BACHELOR OF SCIENCE WITH HONOURS IN COMPUTING SCIENCE

Final Year Project Report

Shelter Me – Mobile App, Website & Web App for tracking pets

Report by

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[24/06/2023]

DECLARATION STATEMENT

I certify that the work submitted is my own and that any material derived or quoted from the published or unpublished work of other persons has been duly acknowledged.

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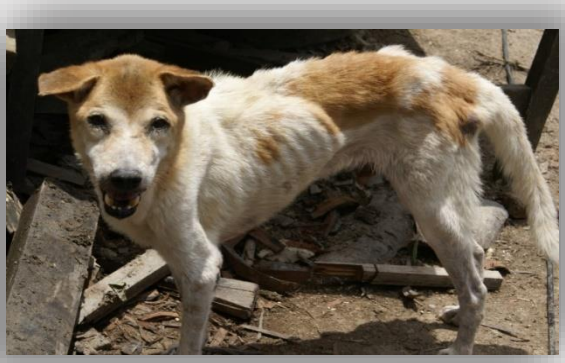

Shelter Me – Mobile App, Website & Web App for tracking Pets

Student Name: Nambukara Gamage Lahiru Sandaruwan

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Project Report

ABSTRACT

This project aims to create a comprehensive tracking system for Animals and animals around the world.

The system comprises a mobile application for the front end and a web application for the back end. The proposed system will utilize GPS technology to track the location of animals and store the data in a central database. The mobile application will enable pet owners to monitor their pets' location in real-time, set virtual fences, and receive alerts when their pets wander out of a designated area. The web application will provide administrators with access to the data collected, enabling them to analyze and interpret the information to make informed decisions regarding animal behavior and population dynamics. The proposed system will improve the accuracy and efficiency of animal tracking and provide a valuable tool for animal welfare organizations and researchers.

ACKNOWLEDGEMENT

I would like to express my deep appreciation to Coventry University and Mr. Saifullah Razali Md for their unwavering support and guidance throughout my final year project. Mr. Saifullah Razali Md served as my project supervisor, and I am truly grateful for his assistance in making my project unique and relevant both academically and professionally.

The focus of my project was the development of an animal tracking system, and I am particularly thankful to my supervisor for providing valuable guidelines that significantly improved the functionality of the system. This enhancement enabled me to offer a better service specifically tailored to street animals in need. I chose this topic due to the prevalent issue of stray animals lacking proper nourishment and care.

Animal tracking has been instrumental in transforming the lives of street animals and the communities they inhabit since 2011. The high number of special needs animals is primarily attributed to vehicle accidents, neglect, and cruelty. However, with adequate treatment and care, many of these animals can recover and lead happy lives. Mr. Saifullah Razali Md recognized the importance of addressing these key objectives and functionalities and helped me formulate a more effective project title.

Thanks to the knowledge I acquired from him, I was able to successfully manage and complete the project within the designated timeframe. Furthermore, he provided invaluable assistance in refining my dissertation and ensuring its alignment with the standards set by CU (Coventry University). I extend my heartfelt gratitude to him for his continuous support and guidance throughout this endeavour.

I would also like to express my utmost gratitude to Mr. Saifullah Razali Md, Mr. Adaikkalavan Adaikkalavan, the entire PSB academic council, and the Coventry University council for their invaluable support in broadening my knowledge in various aspects of computer science and project management. Their contributions have been indispensable to my growth and success in this field.

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1. Chapter 1: Introduction

1.1 Project Introduction

There is a significant population of homeless street animals living on the streets, and unfortunately, their well-being is often neglected, leading to various health issues.

The aim of this project is to assist and provide aid to these street animals in need, with the goal of finding them loving homes. By working collaboratively, we can encourage individuals to contribute towards helping these animals and make a positive impact. In Sri Lanka, it is not uncommon to come across an animal peacefully sleeping on a street corner, but most of these street animals suffer from health problems due to the lack of attention given to their well-being. Conditions such as cancer, skin rashes, and rabies are frequently diagnosed among them. Consequently, there have been instances where people have been bitten by street animals, and although rare, there have been unfortunate cases resulting in fatalities.

The animal tracking system implemented in this project plays a vital role in supporting street animals in Sri Lanka. It comprises a mobile app designed for the community and a personalized mobile app for storing details, generating reports, and analyzing data. The community app offers various features, including the ability to request a rescue, become a foster caregiver for a street animal, make donations, and sponsor a street animal. When making a rescue request, the informant is required to capture a photo of the animal in need and send it through the app, which will then pinpoint the animal's live location. If the location is incorrect, the informant can choose the accurate location from the provided map. Additionally, the informant must provide a brief description of the current situation of the street animal, mentioning any accidents or relevant circumstances. For those who sponsor an animal, they can track the progress of the sponsored animal through the app. Furthermore, the app facilitates donations to the organization, thereby supporting their efforts in helping street animals. The adoption process for an animal can also be initiated through the app, and once adopted, notifications regarding the animal's treatment and medication schedule will be provided.

1.2 Project Background, Aims and objectives.

1.2.1 Project Background

The aim of this initiative is to assist stray Animals in Sri Lanka by partnering with the **ShelterMe** organization to facilitate their rescue and subsequent adoption by loving families. Many of the stray Animals in Sri Lanka are unhealthy, with conditions such as cancer, skin rashes, and rabies being common. Although rabies is not frequently fatal, there are some instances where individuals have died because of being bitten by street Animals.

The **ShelterMe** organization conducts rescue and treatment programs for these Animals, collaborating with animal healthcare hospitals to provide medical care. Once the Animals have been treated, they are placed with families who are willing to adopt them. To simplify the process of reporting a stray Animal in need, a mobile app has been developed for both the public and **ShelterMe** personnel. The app allows users to request rescues, donate to the organization, sponsor a Animal, and become a foster care provider. Users are required to submit a picture of the Animal in need along with a brief description of its condition and location, which is then relayed to a support team who will dispatch to the location to help. Once an Animal has been adopted, the app will provide regular updates on its progress, including days of treatment and medication injections. In addition to the mobile app, a web portal has been created specifically for the use of the **ShelterMe** organization. This portal stores all relevant data related to rescues, hospitalizations, and a reporting a stray Animal in need, a mobile app has been developed for alyzing this data, the web portal is also able to make predictions regarding the future health of the Animals.

1.2.2 Aim

The aim is to make a positive impact on the lives of street animals in need by collaborating with the Homeless animal organization to provide them with the care and attention they deserve. By harnessing the power of technology, I aim to create a user-friendly and accessible home-less animal system that will enable people to easily contribute towards this cause.

1.2.3 Objectives

- Include researching the system requirements and relevant support documentation, analysing and producing a functional specification document.
- designing and constructing a user interface using web technologies. o implementing and evaluating the system requirements and main functionalities.
- The functional specification document will outline the detailed technical specifications and requirements for the development of the mobile and web applications, including the database schema, user interface design, system architecture, and software development methodologies.

1.3 Problem Statements

As an animal lover, Animals hold a special place in my heart. Their inability to communicate verbally means that we must be extra attentive to their needs and well-being. When I take a Animal and Cat for a walk, I always make sure to bring water and take shady paths to prevent heat stroke. With a simple app that utilizes chip technology to recognize and track animals in real-time, we can bring attention to their needs and coordinate efforts to provide them with the care and attention they deserve. By coming together and leveraging technology for good, we can make a difference in the lives of these beloved creatures.

1.3.1 Problems

1) Don't have proper android mobile application for the current location of the animal.

The lack of a proper android mobile application to track and report the current location of animals is a major concern. Therefore, there is a pressing need to develop a proper android mobile application that allows for the easy and efficient tracking of animal locations in realtime, to ensure that they are quickly located and provided with the necessary care and attention they need. The development of such an application will not only facilitate the rescue of animals in distress but also promote their safety and overall well-being.

2) don't have any availability for the animals training canters.

The lack of availability of animal training centers is a significant issue that affects the wellbeing and safety of animals. Additionally, the lack of animal training centers can make it challenging for animal owners to find the resources and support they need to care for their pets properly. This will not only promote the well-being of animals but also support animal owners in providing the necessary care for their pets.

3) There is no organization on the android application platform for company to save money by making any donation through the money when animals get cancer or disease in an emergency.

The lack of an organization on the Android application platform that enables companies to easily make donations to help animals in emergencies, such as those suffering from cancer or other diseases, is a significant problem. This results in a lack of funding for animal care and treatment, and a potential increase in suffering and mortality rates for sick and injured animals.

4) Homeless animal doesn't have any owner. No, other application or nano chip for the animal to find who are the owner of that animal.

The lack of a reliable system to identify the owners of homeless animals is a significant problem. Without an owner, these animals are left vulnerable and often struggle to find adequate care and support. The development of a more effective identification system would not only benefit the animals themselves, but also aid in the enforcement of animal welfare laws and the prevention of animal cruelty.

1.3.2 Market Research

The findings presented in Table 1 provide a comprehensive comparison of all the available systems. Five applications were assessed to determine the issues with the current system, which were discussed in chapter 1.

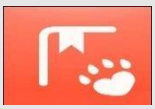
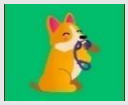
No table of figures entries found.	Clio: Animal Cat Pet Care Tracker 	AnimalLog – Track your Pet's Life 	Pet Care Tracker- PetNote 	AnimaloPuppy and Animal Training 	**11**pets: Pet **care** 
Capture the current location of the animal.	✗	✗	✗	✗	✗
Available training centre for the animal	✗	✗	✗	✗	✗
Grooming of the animals	✗	✓	✗	✗	✗
Vaccine	✓	✗	✓	✗	✓
Weight	✓	✗	✓	✗	✗
Food & water	✓	✓	✓	✓	✗
Medicine	✗	✗	✗	✓	✓
Create a donations cart for the homeless animal.	✗	✗	✗	✗	✗
Create a nano chip for the animal who are their owner.	✗	✗	✗	✗	✗

Table 1: table of market research

1.3.3 Suggestion Solutions

1) Develop an android app or those that are afflicted with an illness.

Developing an android application those that are afflicted with an illness could involve creating a platform that caters to the specific needs of these animals. For animals used as a mode of transportation, the app could be designed to monitor their health, keep track of their workload, and ensure they are receiving proper care.

On the other hand, for animals suffering from illnesses, the app could provide a range of services, such as tracking their medication schedules, connecting them with veterinarians, and offering tips for their owners on how to best care for them. The application could also allow users to report cases of animal cruelty or neglect, which could be directed to appropriate authorities for further action.

In addition, the app could include features such as an interactive map displaying local veterinary clinics, a forum for animal owners to share information and advice, and educational resources on animal health and welfare. Overall, developing an android application for animals would be a valuable contribution to the welfare and care of animals, while also serving as a helpful tool for their owners.

2) Develop a website and web application those that are afflicted with an illness.

Developing an android app for animals that serve as a means of transportation or those that are afflicted with an illness involves creating a mobile application that is specifically designed to cater to the needs of these animals. The app may have different features depending on the intended purpose, but it should be user-friendly and easy to navigate for both the animal and its owner.

The app may include features that help owners schedule rides, track the animal's location, monitor its health, and provide emergency assistance if needed. On the other hand, for animals that are afflicted with an illness, the app may include features that help owners monitor the animal's health, track medication schedules, receive alerts for appointments with veterinarians, and access helpful resources for managing the animal's condition.

In both cases, the app should prioritize the welfare and safety of the animal, as well as make the process of caring for it more convenient for its owner. The app may also include features such as social networking or a community forum to connect owners with other animal lovers who are dealing with similar situations.

3) Implement image recognition technology to identify and match lost animals with their owners. This technology can recognize unique features of animals such as fur patterns, eye colours, or other identifiable characteristics.

1.4 Project Deliverables

Title	Description
Software	Shelter Me is an online platform designed to support street Animals in need. This social network enables users to share information, photos, and details about nearby hospitals and doctors, as well as communicate through various channels. The platform aims to address the problem of homeless street Animals, which are often in poor health due to neglect. To report a Animal in need, the user can take a picture of the animal and submit it through the app, which will then identify the location of the Animal in real-time.
Software type	Mobile application, web application & web site.
Programming Language	Java Script, HTML, CSS, Tailwind CSS.
IDE	Visual Studio Code, Mongo DB Atlas, Node Run Time.
Platform	Android Studio, HTML, CSS, Tailwind CSS.
Additional Technology	Google API, GitHub, Google Schooler, Tutorial Point.
Report (Project Report)	The Following Chapters are covered in my Project report. • Abstract • Acknowledgement • Project Proposal • Suggestion Solutions • Problem Statement • Market Research • Aim • Objective • Suggestion Solution • Scope Exclusions • Use case Diagram. • Hardware and Software • Project Plane • Literature Review • Technical Literature review • Available technology • Project Methodology • Conclusion

Report (Final Report)	The final project report is a critical document that provides a comprehensive overview of the project and its outcomes. The requirement gathering section will capture the project's objectives and outline any constraints or challenges that may arise during the design and implementation phases. The design section will showcase how the project was conceptualized and structured, while the implementation section will detail the steps taken to build the project. The testing section will demonstrate how the project was validated and verified, while the conclusion section will summarize the project's overall success and any lessons learned. By compiling all this information into a single document, the project report serves as a valuable resource for stakeholders to understand the project's objectives, methodology, and results.

Table 2: Deliverables of the project

1.5 Scope Exclusions

- Developing a mobile application that allows users to submit information about Animals.
- Providing the ability for mobile app users to request Animals for adoption and track the status of their adopted Animals.
- Allowing users to report information about street Animals through the app.
- Generating statistical reports based on the collected data for the previous month.

1.6 Hardware and Software requirements

Shelter Me System:

- The “Shelter Me” System is a proposed Animal care solution that integrates hardware and software technologies to monitor and improve Animals' health.

The system includes a wearable collar, known as the “Shelter Me” device, which monitors vital signs and detects abnormalities in Animals' behaviour.

- The data collected by the “Shelter Me” device is transmitted in real-time to the “Shelter Me”app, which is available on both mobile and web platforms.
- The “Shelter Me”app provides alerts and notifications to pet owners if their Animals are in distress and allows them to monitor their pets' health trends over time.
- The “Shelter Me” system utilizes machine learning algorithms to provide personalized recommendations for diet, exercise, and other aspects of pet care based on each individual Animal's health data.
- The “Shelter Me” hardware interfaces include smartphones, laptops, and a cloud-based server, while the software interfaces include various operating systems such as Android, Windows, and Linux, as well as tools like Visual Studio Code, MongoDB Atlas, Node Runtime, and JavaScript.

To develop the application, I mainly used PC and both Android and IOS devices.

needed to test the prototype.

Hardware

- PC (RAM 16GB, i5 CPU)
- Android smartphone (Samsung Galaxy 10)

Software

- Windows 11
- Visual studio code
- npm
- Node.js
- Android studio
- MongoDB
- Flask

1.7 Project plan

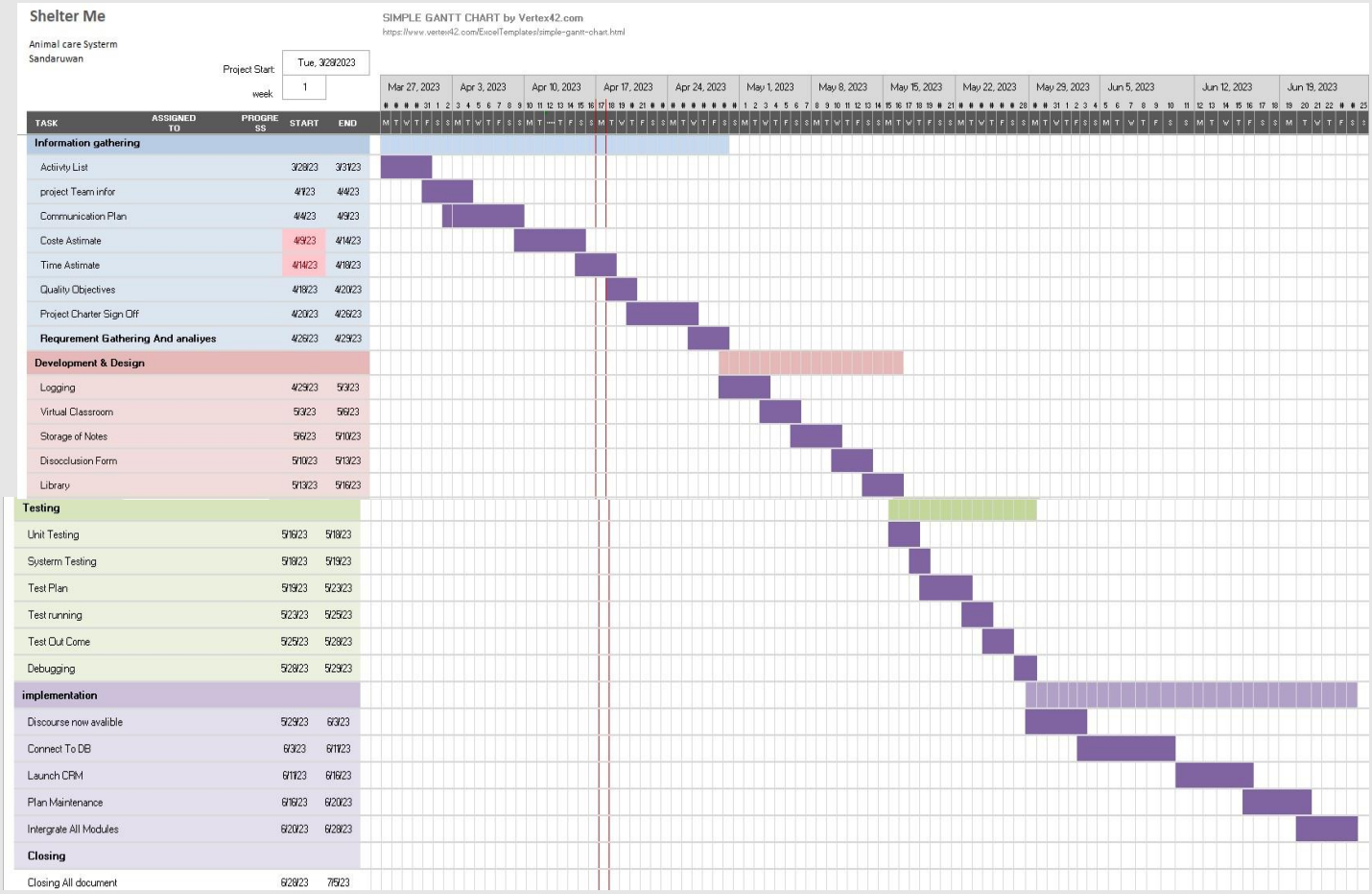


Figure 1: Gantt Chart.

