

## ITCS371 Introduction to Software Engineering

Project Phase 1: Report

### Presented to

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## **Preface**

## Dear Instructors,

We are writing this report as a part of ITCS371 Introduction to Software Engineering course at Faculty of ICT, Mahidol University. The purpose of this report is to provide the overall information of the project phase 1 that we have done.

## Sincerely,

Teerapat Burasotikul
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### **Project Overview**

Adopting a pet is the process of giving it to someone who wants to have one but doesn't know where to look. This is to reduce and organize stray dogs so that there is ready to take care of them. Online pet adoption sites must be registered and maintain a database of internal and external prospective adopters to be able to observe and ensure the safety of pets being taken care of essentially. The organization must create a dog adoption management system. The company must manage a non-profit pet adoption program. The clients are a non-profit organization. This was created for a dog. First and primarily, discuss about the target customers. This service will only be available in Thai. Thai citizens can come check out the service on the website. This service is available for websites to run. The public is available to attend and check out the list of dogs available for adoption. The organization staff must upload the dog profile to the platform, followed by the administration staff, who are looking for a report system. Because this is a non-profit organization, the company requires qualified sponsors to participate, so the organization needs eligible sponsors to come to the website to pay support. This is a list of the four most active users in the group. Now for the features. The first is dog profile management. The primary users are organizational personnel. When they locate the dogs, the staff must register them. They must add them to the system. The dogs' bleed, sex, health, color, blood group, and other characteristics. Customers can therefore check the dog adoption pages for the existing ones to gain data requirements. After registering the dogs, they are not immediately available for adoption. Organization staff must prepare the dog for adoption by recording the treatment of dogs, such as medical treatments, as well as practicing the dog before the adopter arrives. Prepare the dog to fit in with a family. When the dog is ready for adoption, the organization's staff must come to approve the dog for adoption. On the website, for example, the dog's name appears. So, users can come to search for a specific dog on the list for them. This is typical of them. The user's preferred breed of dog to roll, sit, and so on. The adoption process is also not easy. Users must go through a verification process. They checked the adopter's profile, such as ID and address, before allowing the dog to be adopted. The profile will be verified by the organization's staff to ensure that it will be adopted by a good family. Some external systems will be involved in the verification process. First, a criminal record from police. It's very important for a dog's life if they have to live with a criminal. The organization has to check the backlist in other NGO databases. They have the organization to maintain pet adoption blacklist. So, the organization has to include 3 external systems into the verification system. After this, the staff verified that the adopter was ready for the adoption. So, they can see the list of the dogs. They can mark the favorite dog they want to adopt. After the dog's adoption request is successful, it will be sent to the organization's staff. organization staff that the dog was available for adoption. In the case that a dog has multiple adopters, this is not first come, first served. The organization's staff will select the most suitable adopter to get approved. When the organization's staff see their profile, details, and background, they will be motivated by potential staff to improve. After they click accept, they must ensure that there are no more adoptions for that dog. And the system must handle the dog delivery as well. The organization's staff will deliver these dogs to the adopter's home. It must be the delivery part of

the system. The next part is admin. You can provide the phone number of the dog available. Like the basic report. The last group is sponsors. The sponsor can be any organization that wants to support dog organizations. They can come to the system to log in. The organization must approve the system. The sponsor can register the specified amount of money to support the organization. The benefit of organization is that the system must show the banner who is the sponsor of this website. Supporters can log in and upload the banner that they want to the website. Regardless of how much they help There is just one size for the banner to appear on the website.

## Requirement

#### **Functional**

#### **General Function**

- Users, Staff, Sponsors, and admins log in to the website.
- Users and Sponsors need to approve by staff before they can log in.
- Admin and Staff can view the system report
- Users can mark their favorite dog
- The sponsor can upload the banner that they want to the system

#### Dog profile management

- Staff is the only one who can add a dog profile to the website
- The system asks for input such as breed, health, color, medical profile
- Staff record the treatment record of the dog to be adaptable
- Staff must approve the dog profile before adding them

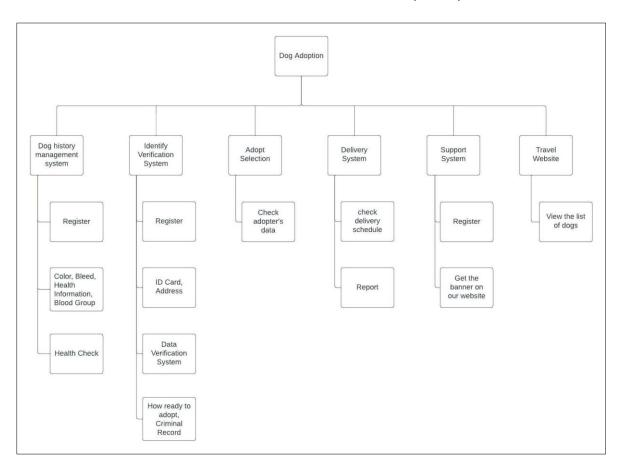
#### **Adoption Process**

- Users must pass the registration process which verifies by the organization to be able to adopt the dog.
- Users need to provide their citizen id, address, and essay of how ready they are then the organization will validate the user profile
- Users send the adoption request for a particular dog to the system
- The request needs to be validated by the staff
- The validation process needs criminal records from the police system and a pet adoption blacklist on the NGO database
- If one dog has many adopters that would like to adopt the organization staff will select the most suitable one
- After adopter got the dog in the first year every month the organization staff have to check the dog condition so the user should do like post the picture

