, Infaq, Alms, Waqf and Grant) this is a rule or command from Allah SWT which is very clearly written in the Qur'an, among the holy verses of the Qur'an that explain about ZISWAHIB are; QS Al-Baqarah verse 43 "And establish prayer, pay zakat and bow with those who bow", QS Al-Hadid verse 18 "Indeed those who give charity, both male and female and lend to Allah a loan that is good, it will surely be doubled (the payment) to them; and for them a great reward", Q.S Adz-Dzariyat verse 19 "And in their wealth there is a right for the poor who ask and the poor who do not get a share". This requires good and transparent management.

For the flow of the ZISWAHIB management process at the orphanage, first the donor will give his donation to the officer who is willing to accept donations from the donors, then the officer will input data to print proof of his donation to the donor, then the officer will ask if there is a prayer that you want did you include? then the officer continues the mandatory prayer for the donors, as a form of gratitude to God and is accompanied if there is a prayer that the donor wants to say. Then the donation is saved, if it is in the form of money, it will be kept by the officers, if it is in the form of staples, it will be stored in the warehouse. Then for a monthly period, the basic materials and money will be distributed to certain places where a feasibility survey has previously been carried out.

The Amil Zakat Institution is a zakat management institution formed by the community so that it has no affiliation with the Amil Zakat Agency, which was formed on the initiative of the government. The Amil Zakat



Institution is seen as a zakat management institution that is fully formed on the initiative of the community and by the community[1]. Large Amil Zakat Institutions in Indonesia are currently big because they use adequate IT infrastructure. The more sophisticated they use information technology (IT) infrastructure, the more efficient the Amil Zakat Institute collects funds from the muzakki and the easier it is to store data on zakat recipients, data on zakat recipient areas, data on areas assisted by zakat institutions, data on institutions that receive support from zakat funds, obligatory zakat data, and others.

Website is a collection of pages that are used to display information, motion or still images, sound, and a combination of all of them both static and dynamic which form a series of interrelated buildings, each with links. It uses the HTTP protocol (hypertext transfer protocol) and to access it using software called a browser[2].

Visual Studio Code (VS Code) is a lightweight and powerful text editor created by Microsoft for multiplatform operating systems, meaning that it is also available for Linux, Mac, and Windows versions. This text editor directly supports JavaScript, Typescript, and Node.js programming languages, as well as other programming languages with the help of plugins that can be installed via the Visual Studio Code marketplace (such as C++, C#, Python, Go, Java, etc.)[1].

Bootstrap is an application package that can be used to design the front-end of a website. Simply put, bootstrap is a template for web design. Bootstrap is designed to simplify the web design process for users ranging from beginner to experienced[3], [4]. Bootstrap consists of CSS and HTML to generate Grid, Layout, Typography, Table, Form, Navigation, and others. In bootstrap there are also jQuery plugins to produce nice UI components such as Transition, Modal, Dropdown, Carousel and others.

XAMPP is an instant and complete web server application because everything you need to create a website with a Content Management System (Joomla) can be tried in this application. XAMPP is an AMP (Apache, MySQL, and Php) installer package that is very easy to apply on your computer that does not yet have a server to be able to view the site you created using the server language and the database server[5], [6].

CSS stands for Cascading Style Sheets, contains a series of instructions that determine how text will appear on web pages. Text design design can be done by defining fonts (letters), colors (color), margins (size), background (background) font sizes (font size) and others. Elements such as colors, fonts, sizes and spacing are also called styles. Cascading Style Sheets can also mean putting different styles on different layers. CSS consists of a style sheet that tells the browser how a document will be rendered. New features on old web pages can be added with the help of style sheets. When using CSS, there is no need to write font, color or size for every paragraph, or for every document[7], [8].

## 2. RESEARCH METHODOLOGY

### 2.1. Research Design

In this study, the method used is a qualitative research method. Qualitative research allows researchers to develop an understanding of a problem that is found, then used to study a case in a limited context. Qualitative research method is a method used to examine natural objects that take place in the community. Qualitative research uses data that is certain or actually happened. Data collection is not mandatory through theory, but guided by the facts found at the time of research[9].

