

The Agile Development Methodology with Data Search to Design a Website-Based Mail Management Information System

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Abstract

In the era of everything digital as it is today, it is important and requires a website to make it easier to make correspondence so that it is recorded and explained clearly. Letters are news or information in written form. A company that needs and needs to make correspondence to be sent to other departments. There are problems that need to be discussed, namely it is difficult to record letters, check letters, make letter dispositions and store incoming and outgoing letters. The Use of Agile Development Methodology with Data Search To Design a Web Site Based Mail Management Information System. By applying the Agile Development method here with a view to software development carried out in stages. Data search is here to make it easier for system users to find, find letters by simply entering a keyword you want to search for. The purpose of this study is to make it easier to record letters, check letter status, make letter dispositions, print letters, save to make it easier to make letters.

Keywords: Agile Development Methodology; Data Search; Management Letter; Blackbox Testing.

1. Introduction

Designing a Management Information System for Correspondence by Implementing a Website-Based Agile Development Methodology This is a way to help companies or system users, namely administrators or secretaries, to expedite the process of sending and receiving letters on a website basis without having to search for one letter. From there, a website is needed to record letters, disposition of letters, print letters, to store incoming and outgoing letters. There are several journal references, such as, [1] Aldisa, R.T., and M. Aldinugroho A, 2022. With the theme the title Application of Agile Development Methodology in Book Sales Systems with Category and Search Features from the title above has the conclusion that it can help buyers in finding the desired book quickly by simply entering the author's name and book title, the desired book will appear automatically if stock is available, the book category feature here is a collection of types of books such as cooking books, school textbooks, computer books, religious books, poetry and novels. [2] Aldisa,R,T, and M. Iwan W, 2022. With the theme of the title Laboratory Information System Using the Website-Based Joint Application Design (JAD) Method (Case: National University Artificial Intelligence Laboratory) from the title above has a conclusion, namely the results of This system is processing Laboratory Software Data, Laboratory Assistant Data, Laboratory Inventory, Laboratory Rooms, Lecture Schedules and News About Activities in the Laboratory. [3] M. Andre Sanjaya, Muthia F, Hasanuddin, 2022. With the theme title Application for Correspondence Management at Higher Education Service Institutions (LLDIKTI) Region XI Kalimantan Web-Based from the title above has the conclusion that this application can be developed by adding book features guests to record guests who come and their needs at the LLDIKTI office. [4] R. Hidayatullah, V. Asmawati, Deasy W, 2020. With the theme title Mobile-Based Incoming and Outgoing Mail Management Application at Perum Bulog Subdivre Dumai from the title above has the conclusion that is Facilitating the allocation of follow-up and disposition of incoming letters in the field concerned, as well as approval of outgoing letters by the leadership. [5] Analysis of the Use of Mail Management Applications

(AMS) in the Management of Incoming Letters on Work Efficiency of Employees of PT. PLN (Persero) Pusharlis UWP II from the title above has the conclusion that the use of this application system has a very good impact on employee work efficiency.

With this AMS it really helps the performance of the users themselves (employees). From the several journals found, the authors wanted to design the title Use of the Agile Development Methodology Method with Data Search to Design a Website-Based Mail Management Information System. The conclusion is that every company or agency definitely needs a letter to communicate and share information. Data regarding incoming and outgoing letters, the disposition of letters must be maintained and stored properly and correctly in order to facilitate the process of managing them. The constraints of recording correspondence data here are still spelled out manually and it takes a long time to be able to find, look for the stored letter data. Therefore, the management of correspondence in agencies and in these companies needs to have a website-based mail data management information system so that secretaries or admins who record, create and store incoming and outgoing letters make it much easier to find and find again. And with the creation of a special data search menu here it is useful to assist in searching for letters quickly by entering a keyword. Applying the Agile Development Methodology as a method in designing a system whether the system has been used properly by the user or not

2. Research Methodology

Research method is a step or method taken by researchers in order to collect information or data and conduct investigations or observations on the data that has been obtained [6].

2.1. Research Roadmap

Roadmap is a road map of a research. So that the research is more structured, can continue to grow, and produce useful as well as easy to apply [7].

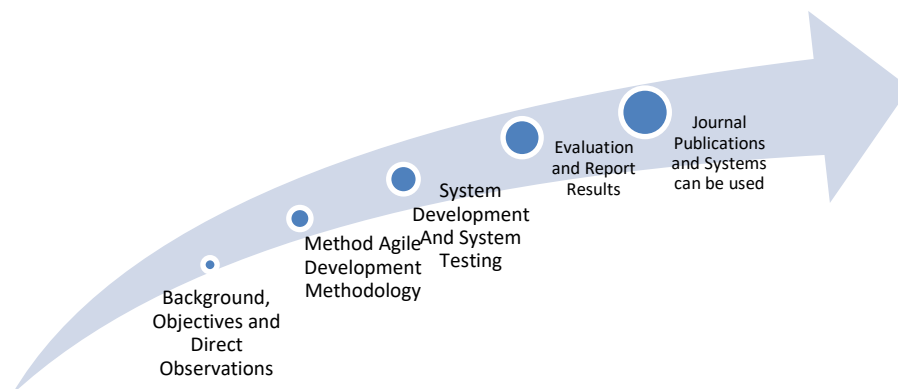


Figure 1. Research Roadmap

Roadmap of the research to be carried out by understanding the background, the purpose of direct observation of needs, carrying out the process of designing the initial system, making the system and testing the system, evaluating and reporting results, publishing journals.

2.2. Research Instrumentation

In this study, the instruments used are as follows:

- Literature on the concept of using Agile Development Methodology with
- Data Search for Designing a Website-Based Mail Management Information System.
- The software used in this study uses Web-based programming.
- Application for data storage process for information system analysis.