2. Chapter 2: Literature Review

2.1 What are the factors contributing to the rise in stray Animal population?

Stray Animals are a growing problem worldwide, with a multitude of causes contributing to their increasing numbers. The primary factors contributing to the increase in stray Animals include overpopulation, urbanization, lack of government intervention, and economic factors. Irresponsible pet ownership and a lack of education and resources for responsible pet ownership contribute to overpopulation. Urbanization provides a more abundant food source for strays in the form of garbage and other waste. A lack of government intervention in the form of animal control services, enforcement of animal welfare laws, and funding for spaying and neutering programs exacerbates the problem (Bowman 2022). Economic factors, such as poverty and cultural practices like Animal meat consumption, also contribute to the problem.

2.1.1 Common Problems Caused by Stray Animals

Stray Animals can cause a variety of problems for humans and other animals. They can transmit diseases such as rabies, which can be fatal if left untreated. Strays can also attack humans, particularly children and the elderly, causing physical injuries and psychological trauma. Stray Animals can also attack livestock and wildlife, leading to economic losses for farmers and environmental degradation. Additionally, the presence of stray Animals can lead to a decline in tourism and the quality of life in affected areas.

By reviewing previous studies related to animal care systems, the literature review helps to identify the unique features and functionalities of the developed system that differentiate it from existing systems. This establishes the novelty of the developed system and helps to position it within the field.

The literature review provides context for the design choices and implementation decisions made during the development of the system. By discussing previous systems and their strengths and weaknesses, the literature review helps to justify why certain components and functionalities were included in the developed system.

2.2 Existing Application

2.2.1 Clio: Animal Cat Pet Care Tracker

One existing application for Clio: Animal Cat Pet Care Tracker is the "MyPet Reminders" app, available on both iOS and Android. This app allows pet owners to track their pet's medical history, including vaccination schedules, medication reminders, and appointments with their veterinarian (The 2021).

Figure 2: Clio Animal Pet care Track Main Page.

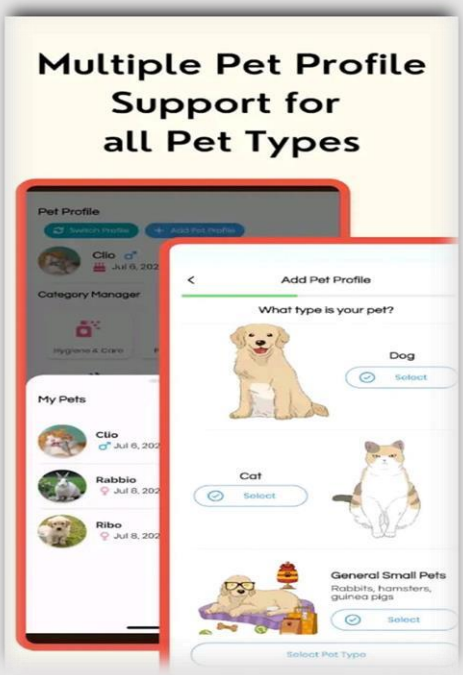


Figure 3: Clio Animal Pet care Track 1st Page.

Users can set reminders for upcoming appointments or medications and receive notifications when it's time to act. The app also includes a feature to record and track their pet's weight, which can help to identify any potential health issues.

Additionally, the app includes a pet profile section where users can store important information about their pet, such as their age, breed, and microchip information.

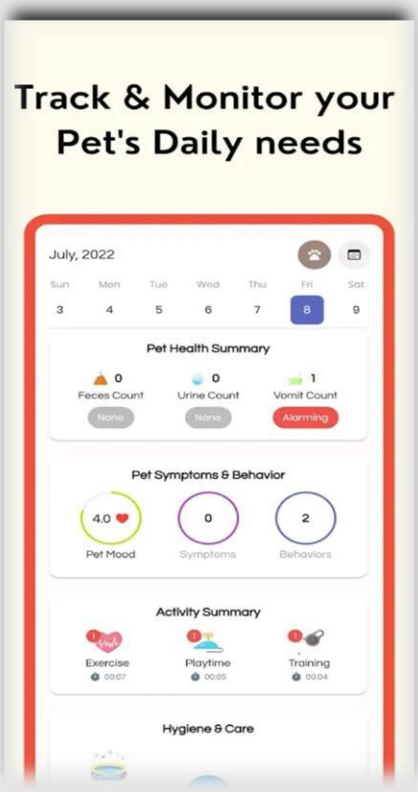


Figure 4: Clio Animal Pet care Track 2nd Page.

"MyPet Reminders" provides a convenient and user-friendly way for pet owners to stay on top of their pet's healthcare needs, making it an excellent application for Clio: Animal Cat Pet Care Tracker.

2.2.2 AnimalLog – Track your Pet's Life

AnimalLog is a pet tracking application available on both iOS and Android. The app allows pet owners to keep track of their Animal's daily activities, including walks, meals, medications, and vet visits. The app also includes a journal feature where users can record their Animal's mood, behavior, and any notable events. This can be useful for tracking changes in their Animal's health or behavior over time (AnimalLog: Track and Coordinate Your Pet's Activities and Health 2021).

Figure 5: AnimalLog – Track your Pet's Life main Page.

One of the app's strengths is its user-friendly interface, which makes it easy for pet owners to log their Animal's activities quickly. The app includes customizable icons for common activities, such as walks or meals, and users can also add their own custom icons. This allows pet owners to personalize the app to their Animal's specific needs and preferences.

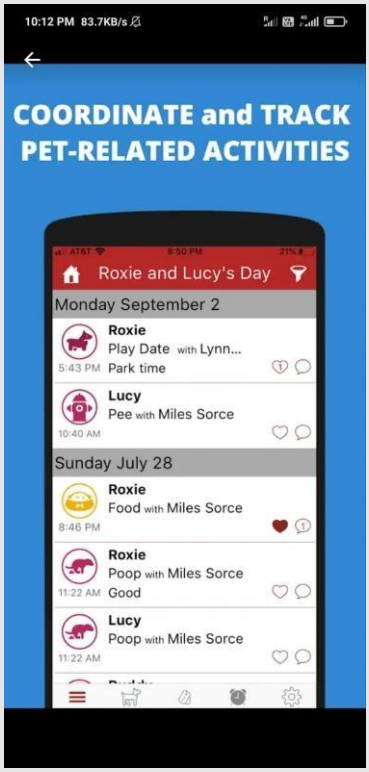


Figure 6: AnimalLog – Track your Pet's Life 1st page.

Another useful feature of the app is the ability to set reminders for upcoming activities or events. For example, users can set reminders for when their Animal is due for their next walk or when it's time for their next medication.

However, one potential downside of the app is that it requires manual input from the user. While this is necessary for accurately tracking a Animal's daily activities, it can be time-consuming and may be challenging for some users to maintain consistently over time.

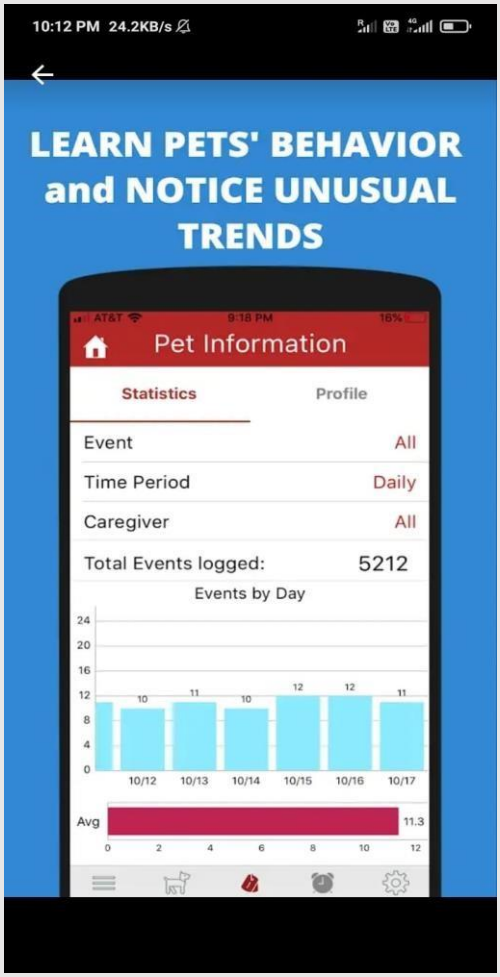


Figure 7: AnimalLog – Track your Pet's Life 2nd page.

AnimalLog is a useful application for pet owners who want to keep track of their Animal's daily activities and monitor changes in their behavior or health. The app's user-friendly interface and customizable features make it a great option for pet owners who want to personalize their pet tracking experience.

2.2.3 Pet Care Tracker- PetNote

PetNote is a pet tracking application available on both iOS and Android. The app allows pet owners to keep track of their pet's daily activities, including walks, meals, medications, and vet visits. The app also includes a feature to record and track their pet's weight, which can help to identify any potential health issues. Additionally, users can store important information about their pet, such as their age, breed, and microchip information, in the app's pet profile section (Saso 2021).

Figure 8: Pet Care Tracker- PetNote main page.

One of the strengths of PetNote is its user-friendly interface, which makes it easy for pet owners to log their pet's activities quickly. The app includes customizable icons for common activities, such as walks or meals, and users can also add their own custom icons. This allows pet owners to personalize the app to their pet's specific needs and preferences.

Figure 9: Pet Care Tracker- PetNote 1st page

PetNote is a useful application for pet owners who want to keep track of their pet's daily activities and monitor changes in their behavior or health. The app's user-friendly interface and customizable features make it a great option for pet owners who want to personalize their pet tracking experience.

2.3 Technical Literature Review

2.3.1 Project Tool

2.3.1.1 Visual Studio Code

Figure 10: Visual Studio Image.

Visual Studio Code is a free and open-source code editor developed by Microsoft. It is available for Windows, macOS, and Linux operating systems and provides a modern and lightweight development environment with advanced features and extensions for various programming languages and frameworks. Key features of VS Code include an intuitive user interface, code editing tools, debugging tools, a vast library of extensions, and built-in Git integration.

2.3.1.2 Mongo DB Atlas

Figure 11: mongo DB Atlas Image.

MongoDB Atlas is a cloud-based fully managed database service provided by MongoDB Inc. that allows users to deploy, manage, and scale MongoDB databases with ease. It is a multi-cloud, multiregional Adatabase service that provides built-in automation and management tools.

Additionally, MongoDB Atlas provides a variety of integrations and tools to simplify application development and deployment, including MongoDB Compass for easy database management, MongoDB Stitch for serverless functions and event triggers, and MongoDB Charts for data visualization and exploration.

Overall, MongoDB Atlas is an excellent choice for building mobile applications that require a highly scalable and secure database backend, as it provides a flexible and reliable solution for managing your data in the cloud.

2.3.1.3 Node.js:

Figure 12: node JS Image.

Node.js is a popular back-end technology that uses JavaScript, the same language used for front-end web development. It is known for its fast performance and ability to handle many concurrent connections.

2.3.1.4 HTML

Figure 13: HTML Image.

A website is typically created using a markup language like HTML or XML, which allows for the content to be structured and presented. CSS, along with HTML and JavaScript, is one of the key technologies that make up the World Wide Web. An HTML and CSS website is essential for a number of reasons. It allows for greater control over the design and layout of a website, making it more visually appealing and user-friendly. In addition, it can help to improve the website's accessibility and search engine optimization, which can ultimately lead to increased traffic and engagement.

Overall, a Technical Literature Review for a developed animal care system for a website in HTML and CSS is important for establishing the novelty and significance of the system, providing context for the design and implementation decisions, evaluating its performance, guiding future research, and addressing any unique challenges associated with developing for this platform.

2.3 Available Technology.

2.3.1 Android Studio

Figure 14: Android studio Image.

Android Studio is a software program that facilitates the development of applications for the Android operating system created by Google. JetBrains' IntelliJ IDEA software served as the foundation for its creation. It was created with the intention of catering specifically to the needs of Android developers. It is compatible with Windows, macOS and Linux based operating systems and can be downloaded at no cost (Download Android Studio & App Tools - Android Developers 2022).

Overall, a Technical Literature Review for a developed animal care system for Android Studio is important for establishing the novelty and significance of the system, providing context for the design and implementation decisions, evaluating its performance, and guiding future research.

2.3.2 Visual Studio

Figure 15: Visual studio Image

Visual Studio is a powerful and popular Integrated Development Environment (IDE) that is used to develop applications for Windows, Android, iOS, and web-based platforms. It is developed by Microsoft and is widely used by developers worldwide.

Visual Studio provides a comprehensive set of tools, including editors, debuggers, compilers, and code analyzers, to help developers write, test, and debug code efficiently. It supports multiple programming languages, including C++, C#, F#, Visual Basic .NET, and JavaScript, among others.

Overall, Visual Studio is a versatile and powerful IDE that helps developers create high-quality applications with ease. It is an essential tool for any software developer working on Microsoft technologies.

2.3.3 WordPress

Figure 16: WordPress Image

WordPress is a popular content management system (CMS) that allows users to create and manage websites. It is open-source software, which means that anyone can use, modify, and distribute it for free. WordPress offers various tools, features, and plugins to help users customize their websites according to their needs and preferences (WordPress.com: Build a Site, Sell Your Stuff, Start a Blog & More 2019).

WordPress is a powerful and flexible CMS that offers a wide range of tools and features to help users create and manage their websites.

2.3.4 PHP Storm

Figure 17: Php Storm Image.

PhpStorm is a widely used integrated development environment (IDE) that is especially suited to work with various popular frameworks such as Symfony, Laravel, Drupal, WordPress, Zend Framework, Magento, Joomla, CakePHP, and Yii. More this comprehensive software provides developers with a range of features and tools that can help simplify the development process, increase productivity, and ensure code quality. For example, PHP Storm includes advanced debugging and testing capabilities, as well as code analysis and review tools, making it easy to identify and fix errors and improve overall code performance. With its strong support for multiple frameworks and languages, PhpStorm has become a popular choice for web developers and teams worldwide (JetBrains 2020).

A Technical Documentation Review for the animal care system developed for PHPStorm is essential for establishing the novelty and importance of the system, providing context for design and operational decisions, testing its applications, directing future research, and addressing any unique challenges associated with development for this platform.

2.3.5 Kotlin

Figure 18: Kotlin Image.

Versatile programming language Kotlin offers type inference, platform independence, and static typing for general-purpose use. Kotlin is a statically typed, high-level programming language, crossplatform, and offers full compatibility with Java and the JVM, but with more concise syntax using types. Kotlin is a high-level programming language with static typing and cross-platform compatibility, designed for general-purpose use, with type inference and concise syntax compared to Java.

2.3.6 NET

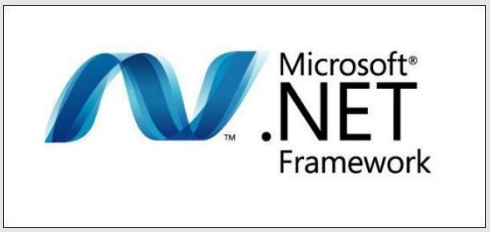


Figure 19: Net Image.

.NET is a Microsoft technology that is often used for enterprise-level web applications. It includes a wide range of tools and frameworks and is known for its security and scalability.

3. Chapter 3: Methodology

3.1 Research Methodology

To move forward with this project, the first task was to sort and arrange ideas by primarily conducting online literature research. Additionally, I have evaluated the advantages and disadvantages by directly utilizing other comparable applications.

