Pet Sign In Web Application

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# Abstract

Pet Sign In is a web application to sign in pets at a work environment. The idea behind this web application is to do two things:

1. Anyone with a pet will be required to abide to the pet policy.
2. Keep an audit trail on the pets and their owners.

# Introduction

## 2.1 Background

At my old job pet friendly, we were required do the following:

1. Fill in a form about our pets
2. Send the pet documentation to the Human Resource team for approval
3. Once approved, the front desk would require us to fill out a form requiring the following:
   1. Name
   2. Pet’s Name
   3. Shots up to date check
   4. Understanding of the dog policy
   5. Signature

I got tired of doing the same process over and over so I thought of making a web application that requires minimum work from Human Resource, wasted paper and stress free.

## 2.2 Goals and Objectives

This project’s goal is to simplify the process of getting your dog registered and signed in.

* An employee can:
  + Create an account
  + Sign into their account once activated
  + Sign in their pet(s)
  + View their account activities
  + Change their password
  + Reset their password
* An employee administrator can:
  + Manage accounts
    - Enable an account
    - Disable an account
    - Enable a pet
    - Disable a pet
    - Update a pet’s name
    - Update a pet’s breed
    - Update a pet’s gender
  + Manage breeds
    - Update a breed’s name
    - Add a breed
  + View their account activities.
  + Change their password
  + Reset their password
* A server administrator can:
  + View the website’s code errors
  + Add administrator
  + Upload pet policy

The following is a list of opportunities this product will bring to dog friendly places:

* Free to use
* Mobile friendly website
* Strong audit trail
* Fast pet sign in process
* Using latest security to protect data in transit and at rest

## 2.3 Scope

This website is a pet sign in application installed in a pet friendly local environment. It will only be accessible via the company’s intranet and not made available on the internet. The idea is to facilitate the sign in process of bringing in your pet to a pet friendly environment.

## 2.4 Intended Audience

The audience for this document is anyone looking to understand this project and how it is designed.

## 2.5 Computer Application

* Agent Ransack
* Fiddler4
* FileZilla
* Google Chrome
* Internet Explorer 11
* Microsoft Excel, PowerPoint, Visio and Word
* MySQL Workbench
* Notepad ++
* PuTTY
* IntelliJ Idea

## 2.6 Web Application

* CPanel
* Dropbox
* GitHub
* JSFiddle
* Runnables

## 2.7 Languages

* HTML 5
* JavaScript
* PHP
* MySQL

## 2.8 Libraries

* Bootstrap
* jQuery
* Joyride

# 3 Analysis Overview

## 3.1 Assumptions, Dependencies and Constraints

The availability of the website will depend on the service availability of the hosting company.

The confidentiality of the website will depend on how well the intranet infrastructure of the company is.

The integrity of the website will depend on how secure the database and the host sever is as well as the server and database administrators.

The only risk assessment if this application is to be stolen or disappear is as followed:

* Negligible
* Loss of personal information

## 3.3 Development Methods

|  |  |
| --- | --- |
| Machine | |
| OS Name | Microsoft Windows 10 Pro |
| Version | 1511 |
| OS Manufacturer | Microsoft Corporation |
| System Manufacturer | INTEL |
| System Model | DZ68BC |
| System Type | x64-based PC |
| Processor | Intel(R) Core(TM) i7-2600K CPU @ 3.40GHz, 3401 Mhz, 4 Core(s), 8 Logical Processor(s) |
| BIOS Version/Date | Intel Corp. BCZ6810H.86A.0021.2011.0831.1555, 8/31/2011 |
| SMBIOS Version | 2.6 |
| Total Physical Memory | 16.0 GB |
| Total Virtual Memory | 32.0 GB |
| C Drive | 238 GB |

# 4 Requirements

## 4.1 Inputs – Data

|  |  |  |
| --- | --- | --- |
| Visitors | | |
| Email | Extension must match company email address | |
| Password | Password must be between 8 and 15 characters long. | |
|  | Password must be different from your email. | |
|  | Password must contain at least one number (0-9). | |
|  | Password must contain at least one lowercase letter (a-z). | |
|  | Password must contain at least one uppercase letter (A-Z). | |
| Users | | |
| Email | Extension must match company email address | |
| Password | Password must be between 8 and 15 characters long. | |
|  | Password must be different from your email. | |
|  | Password must contain at least one number (0-9). | |
|  | Password must contain at least one lowercase letter (a-z). | |
|  | Password must contain at least one uppercase letter (A-Z). | |
| Pet’s name | Pet name must not already exist. | |
| Pet’s document | Document must not already exist. | |
|  | Document must have .PDF extension. | |
|  | Document must be 500kb or lower. | |
|  | Pet name must exist. | |
|  | Email address must exist. | |
|  | Document must not already exist. | |
| Administrators | | |
| Email | Extension must match company email address | |
| Password | Password must be between 8 and 15 characters long. | |
|  | Password must be different from your email. | |
|  | Password must contain at least one number (0-9). | |
|  | Password must contain at least one lowercase letter (a-z). | |
|  | Password must contain at least one uppercase letter (A-Z). | |
| Pet’s name | Pet name must not already exist. | |
| Breed name | Breed name must not already exist. | |
|  | |
| Server Administrators | | |
| Email |  | |
| Password |  | |

