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# WEB-BASED APPLICATION DESIGN FOR ADOPTION OF ABANDONED PETS

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#### Abstract

This research is action research or also known as action research. Pejaten shelter is an organization engaged in the rescue of abandoned animals in the special area of the capital city of Jakarta and its surroundings. Abandoned animals accommodated in this place are dogs and cats. The number of adopted animals available reaches 1700-2000 animals. So far, the adoption process is still relatively difficult, namely by going through the stages directly and disseminating information only through the Instagram platform. then the shelter pejaten still uses routine reports on animals that have been adopted manually. Therefore the purpose of this research is to develop a web-based application that helps animal adopters to find animals for adoption, as well as helping adoption animal providers to disseminate animal adoption information, take care of online adoption needs, and facilitate the administration of animal adoption administration. The research method is divided into data collection methods, design methods, development methods, and evaluation methods. Data collection methods are in the form of surveys, interviews, observations, literature studies, and analysis of similar applications. The design method is divided into User Interface design methods and system design methods. The development method applied is the waterfall method which is divided into Requirement analysis, design, implementation, Testing, Maintenance. The results of the research are in the form of a web-based application that makes it easier for adopters and providers of adopted animals to find and disseminate information on animal adoption effectively, as well as to facilitate the management of online adoption and administration of animals.

## Introduction

Pejaten Shelter is an organization involved in rescuing abandoned animals in the DKI Jakarta area and its surroundings. Founded in 2009 which was founded by Dr. Susana Somali. The number of available adoptable animals reaches around 2000-3000 animals, abandoned animals accommodated in this place are dogs and cats. So far, the adoption process is still relatively difficult, namely by going through the stages directly and distributing information related to adoption only via the Instagram platform, then the Jaten shelter still uses routine reports regarding animals that have been adopted manually, namely contacting the adopted animal. These animals usually occur because they were thrown away, sick, donated pets or animals obtained

from rescues. Most abandoned animals are mostly caused by economic factors because the owner is no longer able to care for his pet. Based on the problems that have been described, researchers are encouraged to create website-based applications that can help disseminate information to the public regarding the adoption of abandoned animals. With the aim of being a solution to help disseminate information about animal adopters, take care of adoption needs online, and make it easier to manage animal adoption administration, such as managing animal adoption applications, and routine reports on the condition of animals that have been adopted. Thus, this application will be a means to make it easier for adopters and adopters to carry out the animal adoption process.

# Method

#### A. Data Gathering Method

- 1. The method of collecting data used in this study are:
- 2. Interview method is a data collection method by asking sources directly to obtain the required data or information.
- 3. Observation method is a direct inspection process to see in detail the system running on the research object
- 4. Library Studies, is a collection of theoretical foundations related to and in accordance with research

# **B.** Waterfall Method

The system development method used in application design is the waterfall method, which consists of several stages, namely :

- 1. Requirement Analysis, at this stage the researcher collects information to determine user needs by conducting interviews with shelters, distributing questionnaires to the community via gform, and also observing the features available in the application. The following are the requirements for this application, namely:
  - a. An animal adoption platform where users can see a selection of animals available for adoption and search for animals according to the desired criteria.
  - b. An animal adoption platform that helps users in the online adoption process.
  - c. A platform for providers of adopted animals to find out the state of their animals after being adopted.
  - d. A platform where adoption animal providers can upload animals for adoption as well as manage the application for the adoption of these animals.
- 2. *Design*, At this stage, the researcher focuses on system configuration and structuring, the researcher designs and creates UML diagrams and the layout of the website that will be created.
- 3. Implementasi, At this stage the researcher implements the system in code form. The programming language used is PHP and uses MySQL as the database.
- 4. *Testing*, After the next implementation stage, the researcher tested the system using the black blox testing method, which aims to find errors in the application and fix these errors.
- 5. *Maintenance*, does not exclude the software subject to change. Changes may occur due to errors that were not detected during testing. During the maintenance phase, the development process can be repeated from specification analysis to modifications to changes to existing software, but not new software. This process can include missed ethics n errors before launch or addressing new issues that will arise.

Below is a figure system development method with Waterfall.



**Figure 1.** System development with Waterfall method Figure 1 is a Waterfall method figure and the research carried out only reached the Design stage.

# **1.** RESULT AND DISCUSSION

Adoptcatdog is a web-based application used to assist the adoption process. The main problem faced by animal adopters is finding an animal that fits the criteria for adoption. Therefore, Adoptcatdog acts as a platform to help find and adopt animals that meet the animal adopter criteria. Adoptcatdog helps with the pre-adoption process, where application users can search for and read details of pets that match their criteria and can then be adopted. Adoptcatdog bridges adoption providers and adopters by providing online adoption registration facilities via the website. App users only need to fill out a form to be approved or rejected by the adoption provider. Next, application users can contact the adoption provider directly to determine an adoption method that suits both parties. Apart from that, Adoptcatdog also provides facilities for animal providers and adopters to stay connected through a monthly report feature, so that animal providers can continue to know the current condition of the animals that have been adopted by the relevant adopters.

## **Application Development**

In designing an application for web-based adoption of abandoned pets, produce designs: Main page, Animal adoption & consultation page, Admin and shelter login page, Admin login page, Animal list page, Adoption history page, and Admin master data page, as follows:



Figure 2. Main page

In Figure 2, on this main page users can see other menus such as the animal adoption menu, the How to adopt menu, and the home menu.

2. Animal adoption & consultation page



Figure 3. Animal adoption & consultation page

In Figure 3, the animal adoption & consultation page above can be used by application users to search for registered shelters and see a list of animals that can be adopted by application users.

3. Admin and shelter login page

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	Form Login
	Admin 🗸
	jakpus
	Login

Figure 4. Admin and shelter login page

In Figure 4, the admin login page has a "login" button to switch to the admin page and if you want to enter the shelter page, select the shelter pop up then "login", in this case the admin must first enter the username and password correctly. The shelter's own page to approve whether the adopted animal is approved by the shelter or not.

4. Animal list page



Figure 5. Animal list page

In Figure 5, this animal list page is for searching for adoptable animals, and can search by animal type and animal breed.

5. Adoption history page

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Figure 6. Adoption history page

In Figure 6, the adoption history page can only be accessed when the adopter logs in to the account, and to view the status of the adopted animal, to provide a rating for the shelter and also to upload proof of the animal being taken.

# 6. Admin master data page



Figure 7. Admin master data page

In Figure 7, this admin master data page can only be done when the admin logs in to the admin login form, here there are several master data related to animal data, adoption data, adopter data, questionnaire data, animal race data and so on.

#### Conclusion

#### Conclusion

Based on the research results, designing an application for adopting abandoned pets, it can be concluded that we have succeeded in designing a website-based application for adopting abandoned pets well.

# Auggestion

As for suggestions that can be given by researchers, namely the need for application development in the form of iOS and Android-based mobile and the development of filtering features when application users perform searches.

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