3.1.1. Qualitative Research

In this project, the primary method of data collection revolves around qualitative research. While quantitative research methods can also be employed in scenarios where large volumes of data can be gathered, there are limitations in terms of being restricted to online data collection only. As a result, the plan is to conduct research by engaging a minimum number of participants to carry out surveys, gather their responses, and incorporate them into the design phase. The surveys will target individuals who have previously used similar applications, and Google Forms will be utilized as the platform for conducting the surveys.

Collection Method	**Conduction Method**	**Targeted Number**	**Used Platform**	**Type Of subject**
Questionnaire	Google Form	30	All Community	Every People

Table 3: Google form summary

3.2 Project Methodology

3.2.1 System Development Methodology

Agile Methodology Selection:

To maintain flexibility, adaptability, and promote continuous improvement throughout the development process, the project will be implemented using an Agile methodology. Agile methodologies, such as Scrum or Kanban, emphasize collaboration, iterative development, and regular feedback, all of which are well-suited for the ever-changing landscape of software development.

a. Project Phases and Deliverables:

a. **Phase 1: Project Initiation and Planning**

- The initial phase of the project involves defining clear project goals, scope, and requirements.
- An extensive research and feasibility study will be conducted to ensure the viability of the project.
- A comprehensive project plan and timeline will be developed to guide the team throughout the entire project duration.
- Communication and collaboration channels will be established to facilitate effective interaction among team members and stakeholders.

b. **Phase 2**: **Android Mobile Application Development**

- Create user stories and backlog.
- Conduct sprint planning and select user stories for each sprint.
- Develop Android mobile application front end using Agile development practices.
- Conduct regular sprint reviews and retrospectives for continuous improvement.
- Deliverables: Functional Android mobile application with front-end features.

c. **Phase 3: Web Application Development**

- Define user stories and backlog for the web application.
- Plan and prioritize user stories for each sprint.
- Develop the web application backend using Agile development practices.
- Conduct frequent reviews and retrospectives for iterative enhancements.
- Deliverables: Fully functional web application with backend features.

d. **Phase 4: Website Development for App Promotion**

- Identify website requirements and target audience.
- Design and develop a visually appealing and informative website.
- Incorporate promotional content and information about the Android app.
- Conduct user testing and gather feedback for improvements.

Deliverables: Live and functional website promoting the Android app.

Agile Project Management:

- Appoint a dedicated project manager to oversee the entire project.
- Use project management tools like Jira or Trello to manage tasks and backlog.
- Conduct daily stand-up meetings to track progress, discuss challenges, and align goals.
- Maintain an Agile board to visualize project progress and task statuses.
- Continuously monitor and adapt the project plan as needed.

Collaboration and Communication:

- Foster effective communication and collaboration among the development team.
- Utilize tools like Slack or Microsoft Teams for real-time communication.
- Schedule regular sprint reviews to gather feedback from stakeholders.
- Encourage transparency and open communication channels for addressing issues.

Deployment and Iterative Enhancements:

- Plan and execute deployment of the Android app, web application, and website.
- Gather user feedback and iterate on features and improvements.
- Adopt an iterative approach for future enhancements and updates.

By following this Agile methodology, the development team can efficiently build and deliver the animal tracking system, ensuring frequent collaboration, adaptability to changing requirements, and high-quality deliverables.

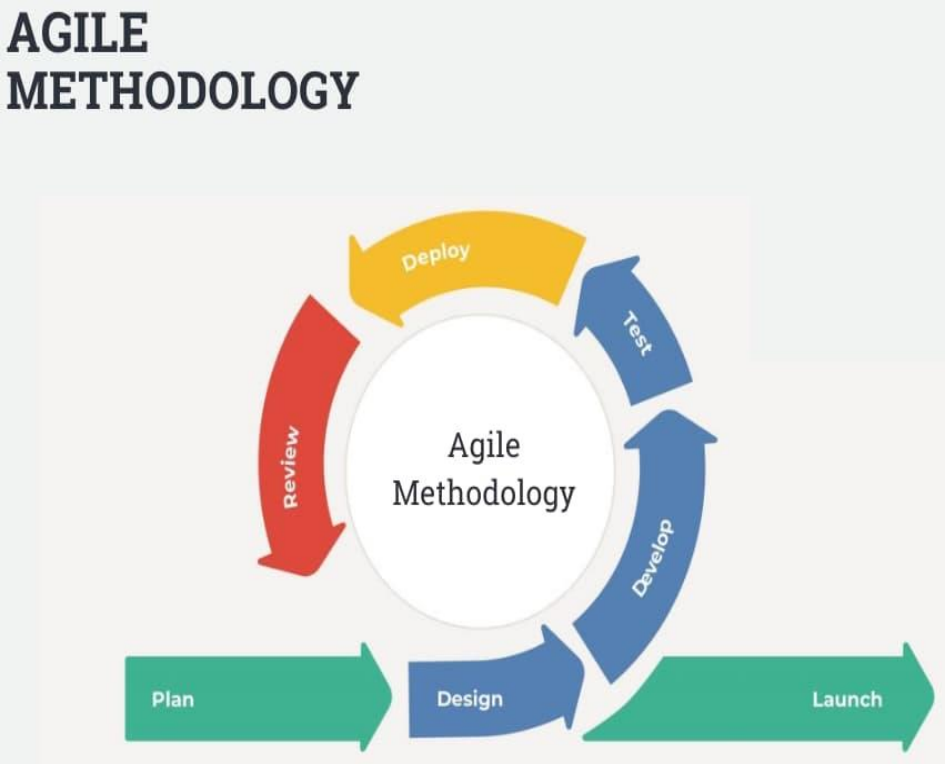


Figure 20: Agile Methodology

3.2.3 Research Methodology

The research methodology for an animal tracking system would depend on the specific goals of the research and the type of animal being tracked. Here are some possible research methodologies that could be used:

- **Field observation:** This involves observing the animal's behaviour and movement in its natural habitat using visual or audio monitoring methods. This can provide valuable insights into the animal's behaviour, migration patterns, and preferred habitats.
- **Wireless telemetry:** This method can be used to study the animal's movement patterns and habitat use over a longer period of time.
- **GPS tracking:** This involves attaching a GPS device to the animal, which can provide detailed information on its movement, location, and behaviour. This method can be useful for studying the animal's behaviour in relation to environmental factors such as weather patterns or food availability.
- **Citizen science:** This involves enlisting the help of members of the public to collect data on the animal's behaviour or movement. This method can be useful for collecting large amounts of data over a wide geographic area.

Once the data has been collected, the research methodology could involve data analysis using statistical methods or machine learning algorithms to identify patterns and trends in the data. The

research findings can then be used to inform the development of an animal tracking system that meets the specific needs of the animal and the research goals.

4. Chapter 4: Requirement Gathering

4.1 Questionnaire

The chosen method for gathering requirements in this project is through a questionnaire. The target audience for this questionnaire primarily includes users in their 20s and 30s who are part of online community groups in Sri Lanka and Singapore. The survey comprises 20 questions, covering aspects such as gender, age, and subjective queries that provide users with the freedom to express their opinions openly. Despite its simplicity, the survey holds significant importance in this software development project as it serves as an efficient means of swiftly gathering diverse perspectives. The survey was conducted over the span of one week, and the questions included were as follows.

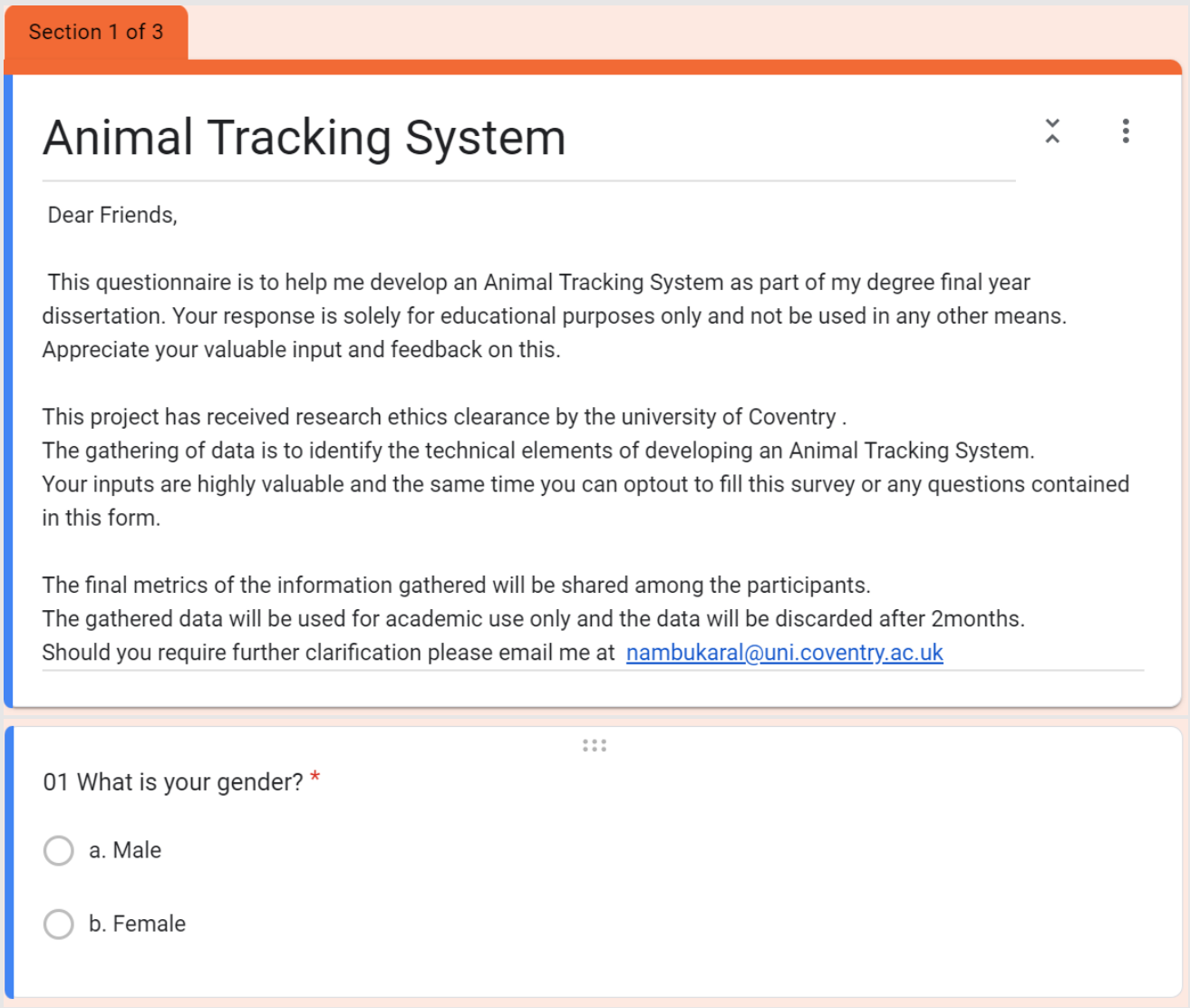


Figure 21: 1st question for the server

I am taking few question in responcers personal questions. So first question I was create a gender information.

02 What Is your age group? *

- a. Under 18
- b. 18 to 25
- c. 26 to 30
- d. 30 to 35
- e. 36 to 40
- f. 41 Over

03 What is your Nationality? *

Short answer text

04. What is your Religion? *

- a. Catholicism/Christianity
- b. Judaism
- c. Islam
- d. Buddhism
- e. Hinduism
- f. Not applicable
- g. Prefer not to say
- Other...

Figure 22: 2nd 3rd and 4th question for the server.

In the three previous questions, I also collected responses regarding personal information. Specifically, I asked for the age group in the first question and nationality in the third question. By knowing the age group, it helps to understand the distribution of responses across different age ranges. Additionally, asking about nationality is relevant because Singapore is a multicultural and multi-ethnic country with a diverse population. By knowing the nationality of the respondents, it provides insights into the representation of different nationalities within the survey data. Moreover, Singapore is known for its multicultural society, with people from various religions coexisting. By acknowledging the diverse religious backgrounds of the participants, it helps to consider potential variations in responses based on religious beliefs or practices.

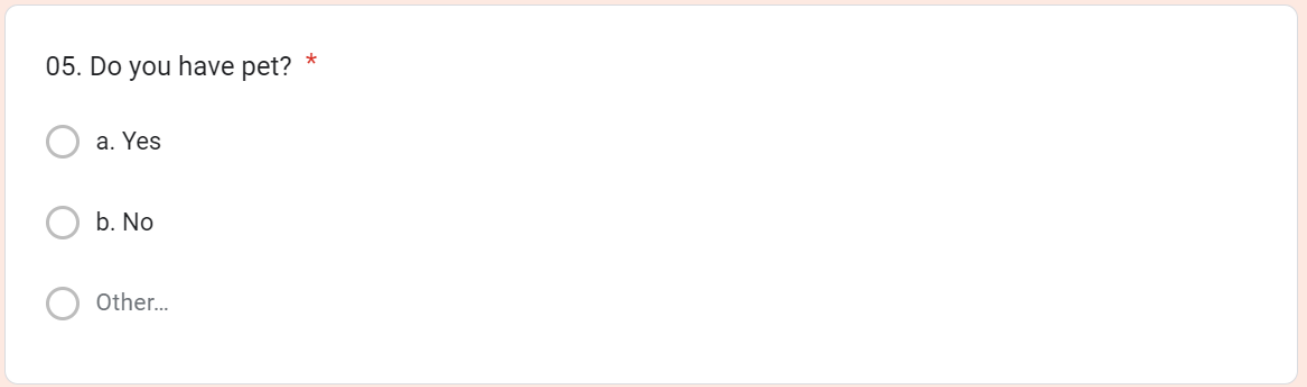


Figure 23: 5th question for the server.

This question was designed specifically for the purpose of studying animals and their impact on individuals. By asking this question, the research aims to gather data on people's preferences and attitudes towards pets, providing insights into the level of interest or aversion towards animals in general.

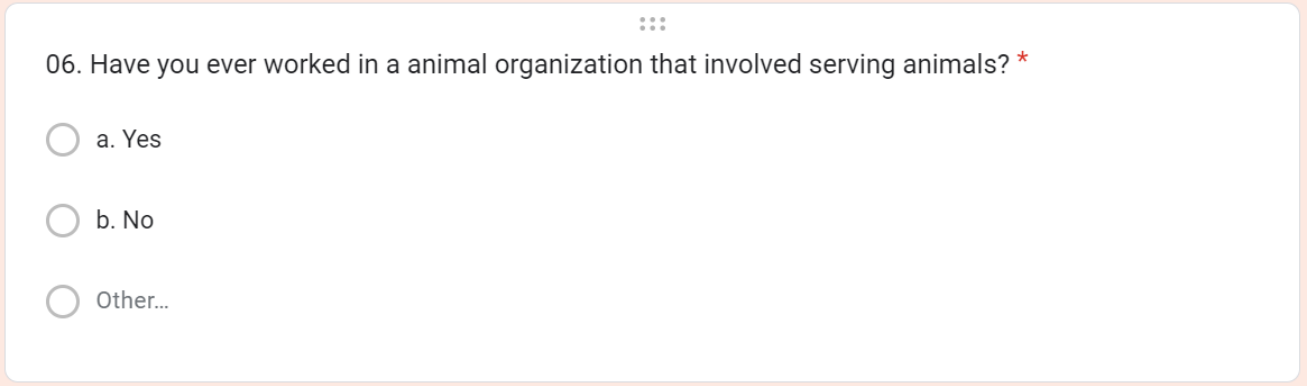


Figure 24: 6th question for the server.

The research question seeks to identify individuals who are interested in working with animal organizations or volunteering in animal care. By asking this question, it aims to determine the preference and inclination of individuals towards animal-related work. This research question helps in identifying those who have a genuine desire to work with animals and are enthusiastic about contributing their time and efforts towards animal care as volunteers.

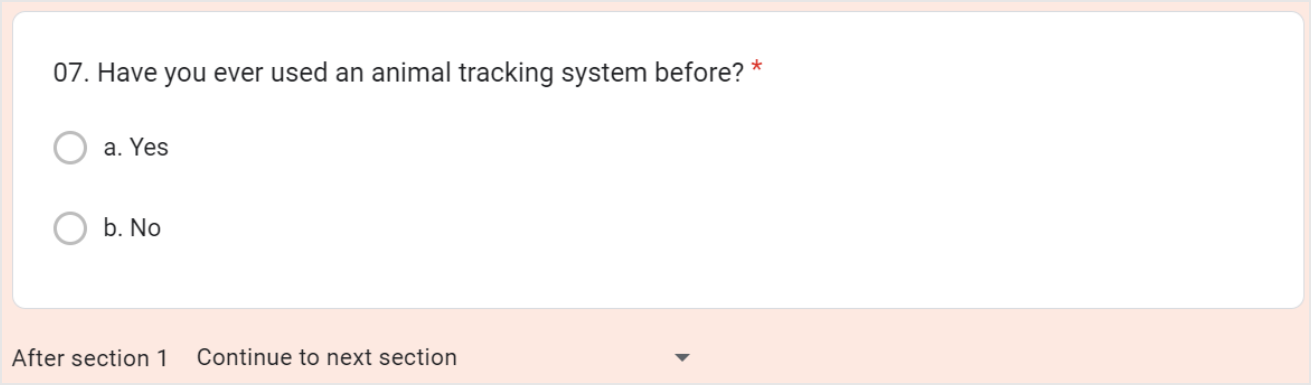


Figure 25 : 7th question for the server.

