A Functional Specification Document

TalaPuSo: PUP Campus Animal Incident Reporting Management System

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I. Introduction

A. Overview of the Application

In the Polytechnic University of the Philippines (PUP) community, students and faculty often encounter challenges related to campus animals, such as being scratched by a cat or bitten by a dog. Despite the presence of organizations like PUP Sintang Pusa and Youth for Animal - PUP, reporting such incidents is inefficient. The current reliance on social media platforms like Facebook makes it difficult to prioritize and address campus animal concerns promptly, as these platforms are inundated with a variety of unrelated messages. This lack of a streamlined reporting process hinders the timely resolution of animal-related issues, leaving both the campus community and the animals underserved.

To address this pressing need, we developed TalaPuSo, a web application designed to simplify and centralize reporting of campus animal incidents. The name "TalaPuSo" merges the essence of recording ("Tala" from the Tagalog word "itala"), school spirit ("Sinta" from "Sintang Paaralan"), and care for animals ("PuSo", combining "pusa" and "aso").

TalaPuSo empowers students, faculty, and staff to report sightings or incidents involving campus animals easily and access reliable information about animal care. It offers innovative and practical features designed to improve animal welfare management within the campus. The **Gamification with a Points System** encourages users to actively participate in reporting by earning points for each submission, which can be exchanged for benefits such as veterinary services, food, or other resources supporting animal welfare. **Real-Time Notifications** ensure that admins promptly receive alerts whenever incidents are reported, enabling swift responses and effective resolutions. Additionally, **Educational Content** provides users with curated articles and resources that promote responsible animal care and advocate for humane treatment. The application also includes **Comprehensive Animal Management** tools, enabling admins to maintain a detailed database of campus animals, monitor health records, and systematically oversee reported incidents.

By addressing current challenges and promoting a culture of responsibility and compassion, TalaPuSo transforms the way the PUP community cares for and manages campus animals. **"Itala nang may Puso para kina Pusa at Aso!"**

B. Objectives

Main Objective

To develop the TalaPuSo web application as an efficient and centralized reporting system for incidents and welfare of campus animals at the Polytechnic University of the Philippines (PUP), facilitating timely communication and effective management of animal-related concerns.

Specific Objectives:

1. **Centralize Reporting**: Establish a user-friendly platform where students, faculty, and staff can easily report sightings and incidents concerning campus cats and dogs.

2. **Streamline Reporting:** Establish a user-friendly platform for students, faculty, and staff to easily report campus animal incidents.

3. **Enhance Incident Resolution:** Enable prompt action on reported cases by ensuring a streamlined communication process between reporters and admins.

4. **Promote Animal Welfare Awareness:** Provide accessible educational resources on responsible animal care and humane treatment.

5. **Support Admin Management:** Equip PUP Sintang Pusa admins with tools to maintain a detailed database of campus animals and monitor incident reports effectively.

6. **Foster Community Engagement:** Encourage active participation through initiatives like a points-based rewards system to motivate users.

7. **Ensure System Reliability and Longevity:** Create a robust and maintainable system to support long-term animal welfare efforts on campus.

C. Scope and Limitations

Scope

➢ The application will be utilized exclusively within the PUP campus, focusing on the welfare of campus animals, particularly cats and dogs.

➢ Types of reports will include animal scratches, bites, incidents of cruelty or abuse, and health concerns related to campus animals.

➢ Admin users will have access to a comprehensive dashboard for verifying reports, publishing recent incidents, updating report statuses, sending real-time notifications, and managing the overall database.

➢ Users will be able to track the history of their reports, view the resolution status of incidents, and access educational articles on responsible animal care.

➢ The app will feature an in-app messaging system for users to communicate directly with administrators for additional support.

➢ Information regarding external animal welfare services will be included for urgent incidents requiring immediate assistance.

Limitations

➢ The scope of reporting and management is limited to the PUP campus; off-campus cat activities and rescues are not covered.

➢ The app mainly focuses on tracking animal health and reporting incidents and does not include more detailed aspects of care, such as studying the long-term behavior of the animal.

➢ Users can report sightings and incidents involving campus cats and dogs but can only access profiles of known animals.

➢ The earned points cannot be converted into cash; instead, they encourage the PUP community to actively engage in reporting incidents.

➢ The scalability of the system may be limited by available resources, including funding, technical support, and the capacity of volunteer organizations.