## 4.2 Outputs – Information

### 4.2.1 Error Messages

|  |  |
| --- | --- |
| Error Messages | |
| Error 0 | (PHP errors, varies) |
| Error 1 | Oops, something went wrong. Contact an administrator with this error message. |
| Error 2 | Oops, something went wrong. Contact an administrator with this error message. |
| Error 3 | Oops, something went wrong. Contact an administrator with this error message. |
| Error 10 | Please enter a valid GMAIL e-mail address (your.name@gmail.com). |
| Error 11 | Not a valid e-mail address. |
| Error 15 | Your account is not activate. Wait or contact an Admin. |
| Error 19 | This account doesn't exist. Please click on "Register for a new account". |
| Error 20 | Password must be between 8 and 15 characters long |
| Error 21 | Password must be different from your email. |
| Error 22 | Password must contain at least one number (0-9). |
| Error 23 | Password must contain at least one lowercase letter (a-z). |
| Error 24 | Password must contain at least one uppercase letter (A-Z). |
| Error 25 | Invalid email and/or password. If you forgot your password, reset it. |
| Error 26 | Please fill all of the fields. |
| Error 27 | Your old passwords don't match and/or they match with your new password. |
| Error 28 | Your old passwords don't match and/or they match with your new password. |
| Error 29 | Your old passwords don't match and/or they match with your new password. |
| Error 50 | This breed already exist. |
| Error 51 | You already have a pet name (pet name). Please pick a different name. |
| Error 60 | Sorry, file already exists. Ask an admin to remove it before uploading a new file. |
| Error 61 | Sorry, your file is too large. |
| Error 62 | Sorry, only PDF files are allowed. |
| Error 63 | Sorry, you don't have a pet named (pet name). |
| Error 64 | Sorry, your file was not uploaded. |
| Error 65 | Sorry, there was an error uploading your file. |
| Error 87 | Your account will be locked out soon. |
| Error 89 | This account has been locked. Reset your account or contact the administrator. |
| Error 99 | Your session expired, please sign in again. |

## 4.3 Storage – Database

* All data will be stored in a MySQL Database.

## 4.4 Control – Interfaces

The website will consist of four roles:

* Visitor
* User.
* Administrator.
* Server administrator.

Each will have distinct rights and ability throughout the application.

## 4.5 Timelines and deadlines

|  |  |  |
| --- | --- | --- |
| Phase | Start Date | End Date |
| Iteration 1 | | |
| Phase | Start Date | End Data |
| Inception | 05/17/2015 | 11/03/2015 |
| Iteration 2 | | |
| Elaboration | 11/04/2015 | 11/29/2015 |
| Construction | 11/30/2015 | 12/07/2015 |
| Iteration 3 | | |
| Inception | 12/08/2015 | 12/09/2015 |
| Elaboration | 12/09/2015 | 12/09/2015 |
| Construction | 12/09/2015 | 12/09/2015 |
| Transition |  |  |
| Iteration 4 | | |
| Inception | 12/09/2015 | 12/15/2015 |
| Elaboration | 12/09/2015 | 12/30/2015 |
| Construction | 12/09/2015 | 12/30/2015 |
| Transition | 12/09/2015 | 12/30/2015 |
| Iteration 5 | | |
| Inception | 12/31/2015 | 12/31/2015 |
| Elaboration | 12/31/2015 | 2/25/2015 |
| Construction | 12/31/2015 | 2/25/2015 |
| Transition | 12/31/2015 | 2/25/2015 |
| Iteration 6 | | |
| Construction | 2/25/2015 | 3/11/2015 |
| Transition | 2/25/2015 | 3/11/2015 |

## 4.6 Use Cases

### 4.6.1 Register

|  |  |
| --- | --- |
| Use Case Name | Register 1.0 |
| Description | Create an account. |
| Actors | Visitors. |
| Pre-Conditions | Valid Gmail email account. |
| Basic Flow | 1. Go to the website.  2. Click on the “Register for a new account” link.  3. Enter the email address in the “Email address” field.  4. Enter the password in the “Password” field.  5. Click on “Terms and Conditions” and read it.  6. Click on “I agree” radio button.  7. Click on the “Register” button. |
| Post Conditions | - A successful registration will send an email to the newly registered email, informing them that an admin will need to approve the account first. |
| Alternate Flows | - Clicking on the “I do not agree” radio button will disable the “Register” button.  - Leaving empty text fields will give you Error 26.  - Not using a gmail.com email address will give you Error 10.  - Using an invalid email will give you Error 11.  - Passwords shorter than 6 characters long will give you Error 20.  - Password matching the email address will give you Error 21.  - Password not containing one number (0-9) will give you Error 22.  - Password not containing one lowercase letter (a-z) will give you Error 23.  - Password not containing one uppercase letter (A-Z) will give you Error 24.  - Registering with an already registered account will give you Error 87.  - Registering with an already registered account will give you Error 89.  - Any other problem you experience will give you Error 1 or Error 2. |
| Notes | None. |

### 4.6.2 Sign in pet

|  |  |
| --- | --- |
| Use Case Name | Sign in pet 2.0 |
| Description | Sign in pet. |
| Actors | Users. |
| Pre-Conditions | Enabled account and pet. |
| Basic Flow | 1. Go to the website.  2. Sign in.  3. Click on the pet’s name. |
| Post Conditions | None. |
| Alternate Flows | - An expired session will give you Error 99.  - Any other problem you experience will give you Error 1 or Error 2. |
| Notes | None. |

### 4.6.3 Add pet

|  |  |
| --- | --- |
| Use Case Name | Add Pet 3.0 |
| Description | Add a pet. |
| Actors | Users. |
| Pre-Conditions | Enabled account. |
| Basic Flow | 1. Go to the website.  2. Sign in.  3. Click on the “Add a pet” button.  4. Enter the pet’s name.  5. Select pet’s breed.  6. Select pet’s gender.  7. Click on “I agree” radio button.  8. Click on the “Add Pet” button. |
| Post Conditions | - A successful registration will send an email to the pet’s owner with information on use case name “Upload pet document”. |
| Alternate Flows | - Clicking on the “I do not agree” radio button will disable the “Add Pet” button.  - Leaving empty text fields will give you Error 26.  - An expired session will give you Error 99.  - Any other problem you experience will give you Error 1, Error 2 or Error 3. |
| Notes | None. |

### 4.6.4 Upload pet document

|  |  |
| --- | --- |
| Use Case Name | Upload pet document 4.0 |
| Description | Upload pet vaccination and rabies documentations. |
| Actors | Users. |
| Pre-Conditions | Enabled account. |
| Basic Flow | 1. Go to the upload website.  2. Enter the email address in the “Email address” field.  3. Enter the pet’s name.  4. Click on the “Choose File” button.  5. Select pet’s PDF required document.  6. Click on the “Upload Document” button. |
| Post Conditions | None. |
| Alternate Flows | - Leaving empty text fields will give you Error 26.  - Uploading any file after a successful upload will give you Error 60.  - Uploading a file that is larger than 500kb will give you Error 61.  - Uploading a file that isn’t a PDF will give you Error 62.  - Uploading a file for a non-existent pet name will give you Error 63.  - A failed upload will give you error 64.  - Any other upload problems will give you Error 65.  - Any other problem you experience will give you Error 1 or Error 2. |
| Notes | None. |