The purpose of this research question is to gather information about whether respondents have used an animal tracking system before or not. This question is important because it helps to identify individuals who have prior experience with such applications. Their previous exposure to animal tracking systems can provide valuable insights and perspectives that can contribute to finding the best option for the current research. Additionally, understanding the respondents' familiarity with these systems is crucial for the potential success of hosting an application in this domain. By targeting users who have used animal tracking systems before, there is a higher likelihood of attracting users and generating revenue from the application.

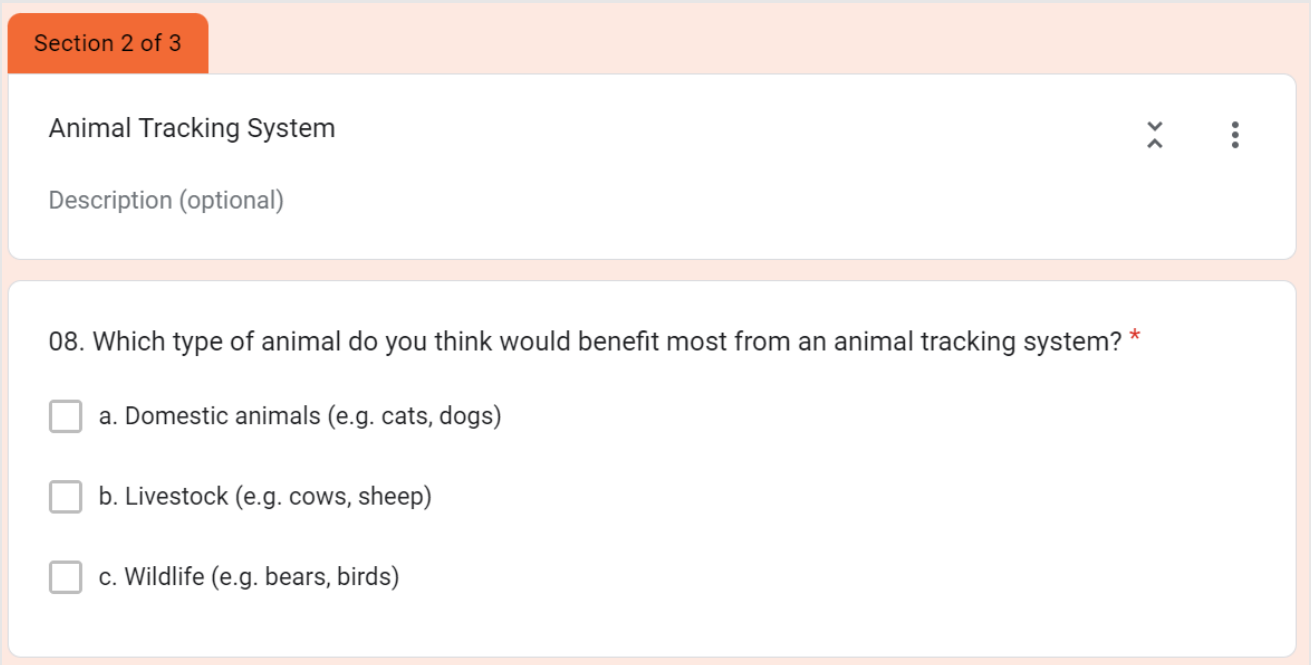


Figure 26: 8th question for the server.

In the second session of my research, I focused on understanding people's motivations for saving animals' lives in various environments. The goal was to explore what factors drive individuals to act and make efforts to protect and preserve animal life. By uncovering these motivations, we can gain insights into the underlying reasons behind people's passion for animal conservation.

Another aspect of the research was to identify the most beneficial environment for animal conservation. By studying different environments and their impact on animal populations, we can determine which areas provide the greatest benefits and support for animal life. This information is valuable as it allows us to prioritize our efforts and allocate resources effectively.

With the research results in hand, the plan is to leverage the findings to expand our network and extend our support to animals across the globe. By utilizing the knowledge gained from the research, we can develop strategies and initiatives that address the specific needs of different animal species and their respective environments. This approach will enable us to make a meaningful impact and contribute to the preservation of animal life on a global scale.

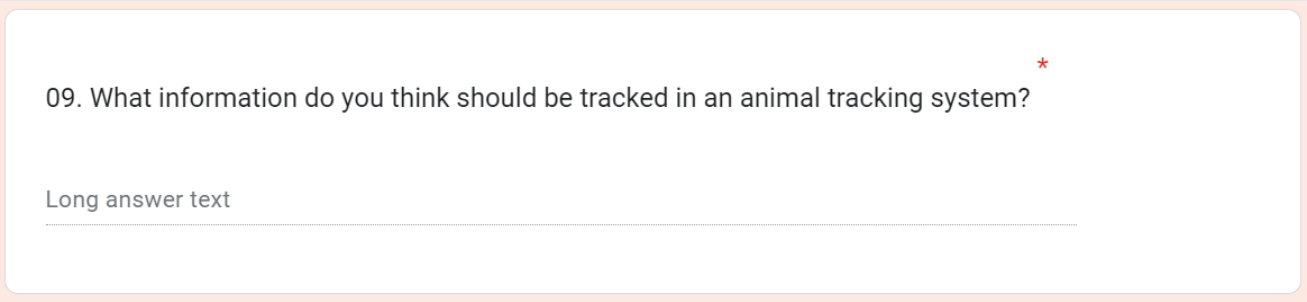


Figure 27: 9th question for the server.

In this question, need to get what the important details are must include in this application. The objective of this question is to gather insights on the crucial details that should be included in the application being developed.

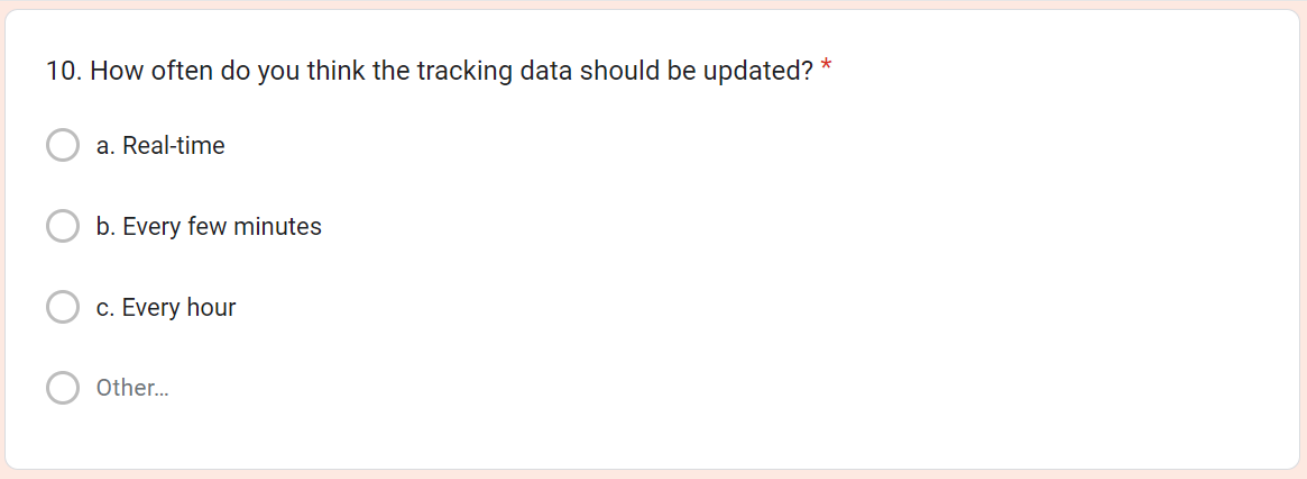


Figure 28: 10th question for the server.

The purpose of the above question is to gather information from respondents regarding how frequently they believe tracking data should be updated. By asking this question, the research aimsto

determine the optimal frequency for updating tracking data in order to obtain the best answer.

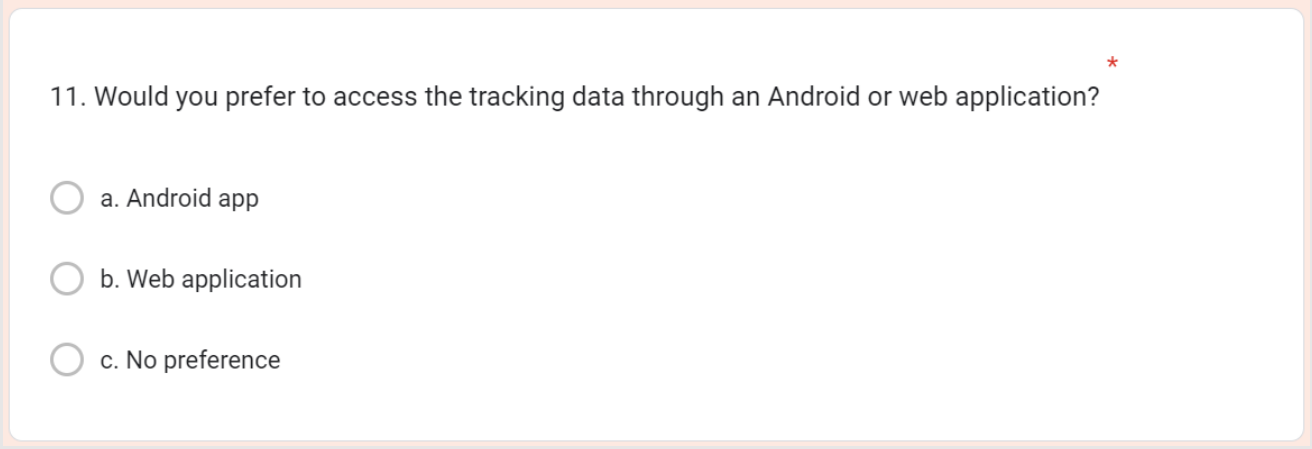


Figure 29: 11th question for the server.

The above question presents three options for accessing the tracking data: through an Android application, a web application, or another alternative option. The purpose of this question is to gather insights from respondents regarding their preferred method of accessing the tracking data.

By providing multiple options, the research aims to understand user preferences and expectations when it comes to accessing the tracking data. The Android application option caters to individuals who prefer using mobile devices, while the web application option appeals to those who prefer accessing the data through a web browser on their computers or other devices.

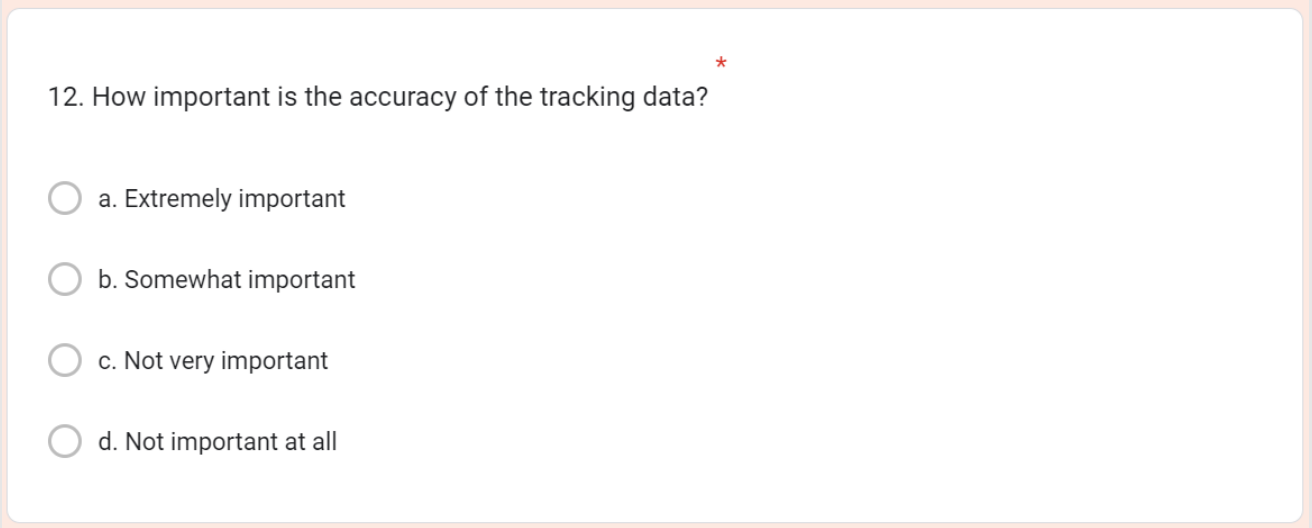


Figure 30: 12th question for the server.

The purpose of this question is twofold. Firstly, the researcher aims to understand the importance placed by respondents on the accuracy of tracking data. By asking this question, the research seeks to gauge the level of significance respondents attribute to the precision and correctness of the tracking data. This information is valuable in designing and developing a tracking system that meets the users' expectations and demands for accurate data.

Secondly, the question seeks to ascertain respondents' awareness of the existence of tracking systems and their perception of their usefulness. By inquiring whether respondents are familiar with tracking

systems and whether they find them useful, the research aims to gain insights into the participants' knowledge and opinions about such systems. This information will help in understanding the user perspective and expectations, as well as identifying any potential gaps or areas for improvement in existing tracking systems.

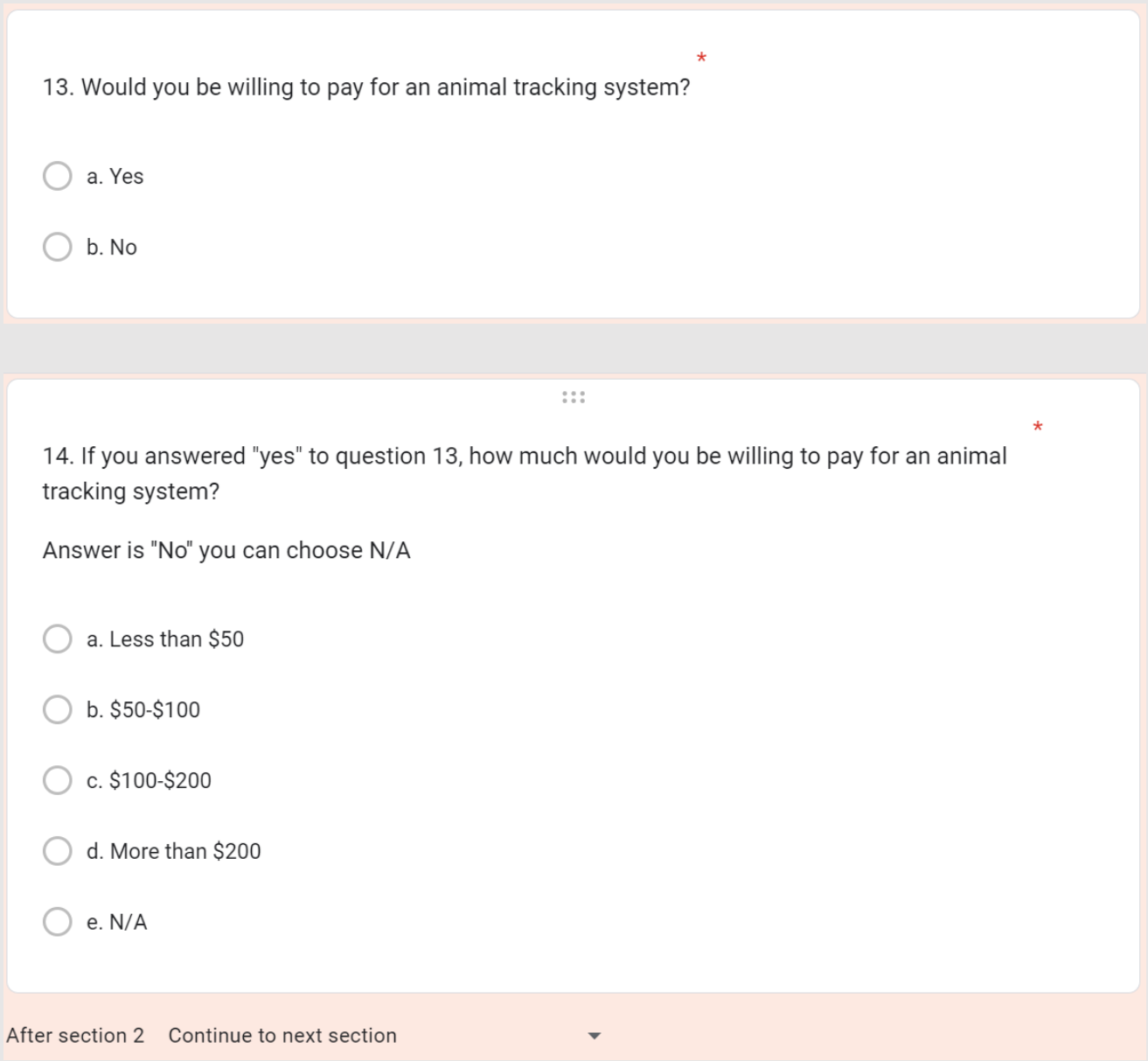


Figure 31 : 13th and 14th question for the server.