The data collection methods in this study, namely:

- 1) Document study, collecting data obtained from the institution where the author does practical work, namely Rumah Yatim. Document Study is the stage of collecting data needed in making the system in solving a problem obtained in the field[10].
- 2) Literature study, conducting library research by taking several references from articles, journals and books. Literature study is a type of collecting references from previous studies in order to support the research researched at the agency.

### 2.2. System Development Method

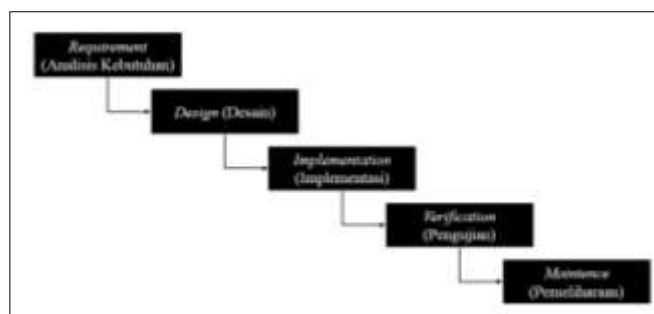


Figure 1. Waterfall Method

The method used in the development of this website uses the waterfall model or commonly known as the waterfall method. The waterfall method has several stages, namely requirements, design, Implementations, Verification, and Maintenance[11], [12].

The explanation of the stages in the waterfall method is as follows:

- 1) Requirements  
Requirements are the first step in the waterfall method, which is to analyze the system requirements that are made so that they can be understood by the user.
- 2) Design  
At the design stage, the waterfall method forms a design of an overall system architecture and determines the flow of the software designed. In designing this system using UML (Unified Modeling Language) and ERD (Entity Relationship Diagram). UML is a language based on graphics or images for visualizing, specifying, building, and documenting a system development[13]. in this design are use case diagrams, activity diagrams, and sequence diagrams. ERD is to model the system that will later be developed in the database and help database designers when analyzing and designing databases because it can show the kinds of data needed and the relationships between data inside it.
- 3) Implementation  
Implementation is the stage in which the overall design is converted into program codes which will then be made into a complete system. The programming used on the system includes PHP, HTML, CSS, and Javascript
- 4) Verification  
System testing is carried out at this stage to assess the system has been running according to the plan so that the objectives of the system formed are realized.
- 5) Maintenance  
Maintenance is the stage of system installation and the system repair process if there are deficiencies in accordance with the plans and designs previously made.

### 3. RESEARCH RESULT

#### 3.1. System Design

Unified Modeling Language (UML) is a visual modeling method for object-oriented system design tools, or the definition of UML is as a language that becomes the standard for visualization, design and system documentation. In object-oriented systems developers use a model language to describe, build, and document the systems they design. UML allows team members to work together with the same model language in applying various systems[14].

Use Case diagram is one type of diagram in UML that describes the interaction between the system and the actor. Use Case diagrams can also describe the type of interaction between the user of the system and the system. Use case diagrams are graphical depictions of some or all of the actors, use cases, and interactions between them that introduce a system. Use case diagrams do not explain in detail about the use of use cases, but only provide a brief description of the relationship between use cases, actors, and systems. In this use case it will be known what functions are in the system created[15].

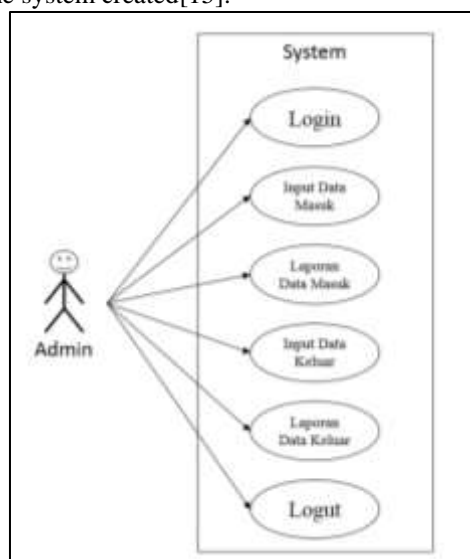


Figure 2. Use Case of Website

### 3.2. Prototype Design

#### 1) Admin Login Page

To enter the main page of the ZISWAHIB RY website, the admin must first log in according to the username and password that have been created. On this page there is a username and password text column, a login button and a remember password checkbox that can make it easier for users to save their passwords.