2.3. Data Search

Data Search is a process to collect information in a computer and then retrieve the required information as quickly as possible. In life we often do data searches, for example in our case we are looking for a food menu on restaurant websites, looking for family phone numbers on our mobile phones, looking for book readings in the library and each of many other examples.

2.4. Agile Development Methodology Method

Agile is a method used for software development which is carried out in stages. The agile development methodology method in its use is able to make decisions in software changes according to the intended conditions, the result of software using this agile method will be more flexible and efficient.

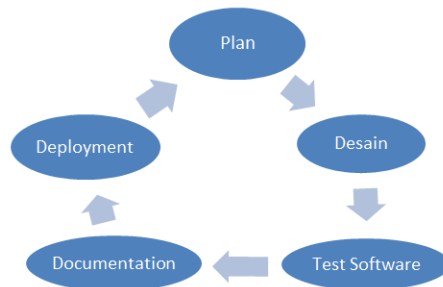


Figure 2. Stages Metode Agile Development Methodology

The following are the stages of the Agile Method in this system, namely:

- Planning, in this stage the system developer such as the owner or director of the company is called the client doing the planning what will be done.
- Design, in this stage the system developer can design the flow or process of working on the system like how it will be made.
- Software Test, in this stage the developer has made the system and can check the system whether there are errors from the system that has been made, if there is an error then the system developer must fix it as soon as possible.
- Documentation in the stages here makes it easy for system users.
- Deployment in this stage the developer can guarantee the quality of the system that has been made by testing the security, speed of the system that has been made.

2.5. Blackbox Testing Understanding

Black Box Testing is a test that is carried out only to observe the results of the execution of the software. Observation of these results through test data from the software itself. Black box testing evaluates only the outer appearance (interface). [8] Can be seen in Figure 3.

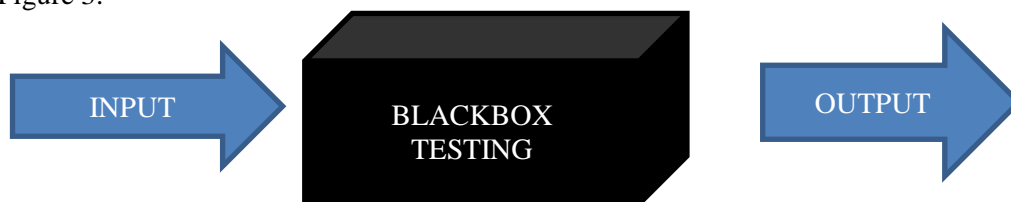


Figure 3. Black box testing

Black box testing is used to test the system that has been designed whether the system can run properly and is useful for system users.



3. Results and Discussion

3.1. Initial design of the system to be made

Below is a display for the initial design of the system from accessing the login menu, main menu, incoming mail menu, outgoing mail menu, data search menu, mail history menu, system user menu

3.2. Preliminary Design Display

The initial design starts system from being able to access the login menu, main menu, incoming mail menu, outgoing mail menu, data search menu, mail history menu, system user menu.

3.3. Home Menu Display

In this menu display you will see the Home Menu where you will see all the contents in the menu consisting of incoming mail, outgoing mail, number of mail dispositions, number of users using the system, mail history and others.

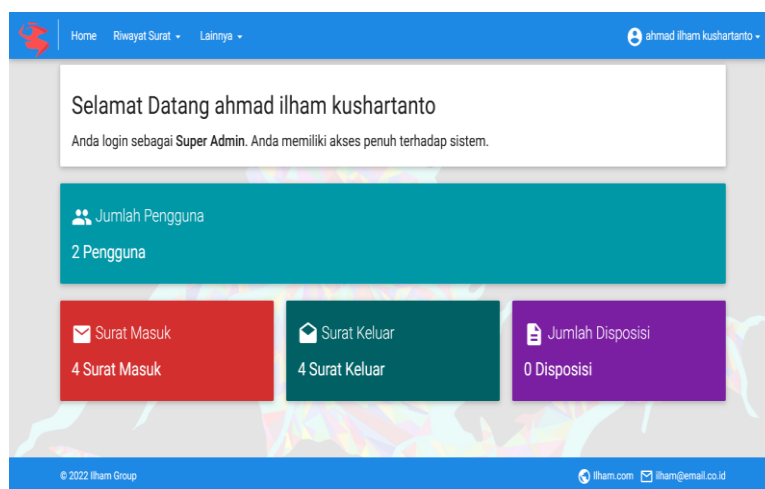


Figure 4. Home Menu Display

3.4. Blackbox Testing Uses

The following is blackbox testing of The Agile Development Methodology with Data Search to Design a Website-Based Mail Management Information System that been carried out.

Table 5. Testing the Login Menu

Menu	Activities	Which areExpected	Results show
Login	Username & Password(Success)	Login Menu	Displays the message LoginSuccessfully
	Username & Password(Failed)	Back to Login	Failed to EnterWrong Username and Password

From the results of the display in table 5 it can be concluded that if the admin enters the username and password appropriately and correctly, the system will immediately enter correctly and display the initial menu page, but if the admin is wrong to enter the username and password, the system will display a failed message. Enter wrong username/password

4. Conclusion

Based on the results of the discussion regarding the Agile Development Methodology with Data Search to Design Website-Based Mail Management Information System can be

interpreted that the system is created to be able to assist system users in searching, finding the letters they are looking for, storing incoming letters, outgoing letters and disposition of letters. This system uses the Agile Development Methodology used for system development. Further research can be developed using other methods

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