The purpose of the below question is to gather insights regarding users' willingness to pay for the hosted app. By asking this question, the research aims to understand whether users would be willing to invest financially in the application's services or features.

The second question seeks to determine the potential spending capacity of users who are willing to pay. By asking respondents how much they are willing to spend, the research aims to gather information about their price sensitivity and expectations regarding the cost of the app.

The responses to these questions will provide valuable insights into users' willingness to pay and their budgetary considerations. This information will help in making informed decisions about the app's pricing strategy, including the possibility of offering different packages or pricing tiers based on users' preferences and spending capacity.

By considering the responses received, the research can tailor the pricing structure of the app to align with users' expectations and maximize its market appeal. This will help in determining the best packages and pricing options that strike a balance between user satisfaction and the financial viability of the app.

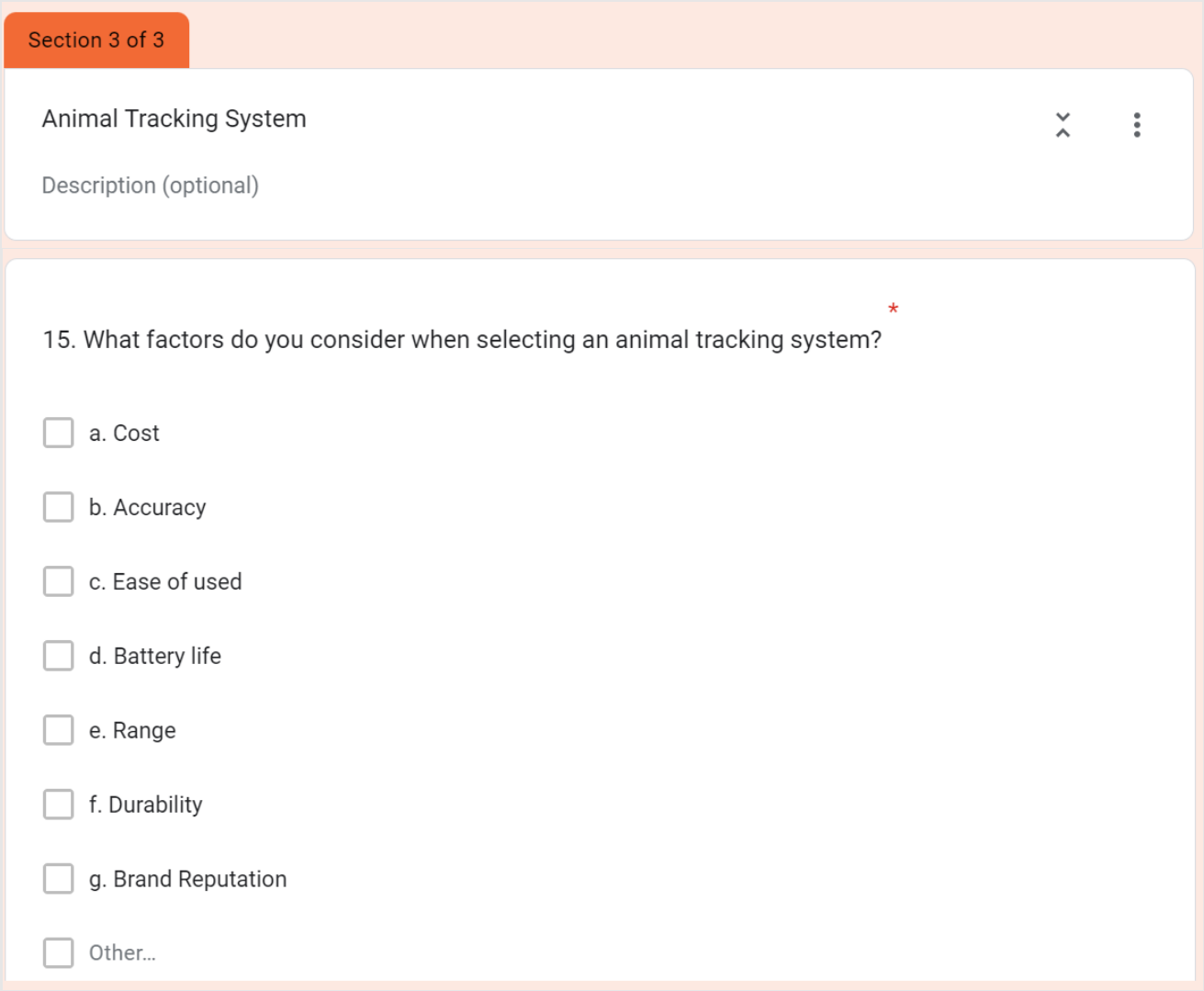


Figure 32: 15th question for the server.

The main purpose of the above question is to determine the primary factors considered when selecting an animal tracking system. The research aims to identify the key criteria or attributes that influence the decision-making process when choosing such a system.

The provided options, including cost, accuracy, ease of use, battery life, range, durability, and brand reputation, represent the selection factors that are being considered in the question. These factors are commonly evaluated when making decisions about which animal tracking system to adopt.

By considering the responses related to these factors, the research can gain insights into the relative importance placed on each criterion during the selection process. This information helps in understanding the priorities and preferences of users, allowing for the development of a tracking system that meets their specific needs and expectations.

By aligning with the identified selection factors, the research can ensure that the chosen animal tracking system offers the desired cost-effectiveness, accuracy, user-friendliness, battery life, range, durability, and brand reputation. This will contribute to a higher likelihood of user satisfaction and successful adoption of the system.

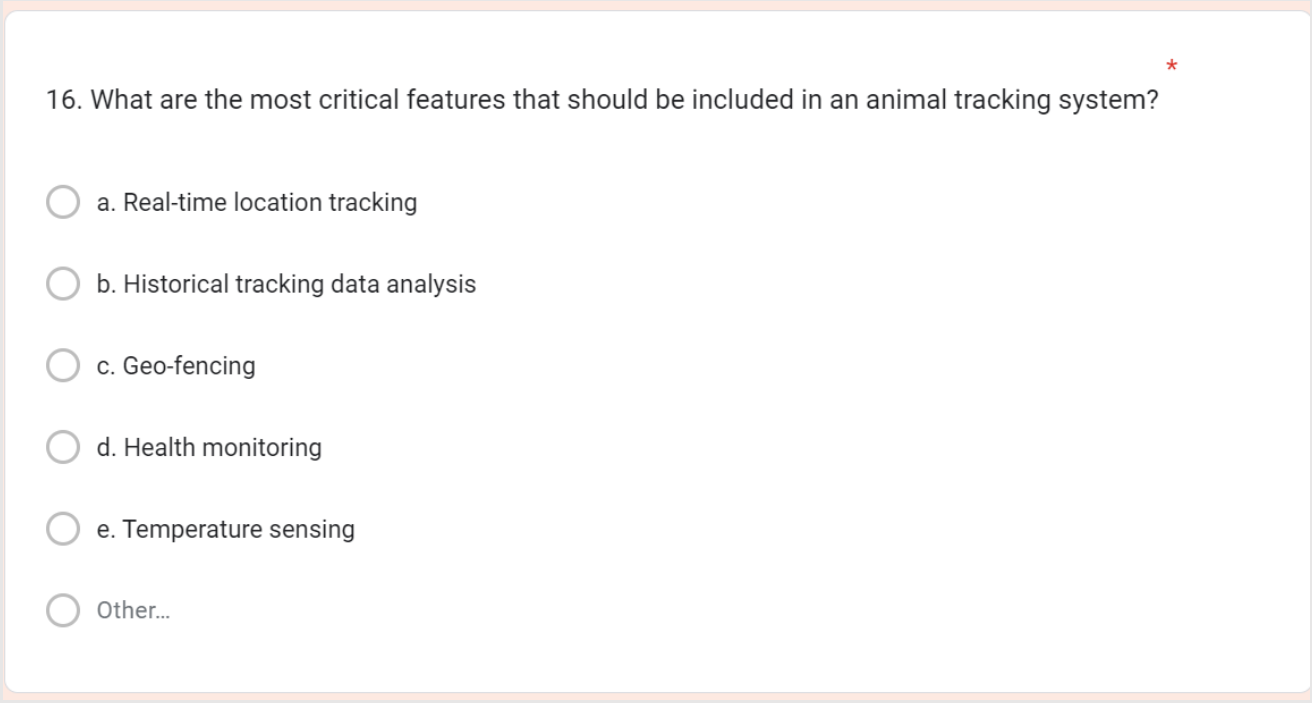


Figure 33: 16th question for the server.

By asking this question and providing respondents with five options to choose from, the research aims to understand which feature is considered the most important or essential by the participants.

The five options provided represent different potential critical features that could be included in a tracking system. The respondents are asked to select the option they believe to be the best choice based on their knowledge, experience, and preferences.

By considering the responses received, the research can gain insights into the prioritization of features and understand which aspect is deemed most critical by the participants. This information will help in designing and developing a tracking system that emphasizes the chosen feature, ensuring that it meets the expectations and requirements of the users.

By aligning with the identified critical feature, the research can enhance the functionality and effectiveness of the tracking system. This will contribute to a higher likelihood of user satisfaction and the successful implementation of the system in relevant contexts.

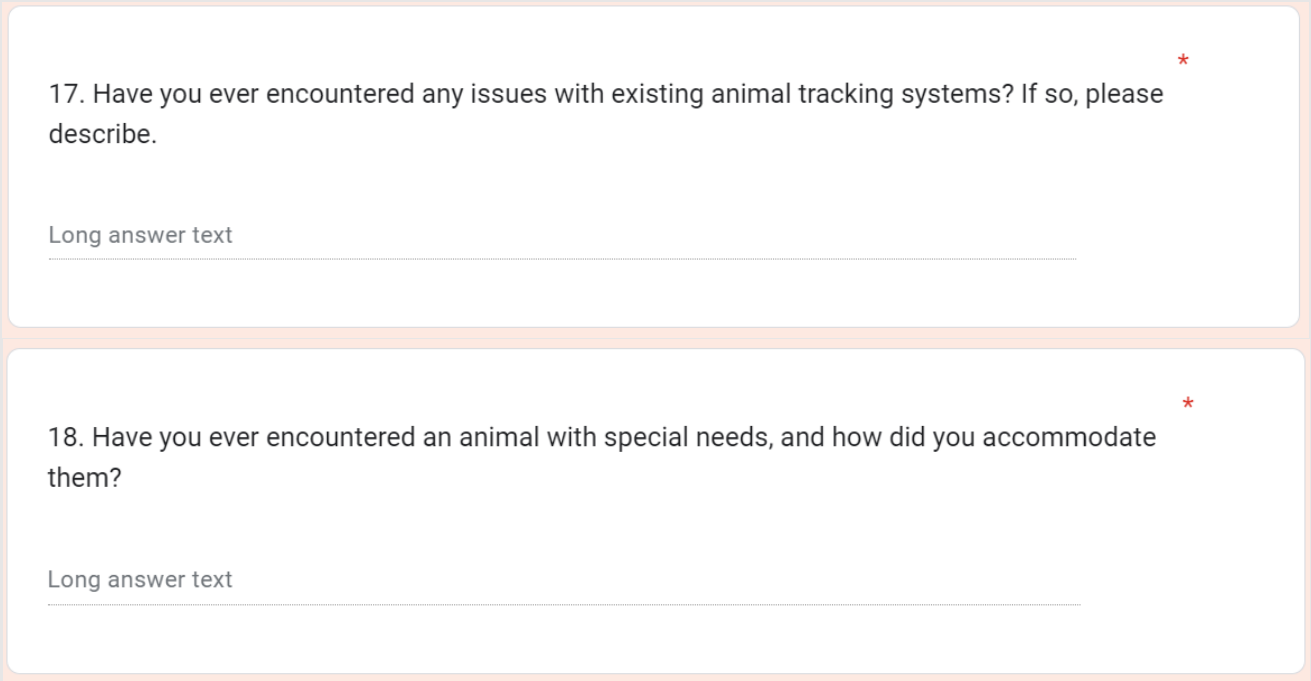


Figure 34: 17 and 18 question for the server.

The purpose of the below two questions is to gather reviews and insights from respondents regarding their experiences with an existing animal tracking system and their accommodations for an animal with special needs.

Writing a review of an existing animal tracking system: The research aims to gather respondents' personal opinions and evaluations of a specific animal tracking system. By allowing them to write their own review, the research seeks to obtain detailed feedback on the system's strengths, weaknesses, usability, accuracy, and any other relevant aspects. These reviews provide valuable insights into the users' first-hand experiences and perceptions of the system's performance.

Accommodating an animal with special needs: This question focuses on understanding how respondents have accommodated an animal with special needs in their care. By sharing their experiences, the research seeks to gather insights into the challenges faced and the specific measures taken to support the animal's unique requirements. This information can include adaptations to the animal's environment, specialized care techniques, or any other strategies implemented to ensure the well-being and comfort of the animal.

By considering the responses to these questions, the research can gain valuable knowledge about the strengths and weaknesses of existing animal tracking systems, as well as insights into the practical considerations and approaches used to accommodate animals with special needs. This information can be used to inform the development of improved tracking systems and to share best practices for supporting animals with unique requirements.

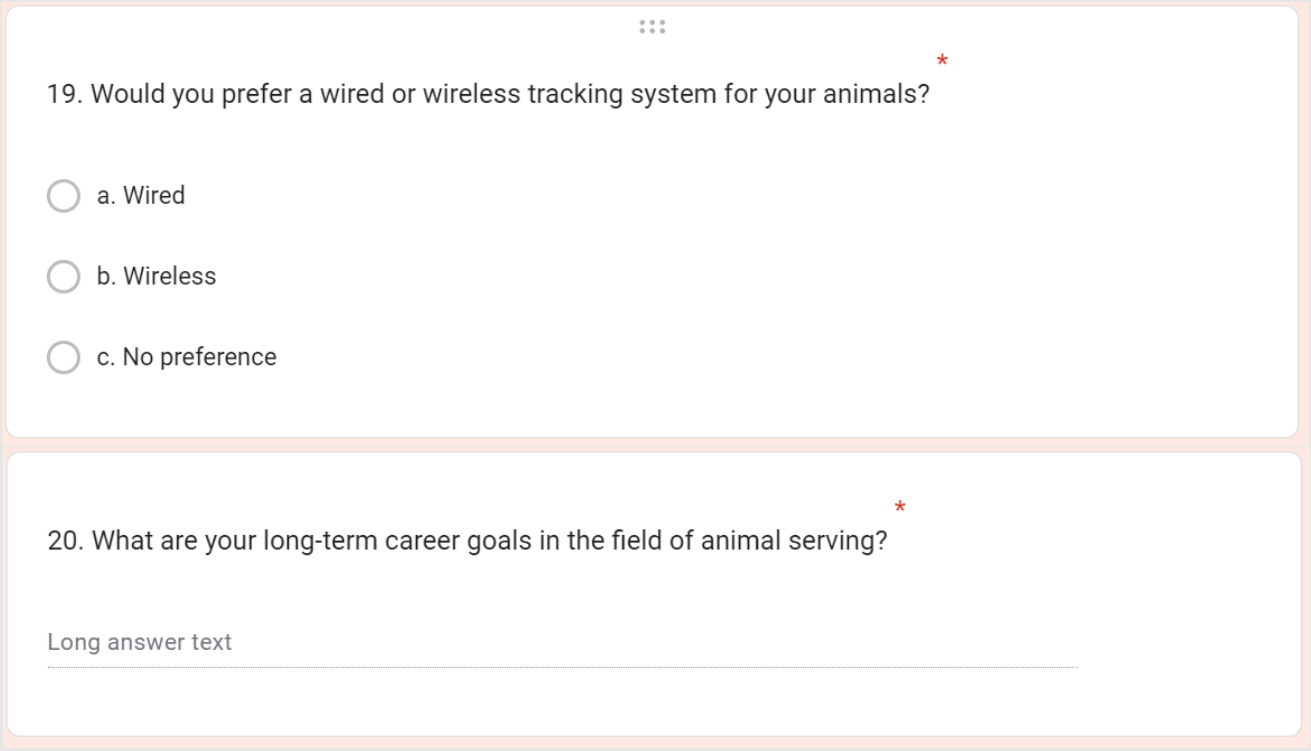


Figure 35: 19 and 20 question for the server.

The purpose of the above question is to gather insights from respondents regarding their opinions on the best tracking systems for animals, specifically focusing on wired and wireless options. This question serves as a further enhancement to the research, allowing for a deeper understanding of the preferences and recommendations related to tracking systems.

By asking this question, the research aims to collect information about the respondents' experiences and knowledge regarding different tracking systems, particularly wired and wireless options. Their responses will provide valuable insights into the advantages and disadvantages of each system type, as well as their suitability for different animal tracking scenarios. This information can help inform decisions regarding the selection and implementation of tracking systems in various contexts.

Additionally, the research aims to gain insights into the long-term career goals of the respondents in the field of animal serving. By asking about their aspirations, the research seeks to understand their motivations, interests, and ambitions related to working with animals. This information can provide valuable insights into the career paths and aspirations within the animal serving industry, which can inform decisions regarding professional development opportunities and the advancement of the field.