### 4.6.5 Reset Password

|  |  |
| --- | --- |
| Use Case Name | Reset password 5.0 |
| Description | Reset password. |
| Actors | Users and administrators. |
| Pre-Conditions | Registered user or administrator email address |
| Basic Flow | 1. Go to the website.  2. Click on the “Can’t access your account?” link.  3. Enter the email address in the “Email address” field.  4. Click on the “Reset” button. |
| Post Conditions | - An email will be sent to the user with the new password. |
| Alternate Flows | - Leaving empty text fields will give you Error 26.  - Entering a non-existent email will give you Error 19.  - Any other upload problems will give you Error 65.  - An expired session will give you Error 99.  - Any other problem you experience will give you Error 1 or Error 2. |
| Notes | None. |

### 4.6.6 Update password

|  |  |
| --- | --- |
| Use Case Name | Update password 6.0 |
| Description | Update your password. |
| Actors | Users and administrators. |
| Pre-Conditions | Enabled account. |
| Basic Flow | 1. Go to the website.  2. Sign in.  3. Click on the “Account” menu.  4. Click on the “Change password” button.  5. Enter your current password in the “Old password” field.  6. Enter your current password in the “Old password again” field.  7. Enter your new password in the “New password” field.  8. Click on the “Change password” button. |
| Post Conditions | None. |
| Alternate Flows | - Leaving empty text fields will give you Error 26.  - The two old passwords not matching will give you Error 27.  - Old passwords not matching with the current password will give you Error 28.  - Old password fields matching new password field will give you Error 27.  - Passwords shorter than 6 characters long will give you Error 20.  - Password matching the email address will give you Error 21.  - Password not containing one number (0-9) will give you Error 22.  - Password not containing one lowercase letter (a-z) will give you Error 23.  - Password not containing one uppercase letter (A-Z) will give you Error 24.  - Registering with an already registered account will give you Error 89.  - Any other upload problems will give you Error 65.  - An expired session will give you Error 99.  - Any other problem you experience will give you Error 1 or Error 2. |
| Notes | None. |

### 4.6.7 Sign in

|  |  |
| --- | --- |
| Use Case Name | Sign In 7.0 |
| Description | Sign into the website. |
| Actors | Users and administrators. |
| Pre-Conditions | Enabled account. |
| Basic Flow | 1. Enter the email address in the “Email address” field.  2. Enter the password in the “Password” field.  3. Click on the “Sign in” button. |
| Post Conditions | None. |
| Alternate Flows | - Leaving empty text fields will give you Error 26.  - Not using a gmail.com email address will give you Error 10.  - Using an invalid email will give you Error 11.  - Passwords shorter than 6 characters long will give you Error 20.  - Password matching the email address will give you Error 21.  - Password not containing one number (0-9) will give you Error 22.  - Password not containing one lowercase letter (a-z) will give you Error 23.  - Password not containing one uppercase letter (A-Z) will give you Error 24.  - Signing in with an incorrect password will give you Error 87.  - Signing in with an incorrect password will give you Error 89.  - Any other upload problems will give you Error 65.  - Any other problem you experience will give you Error 1 or Error 2. |
| Notes | None. |

### 4.6.8 View activities

|  |  |
| --- | --- |
| Use Case Name | View activities 8.0 |
| Description | View account activities |
| Actors | Users and administrators. |
| Pre-Conditions | Enabled account. |
| Basic Flow | 1. Sign into the application.  2. Click on the “Account” menu.  3. Click on the “View activities” button. |
| Post Conditions | None. |
| Alternate Flows | - An expired session will give you Error 99.  - Any other problem you experience will give you Error 1 or Error 2. |
| Notes | None. |

### 4.6.9 Sign out

|  |  |
| --- | --- |
| Use Case Name | Sign out 9.0 |
| Description | Sign out of the application. |
| Actors | Administrators. |
| Pre-Conditions | Already signed in. |
| Basic Flow | 1. Click on the “Sign out” menu. |
| Post Conditions | None. |
| Alternate Flows | - Any other problem you experience will give you Error 1 or Error 2. |
| Notes | None. |

### 4.6.10 Enable account

|  |  |
| --- | --- |
| Use Case Name | Enable account 10.0 |
| Description | Enable an account. |
| Actors | Administrators. |
| Pre-Conditions | Enabled account. |
| Basic Flow | 1. Sign into the application.  2. Click on the “Account” menu.  3. Click on the “View accounts” button.  4. Click on the “Select an account” drop down menu and select an account.  5. Check on the “Disable account” checkbox.  6. Click on the “Update” button. |
| Post Conditions | None. |
| Alternate Flows | - An expired session will give you Error 99.  - Any other problem you experience will give you Error 1 or Error 2. |
| Notes | None. |

### 4.6.11 Disable account

|  |  |
| --- | --- |
| Use Case Name | Disable account 11.0 |
| Description | Disable an account. |
| Actors | Administrators. |
| Pre-Conditions | Enabled account. |
| Basic Flow | 1. Sign into the application.  2. Click on the “Account” menu.  3. Click on the “View accounts” button.  4. Click on the “Select an account” drop down menu and select an account.  5. Un-check on the “Disable account” checkbox.  6. Click on the “Update” button. |
| Post Conditions | None. |
| Alternate Flows | - An expired session will give you Error 99.  - Any other problem you experience will give you Error 1 or Error 2. |
| Notes | None. |

### 4.6.12 Enable pet

|  |  |
| --- | --- |
| Use Case Name | Enable pet 12.0 |
| Description | Enable a pet. |
| Actors | Administrators. |
| Pre-Conditions | Enabled account. |
| Basic Flow | 1. Sign into the application.  2. Click on the “Account” menu.  3. Click on the “View accounts” button.  4. Click on the “Select an account” drop down menu and select an account.  5. Click on the “Select a pet” drop down menu and select a pet.  6. Check on the “Disable pet” checkbox.  7. Click on the “Update” button. |
| Post Conditions | None. |
| Alternate Flows | - An expired session will give you Error 99.  - Any other problem you experience will give you Error 1, Error 2 or Error 3. |
| Notes | None. |