➢ The application will require internet access to function, making it inaccessible during outages or in areas with poor connectivity.

II.   Related Works

Crime Reporting App: SpotCrime

SpotCrime is a widely utilized crime mapping and reporting application that enables users to submit and view crime-related incidents in their local area. The platform aggregates data from law enforcement agencies, news reports, and user submissions, presenting incidents such as thefts, assaults, and vandalism on an interactive map. SpotCrime's approach of collecting and sharing real-time data aids

communities in staying informed and proactive about safety issues. Users can report incidents directly through the app, which are then saved to a database and shared with the appropriate authorities for expedited action.

Drawing from SpotCrime's emphasis on real-time reporting, TalaPuSo will implement a real-time notification system to ensure that administrators are promptly alerted to reported incidents. This will allow for swift responses and improve the efficiency of addressing campus animal-related concerns. The inclusion of an interactive map within the TalaPuSo platform will enable users to track reported incidents and pinpoint areas where attention is required, fostering a proactive approach to animal welfare management.

Web Application: FixMyStreet

FixMyStreet is a map-based platform developed by mySociety in the United Kingdom that allows citizens to notify local authorities about issues such as potholes or broken streetlights. The platform provides a simple interface for users to submit problems, and the reports are then directed to the appropriate local authorities. FixMyStreet also uses MapIt software to match users' postcodes with the relevant local authority, making it easier for users to identify the right department for their report.

TalaPuSo will leverage a similar map-based interface, allowing users to visually report incidents involving campus animals. By incorporating geospatial features, TalaPuSo can create a centralized platform where the campus community can easily submit and track animal-related issues. This will provide a clear visual representation of reported incidents and their statuses, aiding administrators in prioritizing issues based on frequency and location. In addition, TalaPuSo will ensure that users have access to relevant animal welfare authorities, streamlining the reporting process.

Both SpotCrime and FixMyStreet emphasize the importance of community-driven reporting. SpotCrime encourages users to submit crime-related incidents, which are then added to a publicly accessible map, promoting transparency. Similarly,

FixMyStreet fosters community engagement by allowing users to submit public issues, which are then visible to others, contributing to a sense of accountability.

TalaPuSo will adopt a similar approach by encouraging active community participation in reporting incidents involving campus animals. Users will not only report sightings or incidents but will also be able to track the progress of their submissions. Moreover, TalaPuSo's platform will allow users to comment on and discuss reported incidents, fostering a sense of collective responsibility and transparency within the PUP community. This engagement will be further enhanced by TalaPuSo's gamification system, where users earn points for reporting incidents, encouraging continued participation.

III. Functionality - Web Application
A. Core Features and Functionality

Welcome Page / Home

The welcome page gives users an overview of the application's purpose. It allows easy navigation to the login or sign-up pages, with a brief introduction of the application.

Log In / Sign Up

Users and admins can access their respective dashboards by entering their credentials. Alternatively, users can create a new account by providing details such as name, email, and role (User or Admin).

Notifications

Notifications will play a critical role in keeping both users and admins informed. For users, notifications will be sent to their devices whenever a report status changes (e.g., from "pending" to "resolved"), when new reports are published, or when they earn points. For admins, notifications will alert them to new reports that require their attention or updates to existing reports.

Points System Integration

      The points system rewards users for reporting incidents, with points assigned based on the severity of the issue (e.g., 5 points for injured animals, 10 points for resolving recurring problems). Points accumulate over time and can be viewed on the user dashboard. Funded by the donation drives conducted by the admins (e.g. PUP Sintang Pusa), users can exchange points for rewards like veterinary discounts or animal food. This incentivizes engagement and supports campus animal welfare.

Admin's Dashboard

The following are the list of features in Admin's Dashboard:

1. **Database of Cats and Dogs (CRUD)**

   Admins can create, read, update, and delete (CRUD) records of campus animals. Each animal's record includes details such as name, breed, photo, special notes (e.g., health conditions), and last known location. The database is designed for quick access, ensuring that information about animals is easily updated or added.

2. **Database of Reported Incidents (CRUD)**

   Admins can manage all reported incidents involving campus animals. They can review and update the status of reports (e.g., "in progress," "resolved," "pending"), add comments to provide updates, and delete duplicate or irrelevant reports. Each report will also include an indicator of its urgency or severity, helping admins prioritize the most critical incidents. This feature enables admins to assess the situation at a glance, ensuring that more urgent or severe incidents (e.g., injured animals or animal cruelty) receive prompt attention. This functionality enhances efficient tracking, prioritization, and timely resolution of incidents.