By considering the responses received, the research can identify trends, preferences, and potential areas for improvement in tracking systems, as well as gain a better understanding of the long-term career goals and aspirations of individuals in the animal serving field.

5. Chapter 5: Analysis

5.1 Summary of Primary data collected.

The initial method used to collect data for this project was an online questionnaire administered through Google Forms. The research team selected this method to gather information and opinions from users of similar apps. The targeted number of respondents for the questionnaire was set at 30.

The questionnaire was designed to be accessible to a wide range of individuals, encompassing the entire community. The aim was to gather perspectives and insights from people of diverse backgrounds and experiences. By including a broad range of participants, the research team sought to capture a comprehensive understanding of users' opinions and preferences.

To conduct the questionnaire, the research team utilized the Google Forms platform. This online platform facilitated the distribution of the questionnaire, collection of responses, and organization of the gathered data.

Once the data collection phase was completed, the research team proceeded to analyze the response results. The purpose of this analysis was to delve into the opinions and feedback provided by users of similar apps. By studying the collected responses, the research team aimed to identify common themes, patterns, and valuable ideas that could be incorporated into the development of the Reminiscence app.

By leveraging the insights obtained from the analysis of user opinions, the research team could gain valuable guidance for the development of the Reminiscence app. These ideas and feedback would help shape the features, functionalities, and overall design of the app to ensure it meets the needs and preferences of potential users.

Collection Method	Conduction Method	Targeted Number	Used Platform	Type Of subject	Type of subject
Questionnaire	Google Form	30	All Community	Every People	From 20 to 30s. Different ages.

Table 4: summary of the primary data collected.

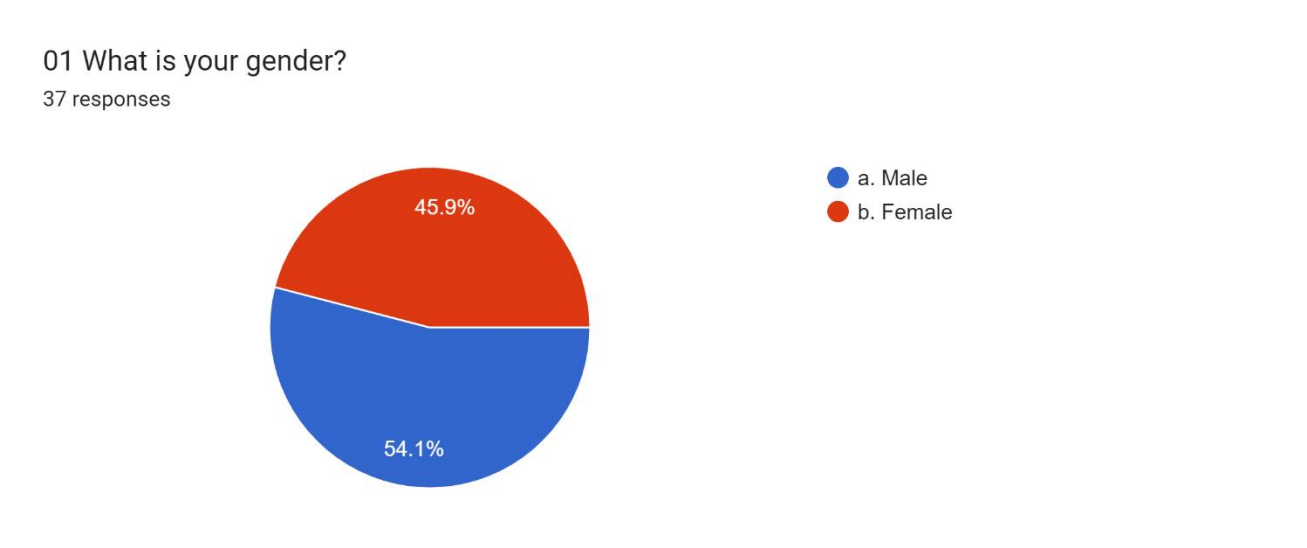


Figure 36: result about gender.

The provided pie chart displays the gender distribution of the respondents. It indicates that out of the total respondents, 45 individuals identified as female, which accounts for 45.9% of the sample. On the other hand, male respondents accounted for 54.1% of the total, which corresponds to nearly 50%.

The gender distribution of the respondents is important to consider when interpreting the survey results, particularly for the subjective questions in the footer section of the survey. The statement suggests that the higher participation rate of women may influence the subjective nature of the answers provided to those questions.

By acknowledging the gender ratio and its potential impact, the research team recognizes that the responses to the subjective questions may be influenced by the perspectives and experiences of the female respondents, who comprise a significant portion of the sample. This understanding is crucial in interpreting the survey results accurately and considering any potential gender-related variations in the answers to the subjective questions.

By recognizing the influence of gender on subjective responses, the research team can account for any potential biases or variations that may arise from different perspectives. This helps ensure a comprehensive and nuanced analysis of the survey data, taking into consideration the diverse experiences and viewpoints of the respondents.

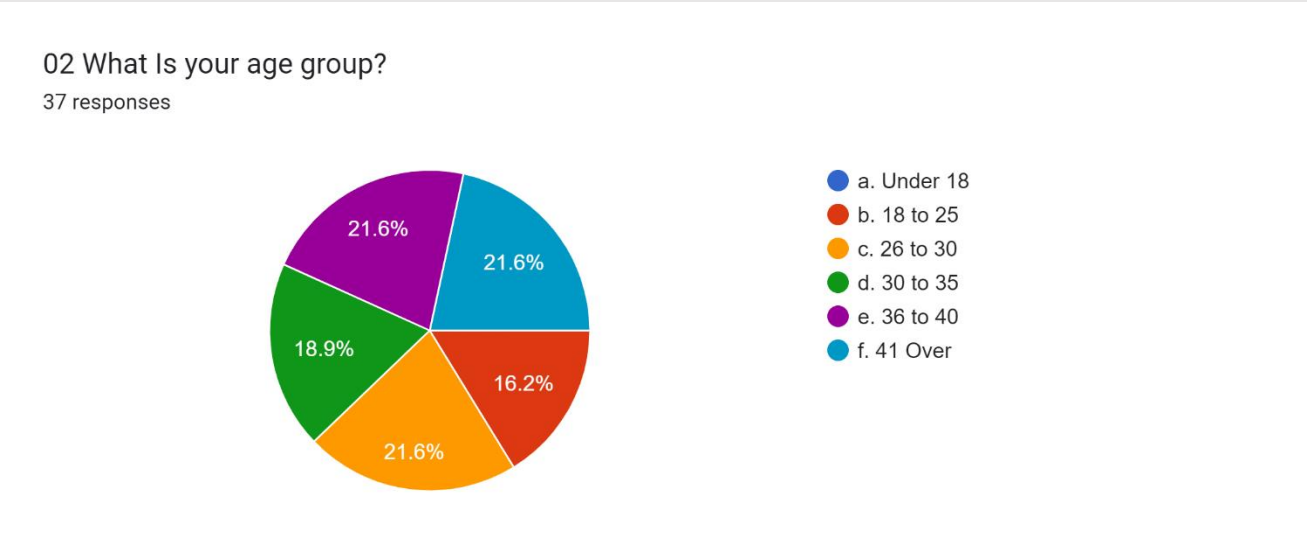


Figure 37 Result about age group.

The provided pie chart represents the age distribution of the respondents. The chart is divided into five age groups, and each group's proportion is depicted in the chart.
The statement indicates that there are no respondents in the "Under 18" age group. However, for the other age groups, the distribution is as follows:
The "18 to 25" age group accounts for 16.2% of the respondents.
The "26 to 30," "36 to 40," and "41 and over" age groups have an equal proportion of respondents, representing an 18.9% share each.

The "30 to 35" age group constitutes 18.9% of the respondents as well.
By examining the proportions within each age group, the research team can gain insights into the age distribution of the respondents. This information can be valuable for understanding the demographics of the sample and considering any potential age-related factors that may influence the survey results. By acknowledging the distribution across different age groups, the research team can consider any variations in perspectives, preferences, or experiences that may arise due to different age ranges. This allows for a comprehensive analysis of the survey data, considering the diversity of age groups represented by the respondents.

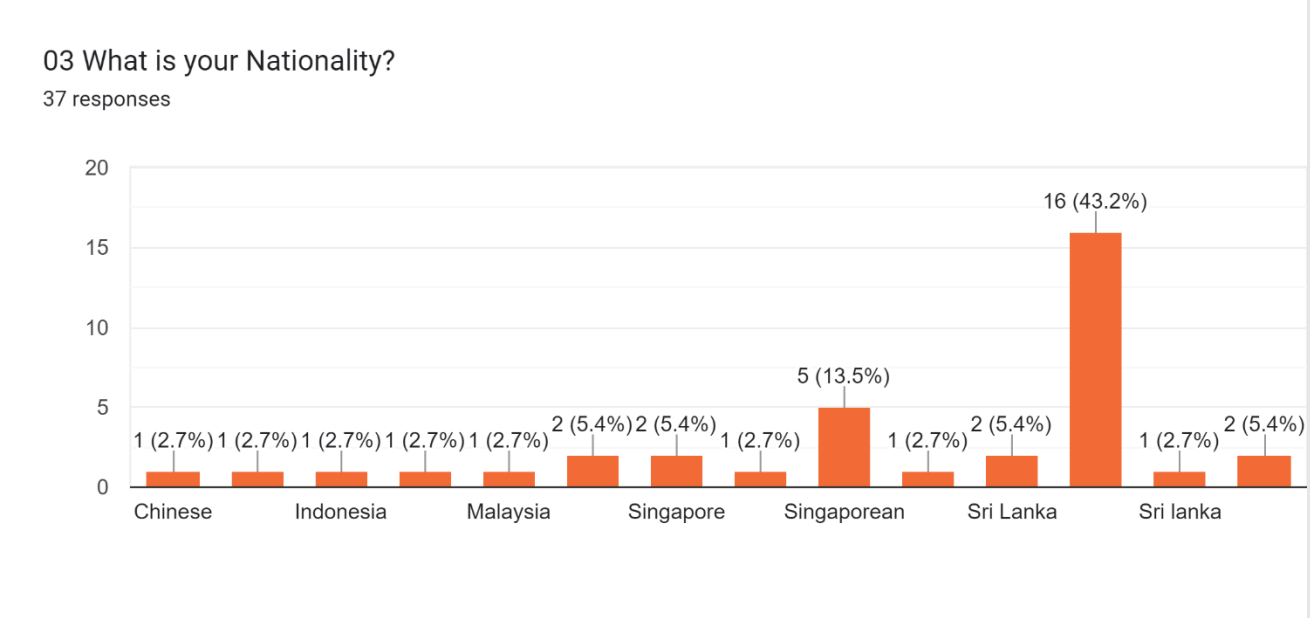


Figure 38: result about nationality.

The question presented focuses on the nationalities of the respondents and represents them in five categories: Sri Lankan, Singaporean, Malaysian, Indonesian, and Chinese. The statement highlights that the majority of the respondents are Sri Lankans and Singaporeans.

The fact that most of the respondents are from Sri Lanka and Singapore is particularly relevant to the research being conducted. It suggests that the research findings and insights gathered from this survey will be applicable and beneficial for the development of the app in both countries. By targeting respondents from these specific nationalities, the research team can gather feedback and opinions that are directly relevant to the target user base in Sri Lanka and Singapore.

Recognizing the significance of the dominant nationalities among the respondents, the research team can tailor the app's features, functionalities, and overall design to cater to the preferences and needs of Sri Lankan and Singaporean users specifically. This targeted approach increases the likelihood of creating an app that aligns well with the cultural, social, and technological context of these two countries.

By acknowledging the representation of nationalities among the respondents, the research team can leverage the insights gained from the survey to ensure that the app meets the requirements and expectations of the Sri Lankan and Singaporean user base. This targeted approach increases the chances of developing a successful app that resonates with the intended audience in both countries.

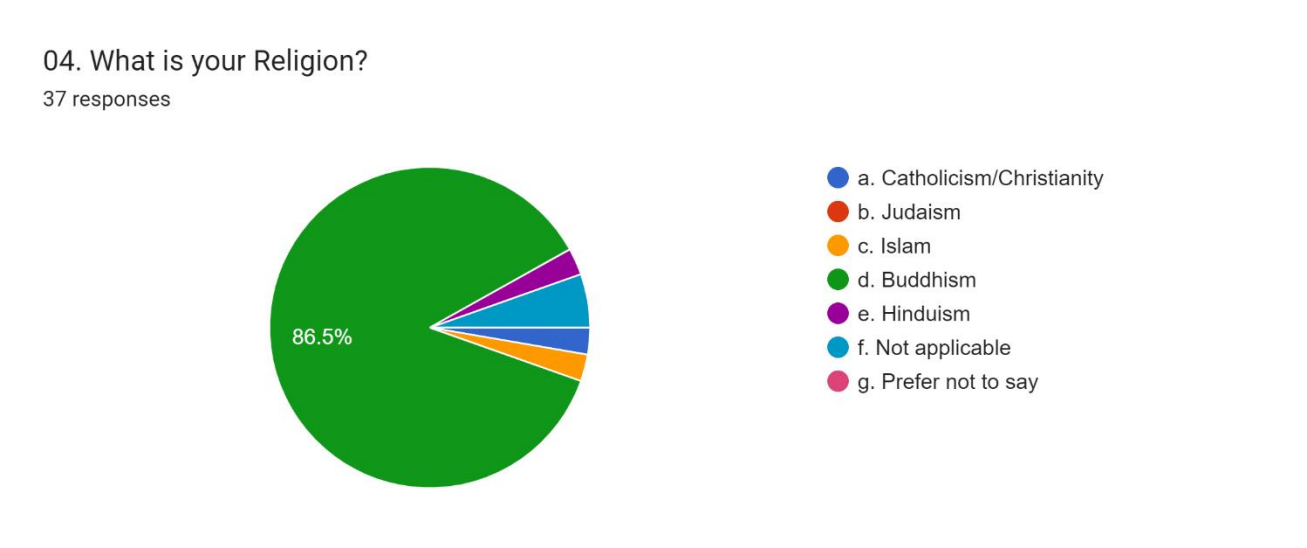


Figure 39: result about religion.

The provided pie chart illustrates the religious affiliations of the respondents. It indicates that the majority of the respondents identify as Buddhists, while the religion of Judaism is not represented in the survey. Additionally, there are some respondents who do not affiliate with any particular religion.

The dominance of Buddhism among the respondents suggests that it is the most prevalent religious affiliation within the surveyed population. This information is valuable as it provides insights into the religious demographics of the respondents and helps the research team understand the cultural and religious context of the target audience.

It is worth noting that the absence of Judaism in the survey may be due to factors such as the specific demographics of the survey respondents or the sampling method used. While this survey did not capture Jewish respondents, it is essential to recognize and respect the diversity of religious beliefs in society.

The inclusion of respondents who do not identify with any religion is also noteworthy. Their perspectives and preferences can contribute to a more comprehensive understanding of the target audience and help ensure that the app caters to a diverse range of users.

By acknowledging the religious distribution of the respondents, the research team can consider the religious and cultural sensitivities while developing the app. This understanding allows for the inclusion of features, content, and user experiences that respect and accommodate the various religious backgrounds and beliefs of the potential users.

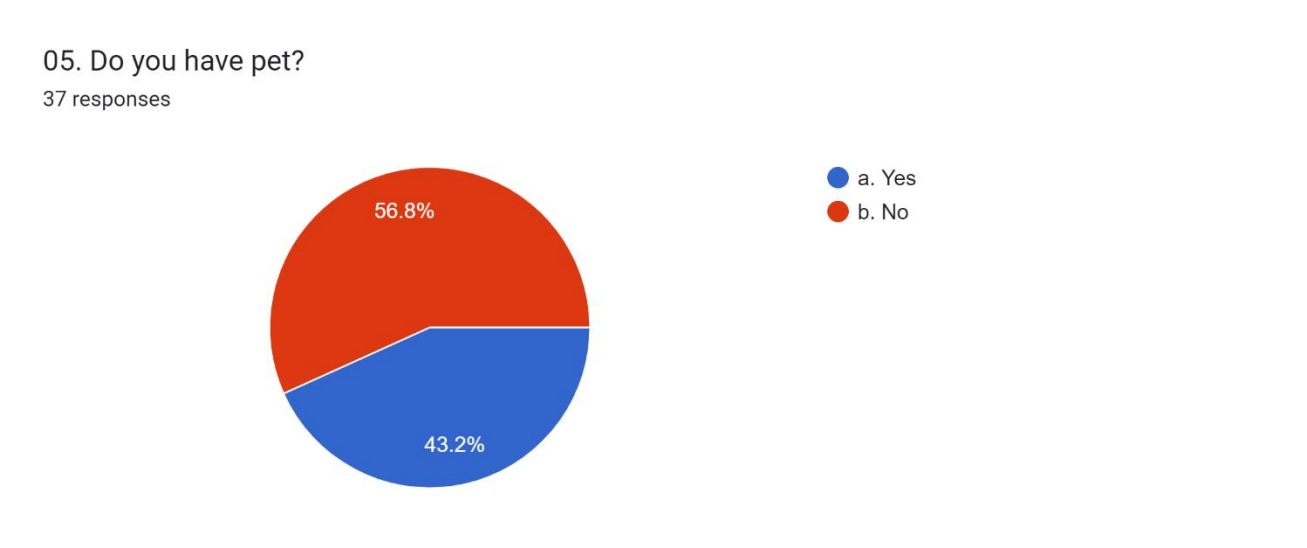


Figure 40: result about pet.