### 4.6.13 Disable pet

|  |  |
| --- | --- |
| Use Case Name | Disable pet 13.0 |
| Description | Disable a pet. |
| Actors | Administrators. |
| Pre-Conditions | Enabled account. |
| Basic Flow | 1. Sign into the application.  2. Click on the “Account” menu.  3. Click on the “View accounts” button.  4. Click on the “Select an account” drop down menu and select an account.  5. Click on the “Select a pet” drop down menu and select a pet.  6. Un-check on the “Disable pet” checkbox.  7. Click on the “Update” button. |
| Post Conditions | None. |
| Alternate Flows | - An expired session will give you Error 99.  - Any other problem you experience will give you Error 1, Error 2 or Error 3. |
| Notes | None. |

### 4.6.14 Update pet’s name

|  |  |
| --- | --- |
| Use Case Name | Update pet’s name 14.0 |
| Description | Update a pet’s name. |
| Actors | Administrators. |
| Pre-Conditions | Enabled account. |
| Basic Flow | 1. Sign into the application.  2. Click on the “Account” menu.  3. Click on the “View accounts” button.  4. Click on the “Select an account” drop down menu and select an account.  5. Click on the “Select a pet” drop down menu and select a pet.  6. Edit the Pet’s name in the “Pet’s name” field.  7. Click on the “Update” button. |
| Post Conditions | None. |
| Alternate Flows | - An expired session will give you Error 99.  - Any other problem you experience will give you Error 1, Error 2 or Error 3. |
| Notes | None. |

### 4.6.15 Update pet’s breed

|  |  |
| --- | --- |
| Use Case Name | Update Pet’s breed 15.0 |
| Description | Update a pet’s breed. |
| Actors | Administrators. |
| Pre-Conditions | Enabled account. |
| Basic Flow | 1. Sign into the application.  2. Click on the “Account” menu.  3. Click on the “View accounts” button.  4. Click on the “Select an account” drop down menu and select an account.  5. Click on the “Select a pet” drop down menu and select a pet.  6. Click on the “Pet’s breed” drop down and select a breed.  7. Click on the “Update” button. |
| Post Conditions | None. |
| Alternate Flows | - An expired session will give you Error 99.  - Any other problem you experience will give you Error 1, Error 2 or Error 3. |
| Notes | None. |

### 4.6.16 Update pet’s gender

|  |  |
| --- | --- |
| Use Case Name | Update Pet’s gender 16.0 |
| Description | Update a pet’s gender. |
| Actors | Administrators. |
| Pre-Conditions | Enabled account. |
| Basic Flow | 1. Sign into the application.  2. Click on the “Account” menu.  3. Click on the “View accounts” button.  4. Click on the “Select an account” drop down menu and select an account.  5. Click on the “Select a pet” drop down menu and select a pet.  6. Click on the “Pet’s gender” drop down menu and select a gender.  7. Click on the “Update” button. |
| Post Conditions | None. |
| Alternate Flows | - An expired session will give you Error 99.  - Any other problem you experience will give you Error 1, Error 2 or Error 3. |
| Notes | None. |

### 4.6.17 Add breed

|  |  |
| --- | --- |
| Use Case Name | Add breed 17.0 |
| Description | Add a breed. |
| Actors | Administrators. |
| Pre-Conditions | Enabled account. |
| Basic Flow | 1. Sign into the application.  2. Click on the “Account” menu.  3. Click on the “View breeds” button.  4. Click on the “Select a breed” drop down menu and select a breed.  5. Edit the breed’s name in the “Breed’s name” field.  6. Click on the “Update” button. |
| Post Conditions | None. |
| Alternate Flows | - Adding a breed that already exists will give you Error 50.  - An expired session will give you Error 99.  - Any other problem you experience will give you Error 1, Error 2 or Error 3. |
| Notes | None. |

### 4.6.18 Update breed

|  |  |
| --- | --- |
| Use Case Name | Update breed 18.0 |
| Description | Update the name of a breed. |
| Actors | Administrators. |
| Pre-Conditions | Enabled account. |
| Basic Flow | 1. Sign into the application.  2. Click on the “Account” menu.  3. Click on the “View breeds” button.  4. Enter a breed name in the “Add a new breed” text field.  5. Click on the “Add” button. |
| Post Conditions | None. |
| Alternate Flows | - An expired session will give you Error 99.  - Any other problem you experience will give you Error 1, Error 2 or Error 3. |
| Notes | None. |

### 4.6.19 View errors

|  |  |
| --- | --- |
| Use Case Name | View errors 19.0 |
| Description | View website errors. |
| Actors | Administrators. |
| Pre-Conditions | Enabled account. |
| Basic Flow | 1. Sign into the application.  2. Click on the “Account” menu.  3. Click on the “View errors” button. |
| Post Conditions | None. |
| Alternate Flows | - An expired session will give you Error 99.  - Any other problem you experience will give you Error 1 or Error 2. |
| Notes | None. |

### 4.6.20 Add administrator

|  |  |
| --- | --- |
| Use Case Name | Add administrator 20.0 |
| Description | Add administrators. |
| Actors | Server Administrators. |
| Pre-Conditions | Server Administrators. |
| Basic Flow | 1. Go to the “..sa/admin.html” page.  2. Enter the user name in the “Email address” field.  3. Enter the password in the “Password” field.  4. Enter the email address in the “Email address” field.  5. Enter the password in the “Password” field. |
| Post Conditions | None. |
| Alternate Flows | None. |
| Notes | None. |

### 4.6.21 Update pet policy

|  |  |
| --- | --- |
| Use Case Name | Update pet policy 21.0 |
| Description | Upload the pet policy to the home directory of the website. The file must be a PDF and must be named “petpolicy.pdf”. |
| Actors | Server Administrators. |
| Pre-Conditions | Server Administrators. |
| Basic Flow | None. |
| Post Conditions | None. |
| Alternate Flows | None. |
| Notes | None. |

## 4.7 Browser Compatibility

|  |  |
| --- | --- |
| Browser | Version |
| Chrome | 49 |
| Firefox | 44 |
| Internet Explorer/Microsoft Edge | 11/25 |
| Opera | 35 |
| Safari | 9 |

## 4.8 Security

### 4.8.1 Overview

The soul of the website resides on the integrity of the audit trail. Audit logs combined with strong authentication and authorization practices provide an important security element, nonrepudiation.