#### Non-functional

- This service run only on website base
- The website must be easy to use for all age groups
- The dog profile on the website must show the picture, name, some special characteristics
- The system must be ensured that there is no more adoption request
- The system must have the function that provide the delivery schedule for the user
- The report that admin can see show the general information of the website such as the number of dog available, list of users, etc.
- The system must show the banner or logo of the sponsors on the website
- The organization provides only one size for the sponsor banner or logo
- During the day the system should be able to handle transactions of around 1000 across the day including viewing the dog as well.
- The system must be prepared for the security aspect
- The website can show the high resolution of the dog picture
- The color theme of the organization is blue and white
- If one dog has many adopters that would like to adopt the organization staff will select the most suitable one

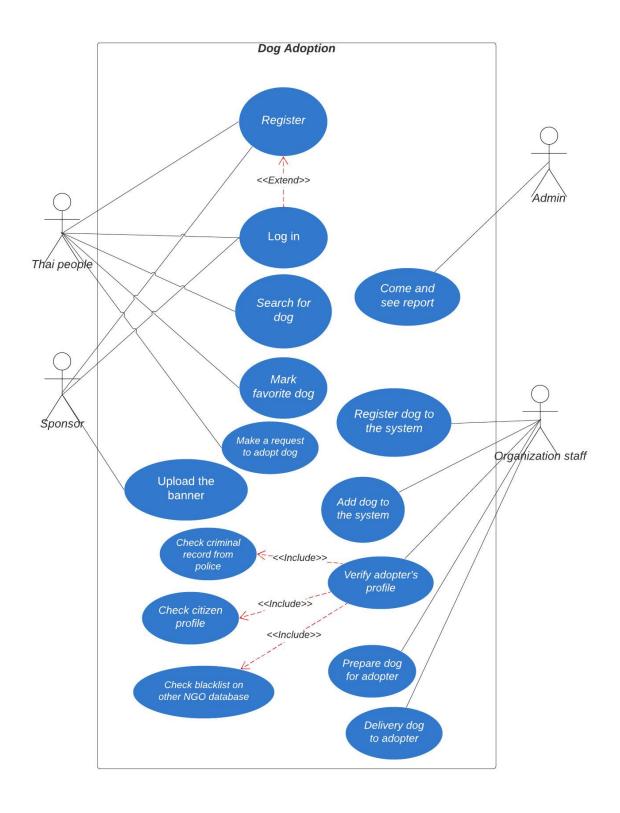
## Work breakdown structure(WBS)



# **Identify Actor**

Actor	Associated Use Case	
Organization Staff	<ul> <li>Add the dog profile to the website</li> <li>Validate the user profile for adoption</li> <li>Validate the sponsor account to let them add their banner</li> <li>View the report of the website</li> </ul>	
Ordinary Person (User)	<ul> <li>Add the favorite dog to a favorite list</li> <li>Send an adoption request for a particular dog</li> </ul>	
System Admin	View the website report	
Sponsor	Adding their own banner to the website	

## Use case diagram



## Use case narrative

Use Case Name	Listing dog process	
Goal in Context	The dog that listing on the website must be ready to adopt.	
Primary Actor	Organization staff	
Secondary Actor	The system that keeps information about dog.	
Precondition	The dog must be nice and safe for people that will adopt them.	
Trigger	When organization staff would like to list the new dog on website.	
Scenario	<ol> <li>Organization staff register the new dog into the system.</li> <li>The system asks for information about dogs (breed, color, gender, medical profile).</li> <li>Dog passes to treatment process.</li> <li>Organization staff record treatment process of dog to be ready for adopt.</li> <li>Organization staff must practice and change the dog to be nice and safe for people.</li> <li>Organization staff approve the dog that ready for adopt.</li> </ol>	
Exception	Exception1: If the dog has the disease, they must pass the treatment process first before listing onto the web site.  Exception2: If the dog has unsafe for people, organization staff must practice and change the dog to be nice and ready for adopt.	
Post-condition	The dog approves to list onto website and ready for adopt.	

Use Case Name	Dog adoption process	
Goal in Context	The organization staff can deliver the dog for Thai people that would	
	like to adopt.	
Primary Actor	Thai people	
Secondary Actor	Organization staff	
Precondition	The people that would like to adopt dog must be Thai citizen.	
Trigger	When people request to adopt the dog	
Scenario	<ol> <li>People register onto the web site.</li> <li>People login onto the web site.</li> <li>People search for the dog that they would like to adopt.</li> <li>People make a request to adopt a dog.</li> <li>Organization staff verify adopter's profile (check criminal record from police, check citizen profile, check blacklist on another NGO database).</li> <li>Organization staff prepare dogs for adopters.</li> <li>Organization staff delivery dog to adopter.</li> </ol>	
Exceptions	Exception1: If people don't have an account yet, they must register first.	

	Exception2: If there are many users that need to adopt the same dog	
	that pass the validation, the organization staff must choose the most	
	suitable one.	
Post-condition	The dog adoption and delivery are successful.	

Use Case Name	User verification for pet adoption	
Goal in Context	To validate user profile for dog adoption process	
Primary Actor	Organization staff	
Secondary Actor	Criminal record from the police system	
	Pet adoption blacklist on NGO database	
Precondition	The criminal record and pet adoption backlist must be available	
Trigger	When the user sends a request for adopting a dog.	
Scenario	<ol> <li>The request comes to the system.</li> <li>Organization staff checks the user information and essays of the ready they are.</li> <li>Organization staff come and see the profile and check the criminal record and pet adoption backlist.</li> <li>If there is no record of this user in both criminal record and pet adoption backlist, the user passes the verification process.</li> </ol>	
Exceptions	Exception1: If the user does not provide the essay, then this request is rejected.  Exception2: If the name of a user appears on the criminal record or pet adoption backlist then this request is rejected.	
Post-condition	The user is valid for the adoption and starts the delivery process.	

## Data flow diagram Level 0