The question presented provides two options for respondents: whether they have a pet or not. The statement suggests that most respondents do not have a pet. It further explains that in Singapore, it is less common for people to own pets due to the high cost of living. However, the situation may differ in Sri Lanka and other countries, where pet ownership varies among individuals.

The observation that most respondents do not have a pet aligns with the context of Singapore, where owning a pet can be financially challenging. The higher cost of living and expenses associated with pet ownership, such as veterinary care, housing, and food, can be deterrents for individuals in Singapore.

In contrast, the statement acknowledges that pet ownership in Sri Lanka and other countries can vary based on individual preferences and circumstances. The cultural, economic, and social factors specific to these regions may influence the prevalence of pet ownership and the feasibility of caring for pets.

By recognizing the disparity in pet ownership between Singapore and other countries, the research team can consider the unique needs and expectations of users from different regions. This understanding can inform the development of the app, ensuring that it caters to the diverse needs and experiences of individuals with and without pets, considering the specific challenges and considerations faced by users in different locations.

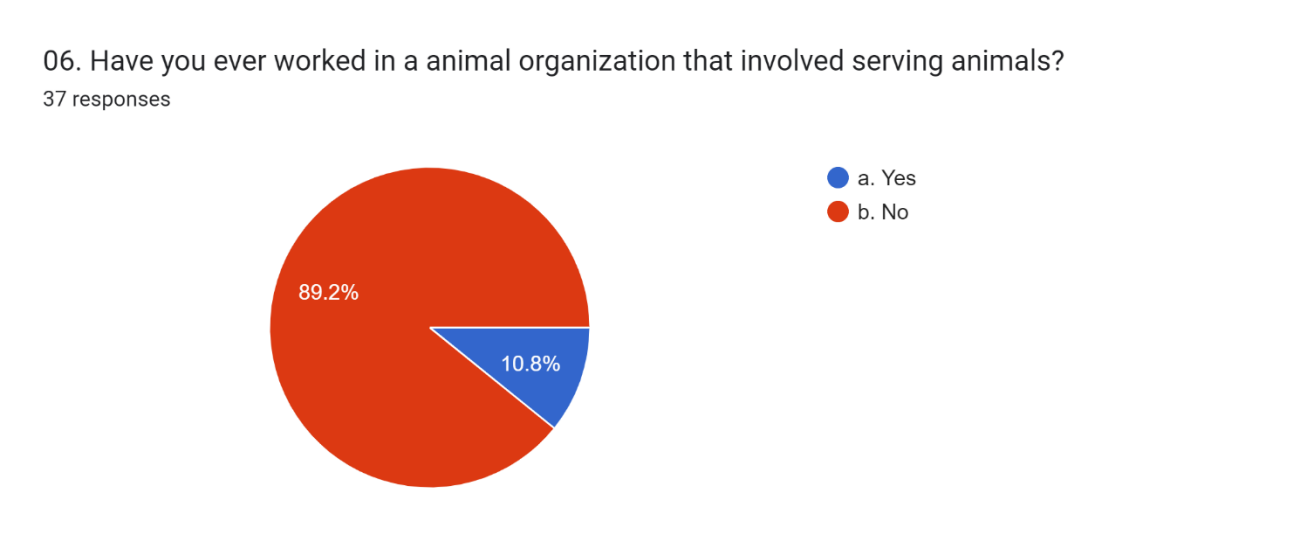


Figure 41: Result about responders worked animal organization

The question presented provides two options for respondents: whether they have worked in an animal organization involved in serving animals or not. The statement suggests that most respondents have not worked in such organizations.

The finding that most respondents have not worked in an animal organization involved in serving animals implies that the survey sample comprises individuals who have limited experience or involvement in professional roles related to animal care or welfare. This information is valuable in understanding the backgrounds and perspectives of the respondents and can help shape the direction of the research and app development accordingly.

By acknowledging that most respondents have not worked in an animal organization, the research team can consider the level of familiarity and understanding that users may have regarding the specific needs and challenges faced by such organizations. This understanding can guide the development of the app, ensuring that it provides accessible information, resources, and functionalities that cater to users who may have limited prior experience in animal care organizations.

Additionally, the research team can consider the potential opportunities to educate and engage users in animal welfare and encourage them to contribute to the well-being of animals, even if they have not worked in formal animal organizations. This can involve providing informative content, volunteer opportunities, or ways to support animal causes within the app.

By recognizing the limited experience in working with animal organizations among the respondents, the research team can develop a user-friendly app that appeals to a broad audience and fosters a sense of empathy and interest in animal welfare, ultimately contributing to the app's success and impact.

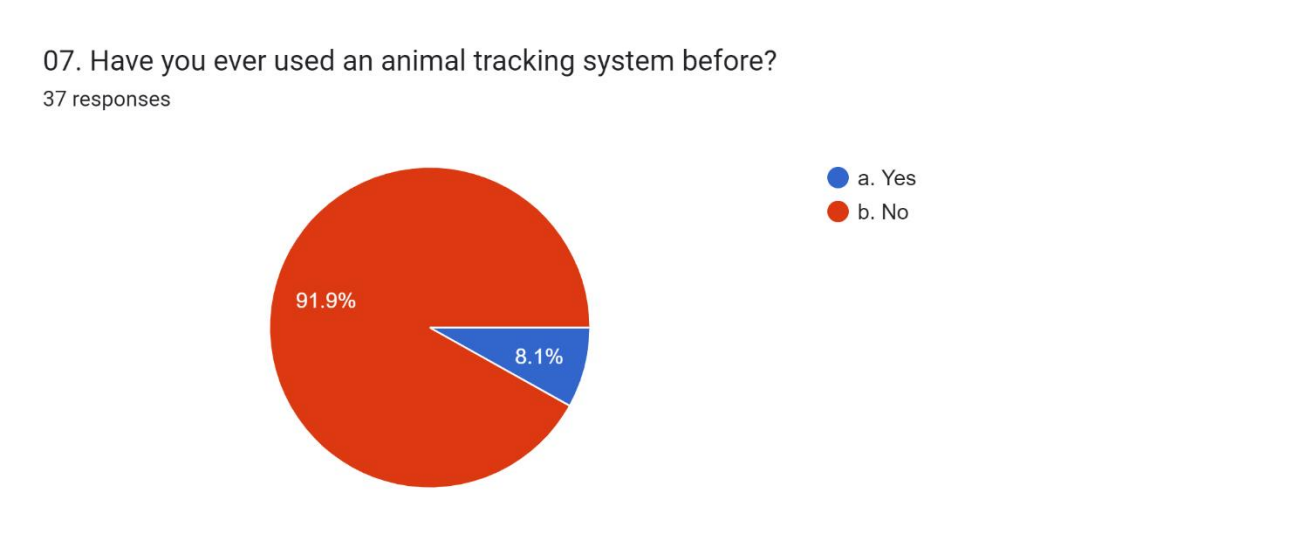


Figure 42: result about have you ever used an animal tracking system before question.

The majority of respondents in the survey have not used an animal tracking system before. This suggests that they may lack familiarity with the functionalities and benefits associated with such systems. The research team should consider the need for user education and intuitive design within the app to address this lack of prior experience.

By acknowledging the respondents' unfamiliarity with animal tracking systems, the team can provide clear instructions, demonstrations, and explanations of the system's benefits. This will help users understand how to use the tracking system effectively.

Additionally, understanding the respondents' lack of experience can guide the development team in creating a user-friendly interface and implementing features that simplify the adoption of the tracking system. Intuitive navigation, easy-to-understand settings, and informative prompts can be incorporated to enhance user experience and ensure maximum utilization of the app's benefits.

Recognizing the respondents' unfamiliarity also allows the research team to address potential barriers to adoption and make the app accessible and engaging for users new to animal tracking technologies. This approach increases the likelihood of user acceptance and satisfaction, contributing to the app's success in the target market.

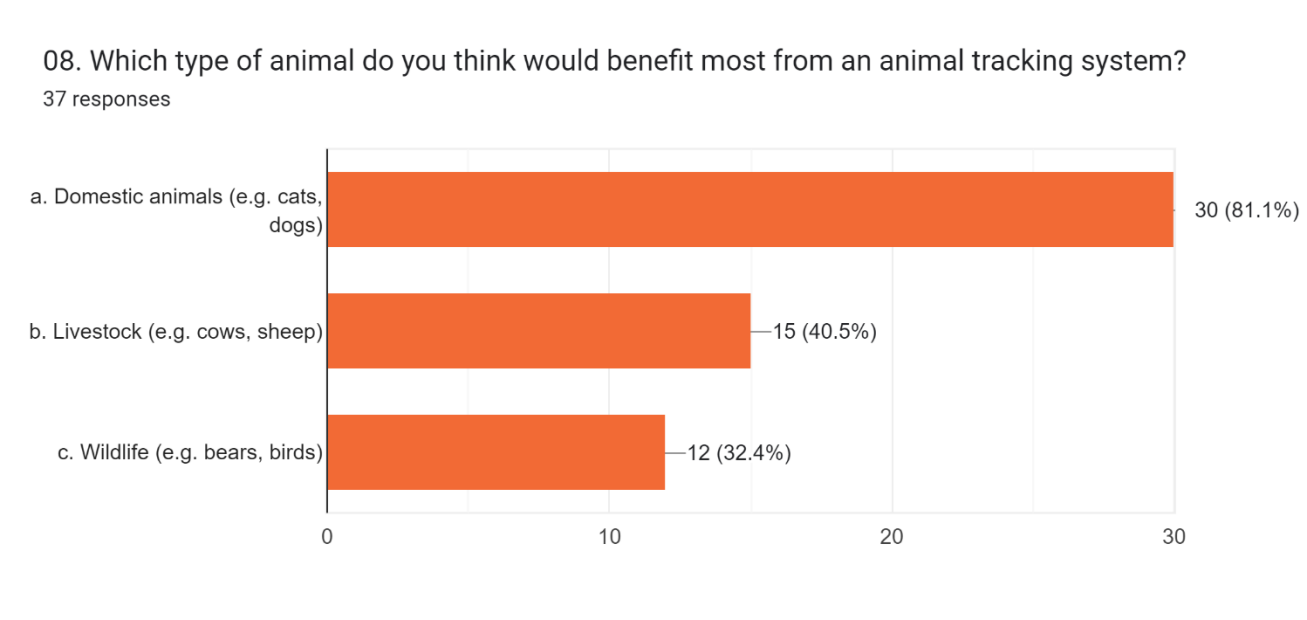


Figure 43: Result about most benefit type of animals..

Most respondents show a preference for developing the app for domestic animals, with a smaller group interested in livestock and a lesser number focused on wildlife. This indicates a stronger connection and familiarity with pets and residential animals among the respondents. The interest in livestock suggests a desire to address farming and agricultural needs, while the limited interest in wildlife implies a relatively lower priority for addressing wildlife concerns. By recognizing these preferences, the research team can allocate resources, accordingly, emphasizing functionalities and content tailored to domestic animals and livestock. This understanding allows for the development of an app that aligns with the target audience's interests and provides valuable resources for domestic animal owners and individuals involved in livestock farming.

09. What information do you think should be tracked in an animal tracking system?

37 responses

Location

Health

Location and health

Location

Whereabouts the animal

Travel location

Online

Location, health, population

Ni idea

Animal's current location

Name of owner and contact. Location of animal

Age, weight, health tracking

Daily route pattern of the animal

Location Health

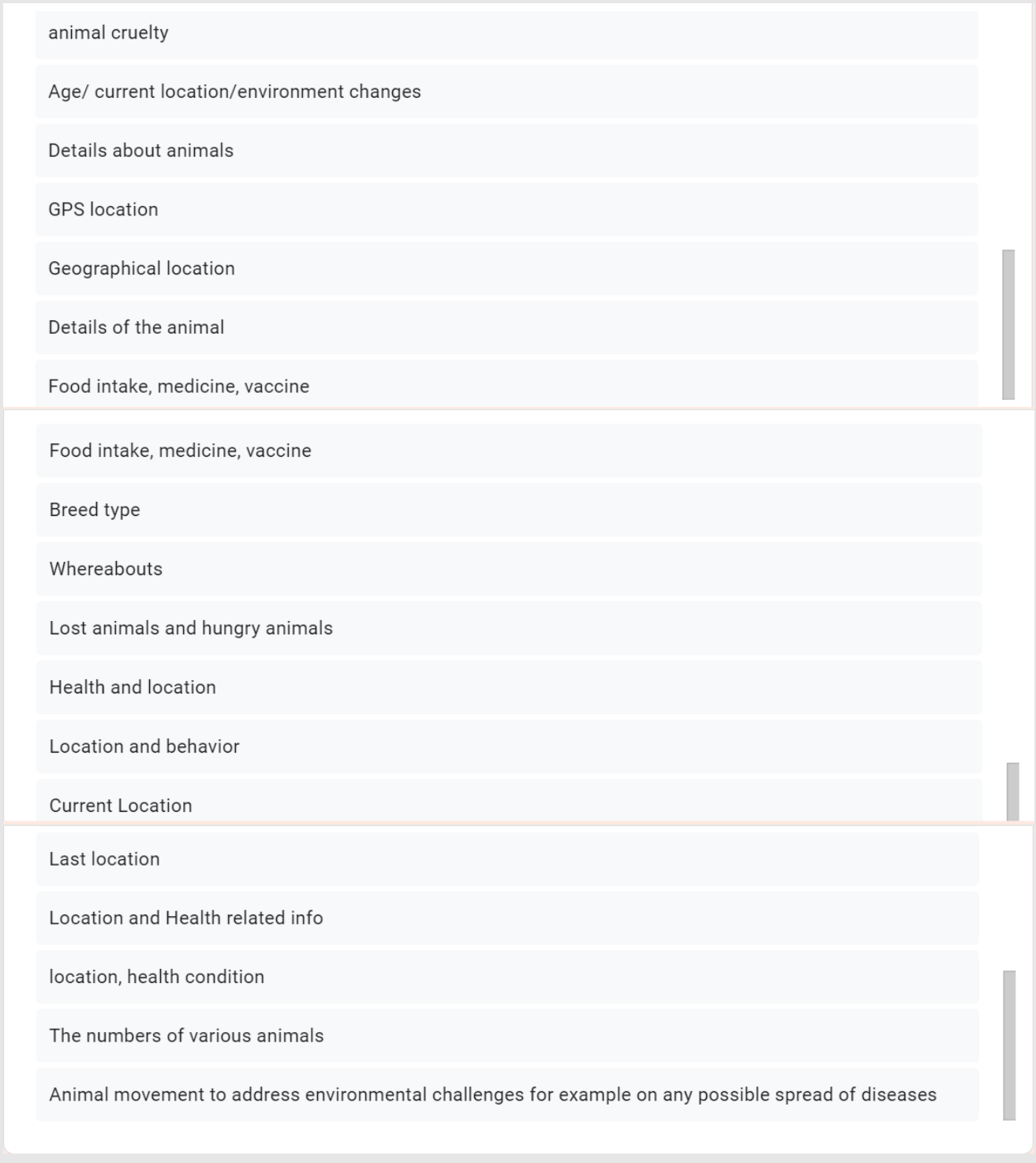


Figure 44: result about information about animal tracking system.

The question aimed to collect different perspectives on what should be tracked in an animal tracking system. The respondents provided various suggestions, including the last and current locations of the animal, its health status, the name of the owner and their contact numbers, the animal's age and weight, its daily route pattern, food intake, medication and vaccines, and movement patterns to address environmental challenges and potential disease spread.

The suggestions provided by the respondents offer valuable insights into the key data points and information that users believe should be tracked in an animal tracking system. These suggestions encompass a range of aspects, including the animal's location history, health-related information, ownership details, and relevant environmental factors.

By considering these suggestions, the research team can prioritize the development of features that address these tracking needs. This may involve incorporating GPS functionality for accurate location tracking, health monitoring features, data fields for owner information, and the ability to track and analyze movement patterns. It also highlights the importance of addressing environmental challenges and disease control measures within the tracking system.

By incorporating these suggested tracking elements into the animal tracking system, the research team can develop a comprehensive and user-oriented solution that meets the needs and expectations of the target audience.