Figure 3. Admin Login Page

#### 2) Main Page

The main page displays all the menus that can be accessed by the admin. On this page there is information about logged in users, application menus consisting of incoming data input, incoming data reports, outgoing data input and outgoing data reports.



Figure 4. Main Page

#### 3) Incoming Data Input Page

This page serves to input data for incoming donations received from donors. This form contains fields for date, type of donation, unit, amount and description. There are three buttons on this form, namely the save, delete and return buttons.

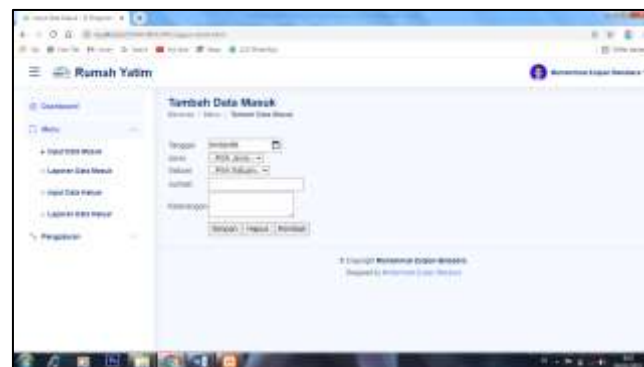


Figure 5. Incoming Data Input Page

#### 4) Incoming Data Reports Page

This page functions to display incoming data along with the types and criteria for donations received in accordance with the data that has been inputted on the Incoming Data Input form.

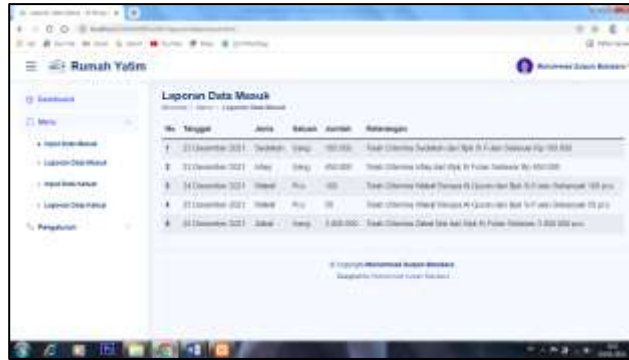


Figure 6. Incoming Data Reports Page

5) Outgoing Data Input Page

This page serves to input data for outgoing goods which will then be distributed to recipients who are entitled to receive assistance. In this form there are fields for date, type, unit, amount, description, officer and recipient. In this form there are three buttons, namely the save, delete and return buttons.



Figure 7. Outgoing Data Input Page

6) Outgoing Data Report Page

This page functions to display data on donations that will be distributed, there is a person in charge of the giver and recipient who will distribute the donation. This page will display information according to the data entered on the Outgoing Data Input form

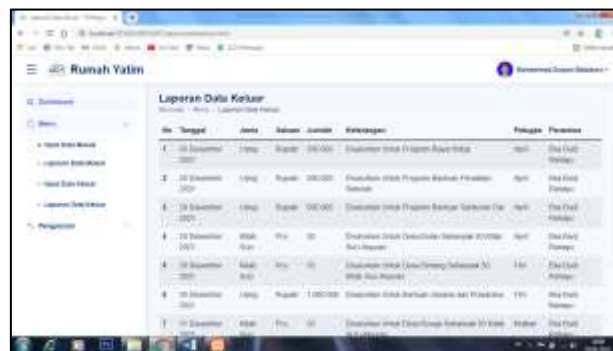


Figure 8. Outgoing Data Report Page

4. CONCLUSION

Based on the results of the research that has been done, it can be concluded that the website that has been designed can facilitate the work of employees at the Rumah Yatim Branch of North Sumatra, especially in terms of incoming and outgoing donation data. It is recommended that in future research it can be equipped with other required features such as financial reports and so on.

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