3. **Settings**

   Admins can update their profile, adjust app preferences, and manage access to certain features. This section ensures that the app remains customizable to different administrative needs.

4. **Log Out**

   Admins can securely log out from their session to protect data integrity and ensure privacy.

User's Dashboard

The following are the list of features in User's Dashboard:

1. **Report Animal Incidents**

   Users can report incidents involving campus animals (e.g., injured animals, lost animals) through a simple form. The form collects information such as location, incident type, and details. Here, they will also select the type of report (e.g., animal cruelty, animal scratched them, injured animal) to ensure the right action is taken.

2. **Animal Gallery**

   Users can browse the campus animals, view photos, and read descriptions. This section encourages awareness and fosters a connection between users and the animals.

3. **History of Reports with Status**

   Users can view a history of all incidents they have reported, with a clear display of the current status of each report (e.g., pending, in progress, resolved). This allows users to stay informed about the actions taken on their submissions and encourages further engagement.

4. **Animal Care Articles**

   Users can access articles and resources about caring for the campus animals. This section may include warnings and guidelines specific to the community.

5. **Points   System**

   The points system rewards users for actively reporting animal-related incidents or engaging in specific actions within the platform. Points are awarded based on the nature and urgency of the reported incidents. Users can accumulate points through continuous engagement and convert them into rewards, such as veterinary services or animal care supplies. The integration of this system motivates users to contribute consistently and responsibly.

6. **Messaging/Inbox**

   Users can contact admins, animal organizations, or any agency handling animal concerns within our application. This feature ensures smooth communication between users and the management teams.

7. **Settings**

   Users can update their profiles and adjust their preferences. These options allow for a customized user experience.

8. **Log Out**

   Users can log out of the system to securely end their session and protect their personal data.

B. Attributes

1. **Reliability**

   TalaPuSo should ensure reliable functionality, handling multiple reports and users simultaneously without system crashes. All submitted data, including cat reports and care articles, must be stored securely with regular backups.

2. **Availability**

   TalaPuSo will be available 24/7, allowing users and admins to access the platform anytime. The system will be hosted on a reliable server with backup features to ensure it stays online without interruptions.

3. **Maintainability**

   TalaPuSo will be built using modular components, enabling easy updates and bug fixes. Regular software updates will improve security, performance, and features without disrupting the user experience.

4. **Usability**

   TalaPuSo will feature an intuitive, user-friendly interface with clear navigation and easy-to-follow forms. User feedback will be used to continuously improve the platform's usability in future updates.

IV. Mock Up Design

Log In

username

password

login

Sign Up

username

name

password
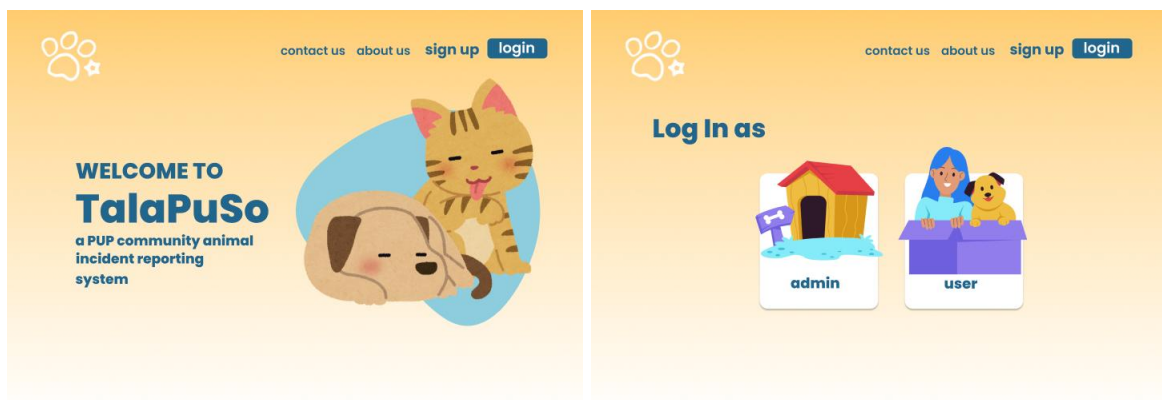
sign up

0.00 pts

🔄 convert

What's Latest

Chaewon Belmonte
Bacon is Injured

Haerin Magbagnua
Pogi is Missing!