A variety of Open Web Application Security Project’s (OWASP) suggestions will be applied.

<https://www.owasp.org/index.php/Session_Management_Cheat_Sheet>

This website is placed inside an intranet environment and is only going to accept company extension. For this project, that extension is a Gmail account. All traffic are forced into a HTTPS/SSL connection.

Once you are logged into the website, every action initiated with the database will validate the user session. The user session consist their IP, Browser and Platform plus PHP’s session ID.

All data sent to the database are sanitized (stripped of slashes) and values are placed in stored procedures.

All actions updates are recorded in the involved user and/or admin. E.g. If an admin makes a change for a user, the user and admin will have their distinct audit. The User will not able to tell which admin made the change but the admin’s audit will have the user’s information.

### 4.8.2 PHP Code Injections Preventions

In Code Injection testing, a tester submits input that is processed by the web server as dynamic code or as an included file. These tests can target various server-side scripting engines, e.g.., ASP or PHP. Proper input validation and secure coding practices need to be employed to protect against these attacks. (Testing for Code Injection (OTG-INPVAL-012), n.d.)

Measures taken to prevent PHP code injection:

* POST HTTP request method
  + Never cache
  + Doesn’t remain in the browser history or display data in the URL
  + Parameters are not saved in browser history or web server logs
  + Cannot be bookmarked

### 4.8.2 SQL Injection Preventions

An SQL injection attack consists of insertion or "injection" of either a partial or complete SQL query via the data input or transmitted from the client (browser) to the web application. A successful SQL injection attack can read sensitive data from the database, modify database data (insert/update/delete), execute administration operations on the database (such as shutdown the DBMS), recover the content of a given file existing on the DBMS file system or write files into the file system, and, in some cases, issue commands to the operating system. SQL injection attacks are a type of injection attack, in which SQL commands are injected into data-plane input in order to affect the execution of predefined SQL commands. (Testing for SQL Injection (OTG-INPVAL-005), n.d.)

Measures taken to prevent SQL Injection:

* Prepared statements with parameterized queries
* Stored procedures
* Sanitized the user supplied input using PHP’s stripslashes to un-quote a quoted string

### 4.8.3 AJAX Preventions

Asynchronous Javascript and XML (AJAX) is one of the latest techniques used by web application developers to provide a user experience similar to that of a traditional (i.e., "pre-web") application. Since AJAX is still a new technology, there are many security issues that have not yet been fully researched. Some of the security issues in AJAX include: (Testing for AJAX Vulnerabilities (OWASP-AJ-001), n.d.)

* Increased attack surface with many more inputs to secure
* Exposed internal functions of the application
* Client access to third-party resources with no built-in security and encoding mechanisms
* Failure to protect authentication information and sessions
* Blurred line between client-side and server-side code, possibly resulting in security mistakes

Client side security preventions:

* The important business and security logic of the application is in the PHP code
* All-important data manipulation resides in the PHP side
* No encryption is done on client side

Server side security preventions:

* Non-exploitable JSON strings by having the outside primitive be an object

### 4.8.4 Cross-Site Request Forgery (CSRF) Preventions

Cross-Site Request Forgery (CSRF) is an attack that forces an end user to execute unwanted actions on a web application in which he/she is currently authenticated. (Testing for CSRF (OTG-SESS-005), n.d.)

Measures taken to prevent CSRF:

* Only accept POST requests
* Disabling autocomplete
* Session expirations3

4.8.5 Cryptographic Storage

### 4.x.x Future Security Enhancements

* Registration
  + reCAPTCHA
* Password reset
  + Security questions

# 5 Design

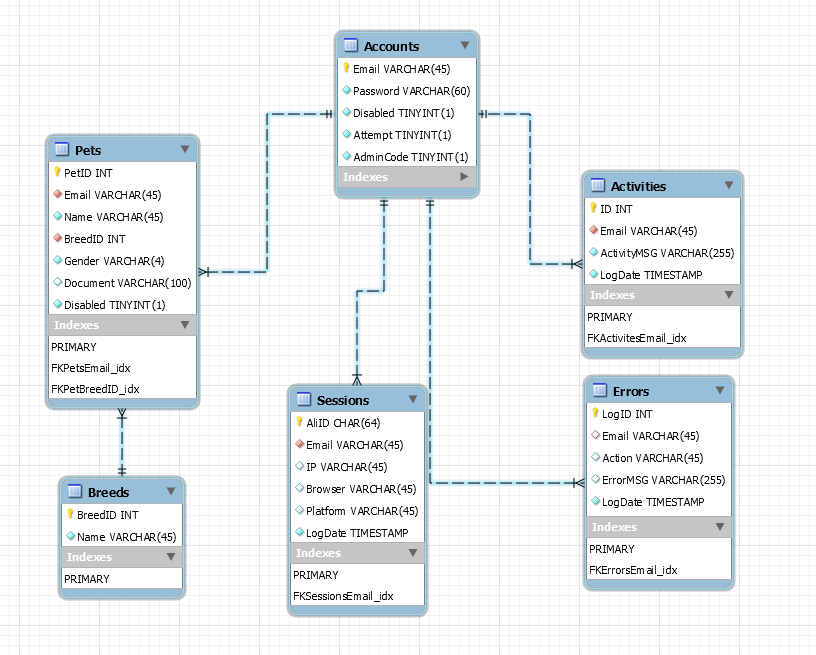
## 5.1 Context Dataflow Diagram



## 5.2 Use Case Diagram



## 5.3 Entity Relationship Diagram



## 5.5 Dataflow Diagram











































## 5.6 Activity Diagram





## 5.7 Conceptual Website Diagram



## 5.8 Database Script

-- MySQL Workbench Forward Engineering

SET @OLD\_UNIQUE\_CHECKS=@@UNIQUE\_CHECKS, UNIQUE\_CHECKS=0;

SET @OLD\_FOREIGN\_KEY\_CHECKS=@@FOREIGN\_KEY\_CHECKS, FOREIGN\_KEY\_CHECKS=0;

SET @OLD\_SQL\_MODE=@@SQL\_MODE, SQL\_MODE='TRADITIONAL,ALLOW\_INVALID\_DATES';

-- -----------------------------------------------------

-- Schema djkabau1\_petsignin

-- -----------------------------------------------------

DROP SCHEMA IF EXISTS `djkabau1\_petsignin` ;

-- -----------------------------------------------------

-- Schema djkabau1\_petsignin

-- -----------------------------------------------------

CREATE SCHEMA IF NOT EXISTS `djkabau1\_petsignin` DEFAULT CHARACTER SET utf8 COLLATE utf8\_general\_ci ;

USE `djkabau1\_petsignin` ;

-- -----------------------------------------------------

-- Table `djkabau1\_petsignin`.`Accounts`

-- -----------------------------------------------------

DROP TABLE IF EXISTS `djkabau1\_petsignin`.`Accounts` ;

CREATE TABLE IF NOT EXISTS `djkabau1\_petsignin`.`Accounts` (

`Email` VARCHAR(45) NOT NULL COMMENT '',

`Password` VARCHAR(60) NOT NULL COMMENT '',

`Disabled` TINYINT(1) NOT NULL COMMENT '',

`Attempt` TINYINT(1) NOT NULL COMMENT '',

`AdminCode` TINYINT(1) NOT NULL COMMENT '',

PRIMARY KEY (`Email`) COMMENT '')

ENGINE = InnoDB;

-- -----------------------------------------------------

-- Table `djkabau1\_petsignin`.`Breeds`

-- -----------------------------------------------------

DROP TABLE IF EXISTS `djkabau1\_petsignin`.`Breeds` ;

CREATE TABLE IF NOT EXISTS `djkabau1\_petsignin`.`Breeds` (

`BreedID` INT NOT NULL AUTO\_INCREMENT COMMENT '',

`Name` VARCHAR(45) NOT NULL COMMENT '',

PRIMARY KEY (`BreedID`) COMMENT '')

ENGINE = InnoDB;

-- -----------------------------------------------------

-- Table `djkabau1\_petsignin`.`Pets`

-- -----------------------------------------------------

DROP TABLE IF EXISTS `djkabau1\_petsignin`.`Pets` ;

CREATE TABLE IF NOT EXISTS `djkabau1\_petsignin`.`Pets` (

`PetID` INT NOT NULL AUTO\_INCREMENT COMMENT '',

`Email` VARCHAR(45) NOT NULL COMMENT '',

`Name` VARCHAR(45) NOT NULL COMMENT '',

`BreedID` INT NOT NULL COMMENT '',

`Gender` VARCHAR(4) NOT NULL COMMENT '',

`Document` VARCHAR(100) NULL COMMENT '',

`Disabled` TINYINT(1) NOT NULL COMMENT '',

PRIMARY KEY (`PetID`) COMMENT '',

INDEX `FKPetsEmail\_idx` (`Email` ASC) COMMENT '',

INDEX `FKPetBreedID\_idx` (`BreedID` ASC) COMMENT '',

CONSTRAINT `FKPetsEmail`

FOREIGN KEY (`Email`)

REFERENCES `djkabau1\_petsignin`.`Accounts` (`Email`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `FKPetBreedID`

FOREIGN KEY (`BreedID`)

REFERENCES `djkabau1\_petsignin`.`Breeds` (`BreedID`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB;

-- -----------------------------------------------------

-- Table `djkabau1\_petsignin`.`Activities`

-- -----------------------------------------------------

DROP TABLE IF EXISTS `djkabau1\_petsignin`.`Activities` ;

CREATE TABLE IF NOT EXISTS `djkabau1\_petsignin`.`Activities` (

`ID` INT NOT NULL AUTO\_INCREMENT COMMENT '',

`Email` VARCHAR(45) NOT NULL COMMENT '',

`ActivityMSG` VARCHAR(255) NOT NULL COMMENT '',

`LogDate` TIMESTAMP NOT NULL DEFAULT NOW() COMMENT '',

PRIMARY KEY (`ID`) COMMENT '',

INDEX `FKActivitesEmail\_idx` (`Email` ASC) COMMENT '',

CONSTRAINT `FKActivitesEmail`

FOREIGN KEY (`Email`)

REFERENCES `djkabau1\_petsignin`.`Accounts` (`Email`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB;

-- -----------------------------------------------------

-- Table `djkabau1\_petsignin`.`Errors`

-- -----------------------------------------------------

DROP TABLE IF EXISTS `djkabau1\_petsignin`.`Errors` ;

CREATE TABLE IF NOT EXISTS `djkabau1\_petsignin`.`Errors` (

`LogID` INT NOT NULL AUTO\_INCREMENT COMMENT '',

`Email` VARCHAR(45) NULL COMMENT '',

`Action` VARCHAR(45) NULL COMMENT '',

`ErrorMSG` VARCHAR(255) NULL COMMENT '',

`LogDate` TIMESTAMP NOT NULL DEFAULT NOW() COMMENT '',

PRIMARY KEY (`LogID`) COMMENT '',

INDEX `FKErrorsEmail\_idx` (`Email` ASC) COMMENT '',

CONSTRAINT `FKErrorsEmail`

FOREIGN KEY (`Email`)

REFERENCES `djkabau1\_petsignin`.`Accounts` (`Email`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB;

-- -----------------------------------------------------

-- Table `djkabau1\_petsignin`.`Sessions`

-- -----------------------------------------------------

DROP TABLE IF EXISTS `djkabau1\_petsignin`.`Sessions` ;

CREATE TABLE IF NOT EXISTS `djkabau1\_petsignin`.`Sessions` (

`AliID` CHAR(64) NOT NULL COMMENT '',

`Email` VARCHAR(45) NOT NULL COMMENT '',

`IP` VARCHAR(45) NULL COMMENT '',

`Browser` VARCHAR(45) NULL COMMENT '',

`Platform` VARCHAR(45) NULL COMMENT '',

`LogDate` TIMESTAMP NOT NULL DEFAULT NOW() COMMENT '',

PRIMARY KEY (`AliID`) COMMENT '',

INDEX `FKSessionsEmail\_idx` (`Email` ASC) COMMENT '',

CONSTRAINT `FKSessionsEmail`

FOREIGN KEY (`Email`)