Gallery

cats

dogs

Articles

Welcome,
Haerin

⌂ Home
Gallery
History
Inbox

Profile

save changes

Haerin Magbanua

username
userhaerin123

password
12345678

email
haerinbmagbanua@iskolarngbayan@pup.edu.ph

gender
Female

log out

Welcome,
Haerin

Home
Gallery
History
Inbox

Convert Points
Convert to donate your points to our sintang furfriends

vet & med fees

pet foods

pet supplies

or

Select your lucky furfriend

Welcome,
Haerin

Home
Gallery
History
Inbox

Convert Points
Convert to donate your points to our sintang furfriends

cats ✕

Select your lucky friend

Select Cat's Name ▾

OK

Convert Points
Convert to donate your points to our sintang furfriends

dogs ✕

Select your lucky friend

Select Dog's Name ▾

OK

Gallery

cats
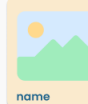
dogs

name

name

name

name

name

name

Welcome,
Haerin

Home
Gallery
History
Inbox

Report History

cat *injury*	pending
dog *lost*	pending
dog *bite*	resolved

[+]

Inbox

Admin Reynalyn

Admin Marian

Admin Jane
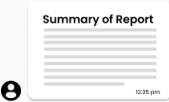
Welcome, Haerin
- Home
- Gallery
- History
- Inbox

< 👤 **Admin Reynalyn**

Summary of Report
12:35 pm

12:35 pm

12:36 pm

Form

Type of Animal ▼	How Bad is the Accident? ▼

Name

Student ID Number

Age	Status ▼

Date & Time of Incident

Name of Animal [View Gallery]

Specific Description of Animal

Type of Incident

Proof of Incident [upload]

[submit]

Welcome, Admin Hanni
- Home
- Database
- Notifications
- Reports
- Inbox

Reports 3

Chaewon Belmonte
Bacon is Injured
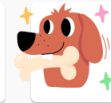
Haerin Magbagnua
Pogi is Missing!

Database

30 cats

40 dogs

Notifications 4

Chaewon Belmonte reported a **Severe Dog Injury**
10 mins

Profile [save changes]

name
Hanni Cruz

username
adminhanni123

password
12345678

email
hannicruz@iskolarngbayan@pup.edu.ph

gender
Female ▼

[log out]

Database

Meet the **Community Cats**

Meet the **Community Dogs**

Cat Database

🐱 **Pogi**

🐱 **Buchog**

[+]

Screen 1

Dog Database

Bacon

Shadow

[+]

Screen 2

edit delete

name
Pogi

Basic Information

Medical History

Screen 3

save delete

name
Pogi

edit

Basic Information ✎

Medical History ✎

Screen 4

edit delete

name
Bacon

Basic Information

Medical History

Screen 5

save delete

name
Bacon

edit

Basic Information ✎

Medical History ✎

Screen 6

save delete

name
Name

edit

Basic Information ✎

Medical History ✎

Screen 7

Notifications

New Unread

Chaewon Belmonte reported a **Severe Dog Injury**
10 mins

Screen 8

Reports
10 reports as of 10-10-2024

Chaewon Belmonte 10 mins
dog injury
pending
severe

status ⌄

Chaewon Belmonte
October 7, 2024 11:59 AM

Student/Faculty ID Number   2022-00000-MN-0
Age   21 years old
Status   Student

Type of Animal   dog
Alleged Name of Animal   Bacon
Specific Description of Animal   Brown Fur

Severity of the Incident   severe
Type of Incident   injury
Date and Time of Incident   10/07/2024 11:30 AM
Proof of Incident   view photo

connect

Welcome,
Admin
Hanni

- Home
- Database
- Notifications
- Reports
- Inbox

Inbox

Chaewon Belmonte

Welcome,
Admin
Hanni

- Home
- Database
- Notifications
- Reports
- Inbox

‹ **Chaewon Belmonte**

October 7

Summary of Report

12:35 pm

12:36 pm

Send Message

Welcome,
Admin
Hanni

- Home
- Database
- Notifications
- Reports
- Inbox

V.   References

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