REFERENCES `djkabau1\_petsignin`.`Accounts` (`Email`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB;

USE `djkabau1\_petsignin` ;

-- -----------------------------------------------------

-- procedure UTCreate

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`UTCreate`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `UTCreate` ()

BEGIN

DROP TABLE IF EXISTS djkabau1\_petsignin.UnitTest ;

CREATE TABLE IF NOT EXISTS djkabau1\_petsignin.UnitTest (

TestColumn INT NOT NULL,

PRIMARY KEY (TestColumn))

ENGINE = InnoDB;

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure UTInsert

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`UTInsert`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `UTInsert` (IN UTValue INT)

BEGIN

INSERT INTO djkabau1\_petsignin.UnitTest (TestColumn) VALUES (UTValue);

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure UTUpdate

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`UTUpdate`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `UTUpdate` (IN UpdatedUTValue INT, IN UTValue INT)

BEGIN

UPDATE djkabau1\_petsignin.UnitTest SET TestColumn = (UpdatedUTValue) WHERE TestColumn = (UTValue);

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure UTDelete

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`UTDelete`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `UTDelete` (IN UpdatedUTValue INT)

BEGIN

DELETE FROM djkabau1\_petsignin.UnitTest WHERE TestColumn = (UpdatedUTValue);

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure UTDrop

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`UTDrop`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `UTDrop` ()

BEGIN

DROP TABLE IF EXISTS djkabau1\_petsignin.UnitTest;

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure AddAttempt

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`AddAttempt`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `AddAttempt` (IN NewAttempt INT, IN Email VARCHAR(45))

BEGIN

UPDATE djkabau1\_petsignin.Accounts SET Attempt = (NewAttempt) WHERE Email = (Email);

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure ResetAttempt

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`ResetAttempt`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `ResetAttempt` (IN Email VARCHAR(45))

BEGIN

UPDATE djkabau1\_petsignin.Accounts SET Attempt = ("0") WHERE Email = (Email);

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure AddSession

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`AddSession`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `AddSession` (IN xAliID VARCHAR(64), IN xEmail VARCHAR(45), IN xSessionIP VARCHAR(45), IN xSessionBrowser VARCHAR(45), IN xSessionPlatform VARCHAR(45))

BEGIN

INSERT INTO djkabau1\_petsignin.Sessions (AliID, Email, IP, Browser, Platform) VALUES (xAliID, xEmail, xSessionIP, xSessionBrowser, xSessionPlatform);

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure FetchSession

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`FetchSession`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `FetchSession` (IN xAliID VARCHAR(64))

BEGIN

SELECT \* FROM djkabau1\_petsignin.Sessions WHERE AliID = (xAliID);

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure FetchAccountRole

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`FetchAccountRole`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `FetchAccountRole` (IN xEmail VARCHAR(45))

BEGIN

SELECT Disabled, Attempt, AdminCode FROM djkabau1\_petsignin.Accounts WHERE Email = (xEmail);

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure DeleteSession

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`DeleteSession`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `DeleteSession` (IN xEmail VARCHAR(45))

BEGIN

DELETE FROM djkabau1\_petsignin.Sessions WHERE Email = (xEmail);

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure AddAccount

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`AddAccount`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `AddAccount` (IN xEmail VARCHAR(45), IN xPassword VARCHAR(60), IN xDisabled INT, IN xAttempt INT, IN xAdminCode INT)

BEGIN

INSERT INTO djkabau1\_petsignin.Accounts (Email, Password, Disabled, Attempt, AdminCode) VALUES (xEmail, xPassword, xDisabled, xAttempt, xAdminCode);

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure FetchUser

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`FetchUser`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `FetchUser` (IN xEmail VARCHAR(45))

BEGIN

SELECT \* FROM djkabau1\_petsignin.Accounts WHERE Email = (xEmail);

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure FetchBreeds

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`FetchBreeds`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `FetchBreeds` ()

BEGIN

SELECT \* FROM djkabau1\_petsignin.Breeds ORDER BY Name ASC;

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure FetchActivities

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`FetchActivities`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `FetchActivities` (IN xEmail VARCHAR(45))

BEGIN

SELECT ActivityMSG, LogDate FROM djkabau1\_petsignin.Activities WHERE Email = (xEmail) ORDER BY LogDate DESC;

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure AddActivity

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`AddActivity`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `AddActivity` (IN xEmail VARCHAR(45), IN xActivityMSG VARCHAR(255))

BEGIN

INSERT INTO djkabau1\_petsignin.Activities (Email, ActivityMSG) VALUES (xEmail, xActivityMSG);

END

$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure AddError

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`AddError`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `AddError` (IN xEmail VARCHAR(45), IN xAction VARCHAR(45), IN xErrorMSG VARCHAR(255))

BEGIN

INSERT INTO djkabau1\_petsignin.Errors (Email, Action, ErrorMSG) VALUES (xEmail, xAction, xErrorMSG);

END

$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure AddPet

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`AddPet`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `AddPet` (IN xEmail VARCHAR(45), IN xName VARCHAR(45), IN xBreedID INT, IN xGender VARCHAR(4), IN xDisabled INT)

BEGIN

INSERT INTO djkabau1\_petsignin.Pets (Email, Name, BreedID, Gender, Disabled) VALUES (xEmail, xName, xBreedID, xGender, xDisabled);

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure AddBreed

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`AddBreed`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `AddBreed` (IN xName VARCHAR(45))

BEGIN

INSERT INTO djkabau1\_petsignin.Breeds (Name) VALUES (xName);

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure FetchBreedNameCount

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`FetchBreedNameCount`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `FetchBreedNameCount` (IN xName VARCHAR(45))

BEGIN

SELECT count(\*) as Count FROM djkabau1\_petsignin.Breeds WHERE Name = (xName);

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure FetchSignInPet

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`FetchSignInPet`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `FetchSignInPet` (IN xEmail VARCHAR(45))

BEGIN

SELECT PetID, Name, Disabled, (SELECT DATEDIFF(now(), (SELECT LogDate FROM djkabau1\_petsignin.Activities WHERE Email = (xEmail) AND ActivityMSG = CONCAT("Your pet ", Pets.Name, " has been signed in.") ORDER BY LogDate DESC LIMIT 1))) AS DiffDate FROM djkabau1\_petsignin.Pets WHERE Email = (xEmail) ORDER BY Name ASC;

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure AddAdminAccount

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`AddAdminAccount`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `AddAdminAccount` (IN xEmail VARCHAR(45), IN xPassword VARCHAR(60), IN xDisabled INT, IN xAttempt INT, IN xAdminCode INT)

BEGIN

INSERT INTO djkabau1\_petsignin.Accounts (Email, Password, Disabled, Attempt, AdminCode) VALUES (xEmail, xPassword, xDisabled, xAttempt, xAdminCode);

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure UpdateAccountStatus

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`UpdateAccountStatus`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `UpdateAccountStatus` (IN xDisabled INT, IN xEmail VARCHAR(45))

BEGIN

UPDATE djkabau1\_petsignin.Accounts SET Disabled = (xDisabled) WHERE Email = (xEmail);

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure FetchErrors

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`FetchErrors`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `FetchErrors` ()

BEGIN

SELECT Email, Action, ErrorMSG, LogDate FROM djkabau1\_petsignin.Errors;

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure FetchAdmins

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`FetchAdmins`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `FetchAdmins` ()

BEGIN

SELECT \* FROM djkabau1\_petsignin.Accounts WHERE AdminCode = 2;

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure FetchUsers

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`FetchUsers`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `FetchUsers` ()

BEGIN

SELECT Email FROM djkabau1\_petsignin.Accounts WHERE AdminCode = 1;

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure FetchPet

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`FetchPet`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `FetchPet` (IN xPetID INT)

BEGIN

SELECT Name, BreedID, Gender, Document FROM djkabau1\_petsignin.Pets WHERE PetID = (xPetID);

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure FetchUserPets

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`FetchUserPets`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `FetchUserPets` (IN xEmail VARCHAR(45))

BEGIN

SELECT PetID, Name FROM djkabau1\_petsignin.Pets WHERE Email = (xEmail) ORDER BY Name;

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure FetchUserStatus

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`FetchUserStatus`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `FetchUserStatus` (IN xEmail VARCHAR(45))

BEGIN

SELECT Disabled FROM djkabau1\_petsignin.Accounts WHERE Email = (xEmail);

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure FetchPetStatus

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`FetchPetStatus`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `FetchPetStatus` (IN xPetID INT)

BEGIN

SELECT Disabled FROM djkabau1\_petsignin.Pets WHERE PetID = (xPetID);

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure UpdatePetStatus

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`UpdatePetStatus`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `UpdatePetStatus` (IN xDisabled INT, IN xPetID INT)

BEGIN

UPDATE djkabau1\_petsignin.Pets SET Disabled = (xDisabled) WHERE PetID = (xPetID);

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure UpdatePetName

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`UpdatePetName`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `UpdatePetName` (IN xName VARCHAR(45), IN xEmail VARCHAR(45))

BEGIN

UPDATE djkabau1\_petsignin.Pets SET Name = (xName) WHERE Email = (xEmail);

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure UpdatePetBreed

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`UpdatePetBreed`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `UpdatePetBreed` (IN xBreedID INT, IN xName VARCHAR(45), IN xEmail VARCHAR(45))

BEGIN

UPDATE djkabau1\_petsignin.Pets SET BreedID = (xBreedID) WHERE Name = (xName) AND Email = (xEmail);

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure UpdatePetGender

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`UpdatePetGender`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `UpdatePetGender` (IN xGender VARCHAR(4), IN xEmail VARCHAR(45))

BEGIN

UPDATE djkabau1\_petsignin.Pets SET Gender = (xGender) WHERE Email = (xEmail);

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure UpdateBreed

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`UpdateBreed`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `UpdateBreed` (IN xName VARCHAR(45), IN xBreedID INT)

BEGIN

UPDATE djkabau1\_petsignin.Breeds SET Name = (xName) WHERE BreedID = (xBreedID);

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure FetchPetNameCount

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`FetchPetNameCount`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `FetchPetNameCount` (IN xEmail VARCHAR(45), IN xName VARCHAR(45))

BEGIN

SELECT count(\*) as Count FROM djkabau1\_petsignin.Pets, djkabau1\_petsignin.Accounts WHERE Accounts.Email = Pets.Email and Pets.Email = (xEmail) AND Name = (xName);

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure UpdateDocument

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`UpdateDocument`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `UpdateDocument` (IN xDocument VARCHAR(255), IN xEmail VARCHAR(45), IN xName VARCHAR(45))

BEGIN

UPDATE djkabau1\_petsignin.Pets SET Document = (xDocument) WHERE Email = (xEmail) AND Name = (xName);

END$$

DELIMITER ;

-- -----------------------------------------------------

-- procedure UpdatePassword

-- -----------------------------------------------------

USE `djkabau1\_petsignin`;

DROP procedure IF EXISTS `djkabau1\_petsignin`.`UpdatePassword`;

DELIMITER $$

USE `djkabau1\_petsignin`$$

CREATE PROCEDURE `UpdatePassword` (IN xPassword VARCHAR(64), IN xEmail VARCHAR(45))

BEGIN

UPDATE djkabau1\_petsignin.Accounts set Password = (xPassword) where Email = (xEmail);

END$$

DELIMITER ;

SET SQL\_MODE=@OLD\_SQL\_MODE;

SET FOREIGN\_KEY\_CHECKS=@OLD\_FOREIGN\_KEY\_CHECKS;

SET UNIQUE\_CHECKS=@OLD\_UNIQUE\_CHECKS;

# 6 Web Pages Code

## 6.1 index.html

## 6.2 upload.html

## 6.3 main.css

## 6.4 main.js

## 6.5 operation.php

## 6.6 upload.php

## 6.7. db.php

## 6.8 admin.php

# 7 Screenshots