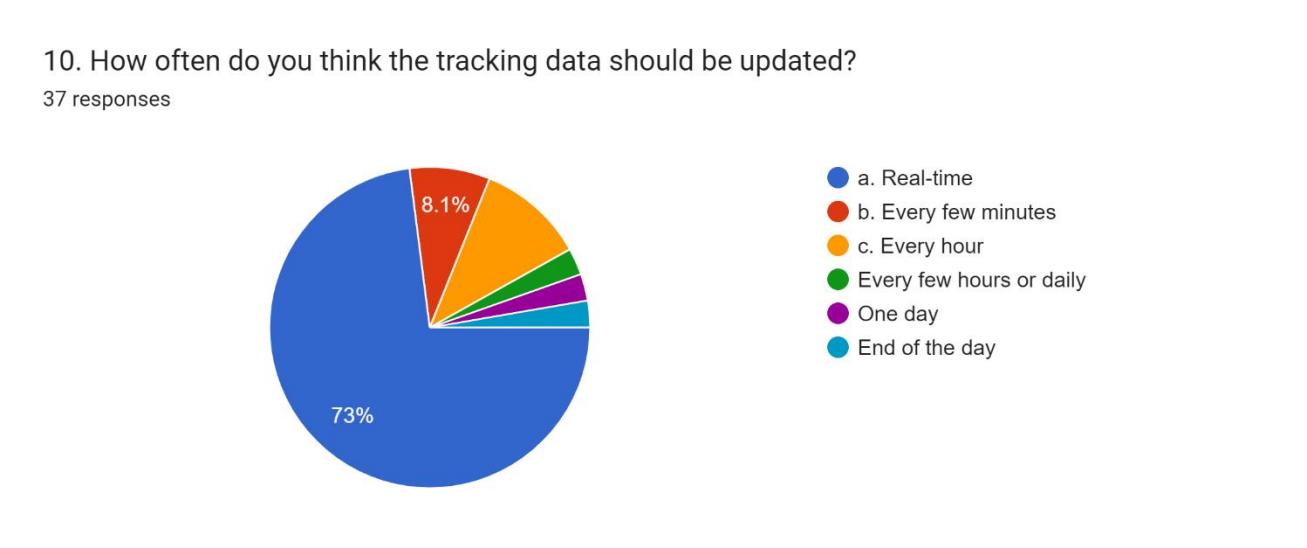


Figure 45: result about how often tracking data will updated.

The question indicates that most respondents prefer to update the tracking data at the end of the day, while a smaller group prefers more frequent updates every few minutes or every hour. The preference for end-of-day updates suggests a focus on comprehensive data review and patterns over time, while those desiring more frequent updates prioritize real-time monitoring and immediate access to animal location and activities. The research team can use this information to incorporate flexible options in the app, allowing users to choose their desired update frequency. This ensures a personalized user experience that accommodates both comprehensive daily updates and more frequent real-time monitoring based on user preferences.

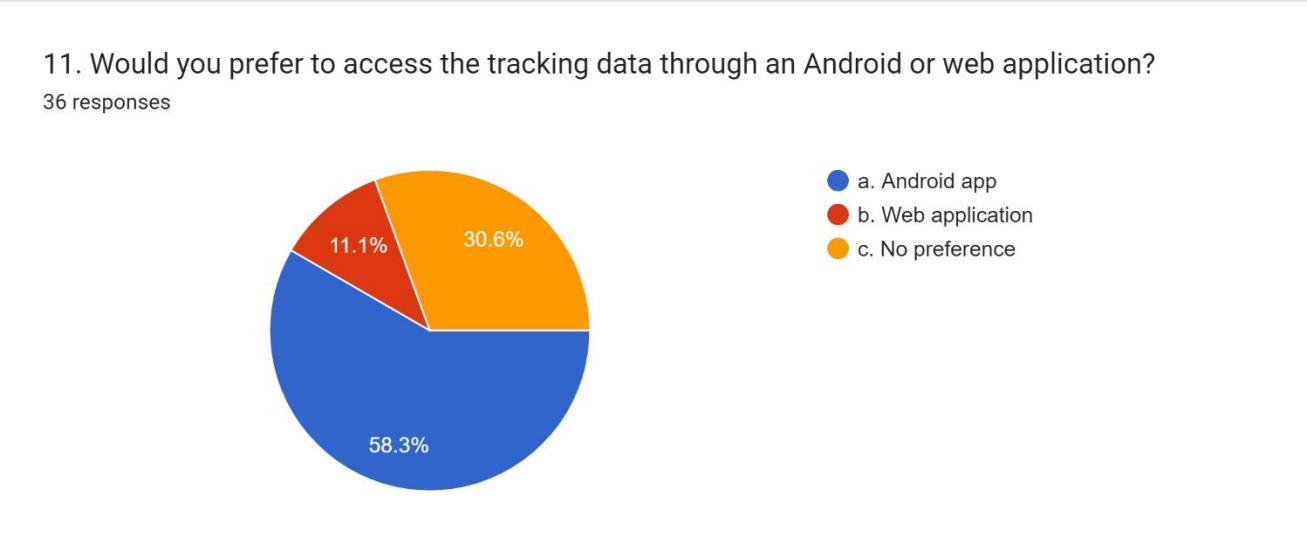


Figure 46: result about preferred applications.

This survey, most respondents, accounting for 58.3%, expressed a preference for accessing Android applications. On the other hand, 30.6% of respondents indicated no particular preference. Additionally, 11.1% of people showed a preference for accessing web applications.

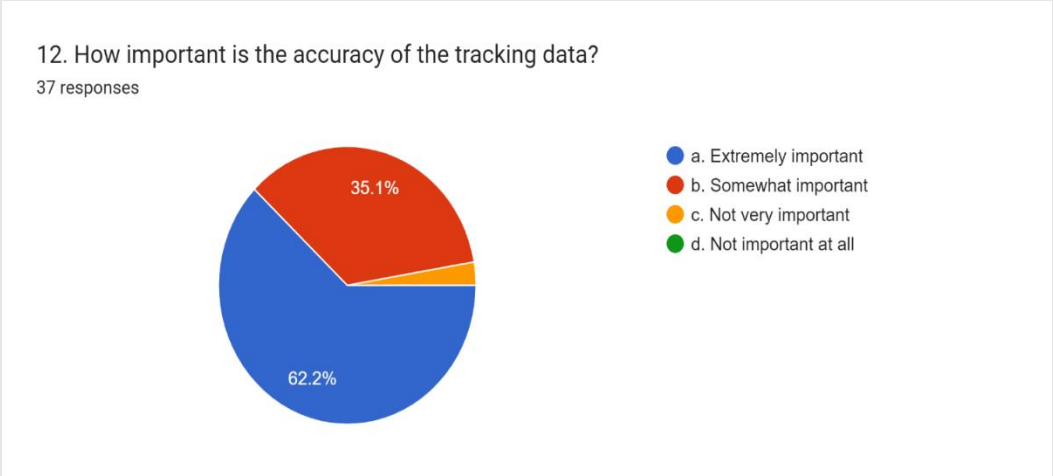


Figure 47: result about importance the accuracy of the tracking data.

In this survey, the findings reveal that 62.2% of respondents consider the accuracy of tracking data to be important. Furthermore, 35.1% of the remaining respondents indicated that the accuracy of tracking data is somewhat important.

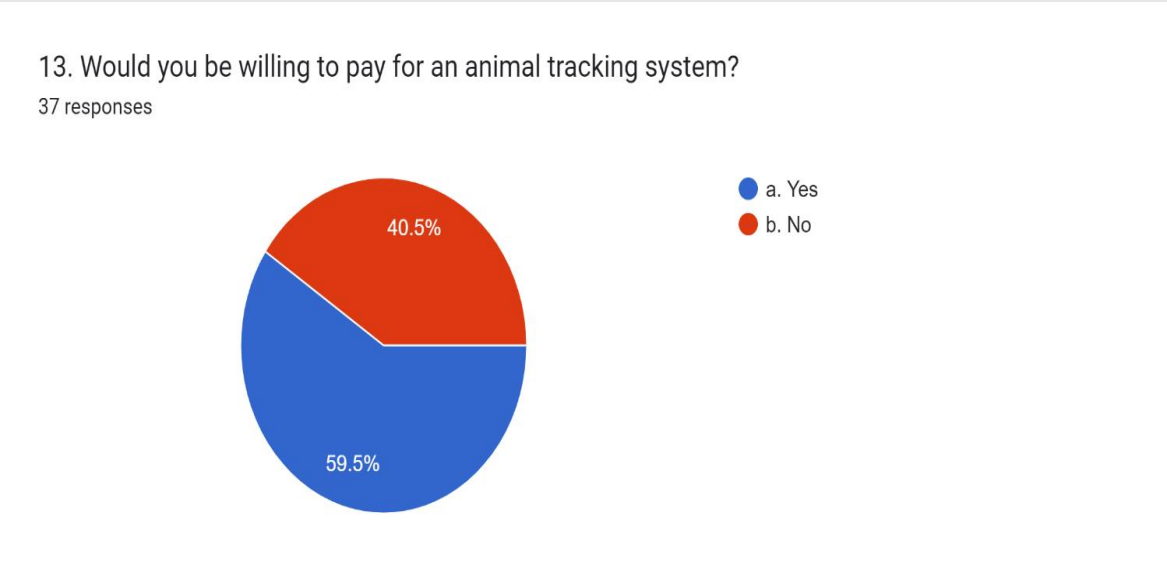


Figure 48: result about would you be willing to pay for an animal tracking system.

In this survey, it was found that 59.5% of respondents expressed their willingness to pay for an animal tracking system. These respondents acknowledged the usefulness of such an app for tracking homeless animals and those involved in accidents. On the other hand, 40.5% of the respondents indicated that they were not interested in paying for an animal tracking system.

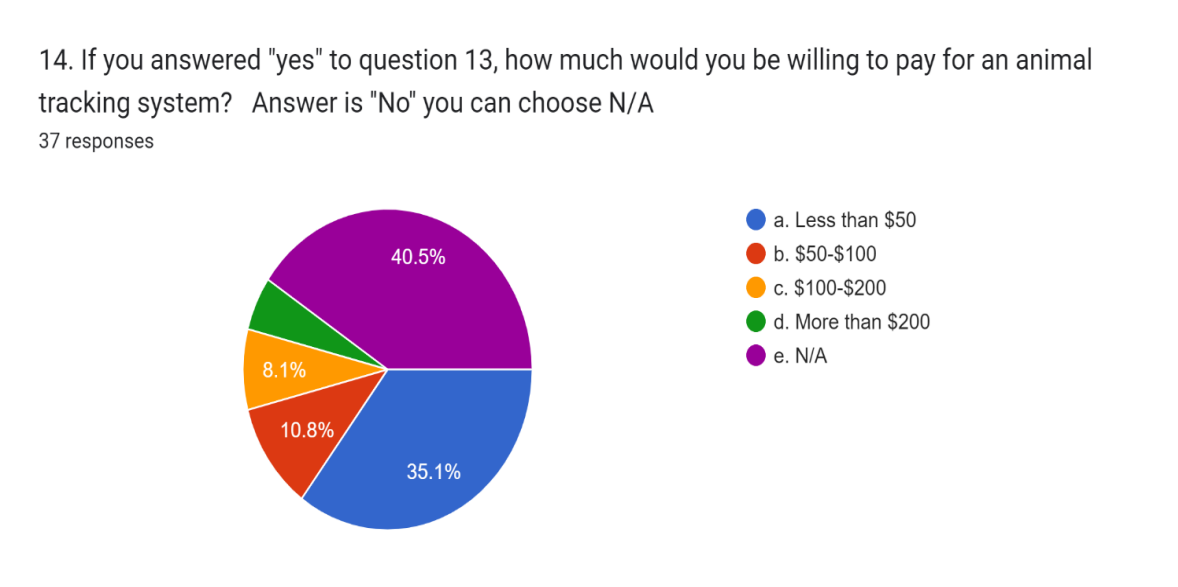


Figure 49: result about why selected yes on 13 questions.

In this survey, it was found that 35.1% of respondents are willing to pay less than $50 for an animal tracking system. Additionally, 10.8% of respondents indicated their willingness to pay between $50 and $100 for such a system. Furthermore, 8.1% of respondents expressed their readiness to pay

between $100 and $200 for an animal tracking system. However, the majority of people in the survey did not express a preference to pay any amount from the given price range for an animal tracking system.

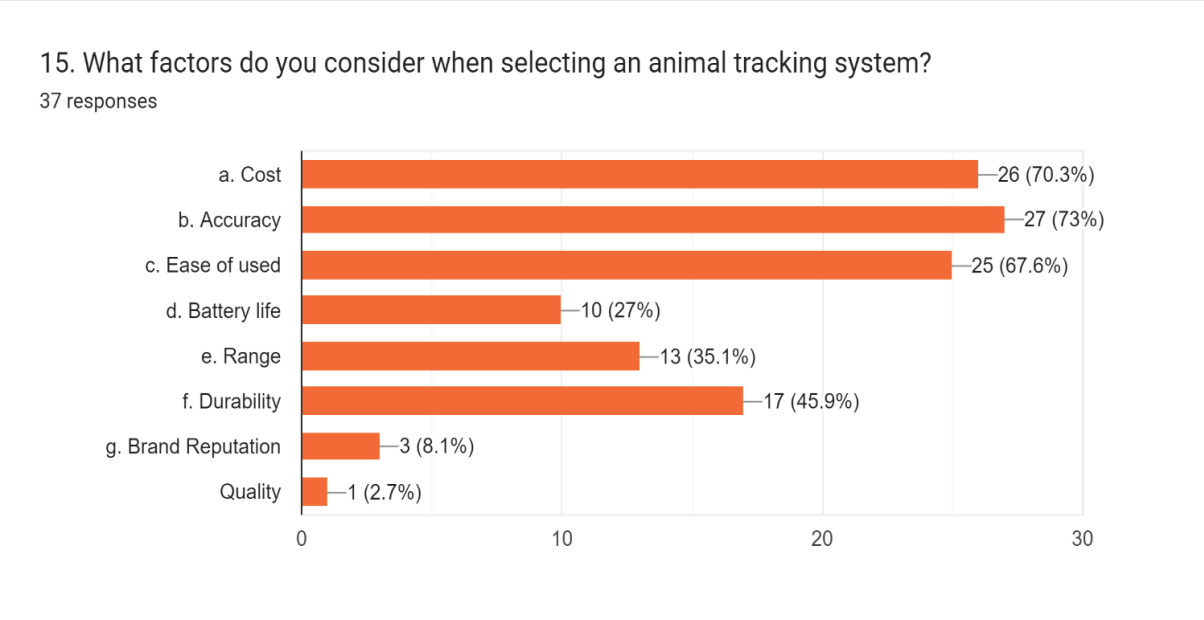


Figure 50: result about factors of selecting animal tracking system.

In this survey, respondents were asked to consider various factors when selecting an animal tracking system. The highest percentage of respondents, accounting for 73%, prioritized the factor of accuracy. The second most significant factor, chosen by 70.3% of respondents, was cost. Following that, 67.6% of respondents emphasized the importance of ease of use as the third factor. Durability was ranked fourth, with 45.9% of respondents considering it. The range factor ranked fifth, with a percentage of 35.1%. Additionally, 27% of respondents considered another factor as their fifth priority. Lastly, brand reputation was the sixth factor, selected by 8.1% of respondents.

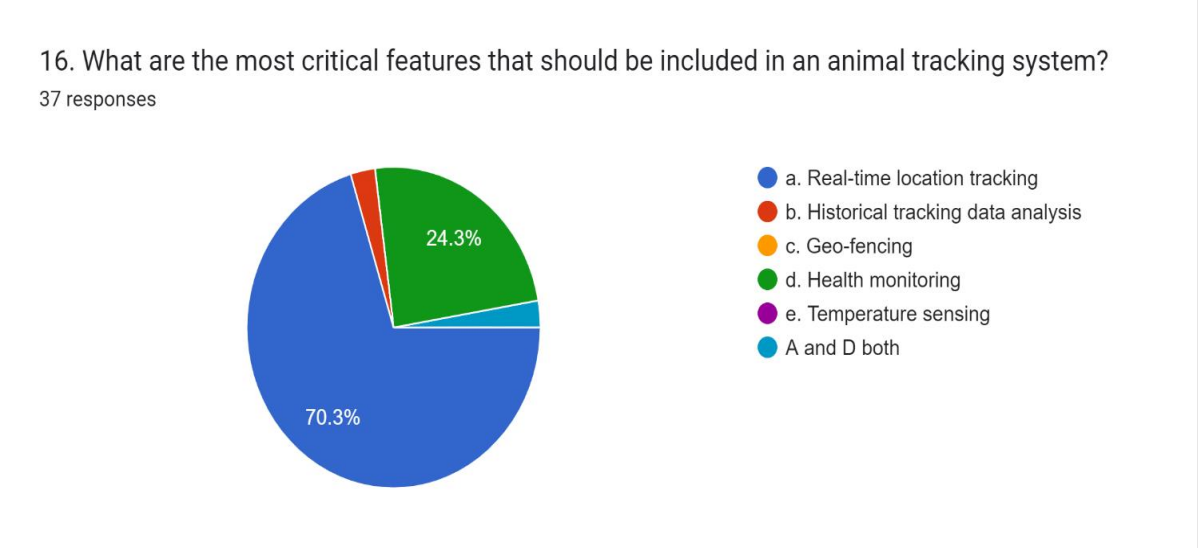


Figure 51: result about most critical features included of animal tracking system.

In this survey, participants were asked to identify the most critical features that an animal tracking system should include. The top-ranked feature, chosen by the majority of respondents, was real-time location tracking. The second most important feature, according to the respondents, was health monitoring. Finally, the third feature deemed crucial for an animal tracking system was the analysis of historical tracking data.

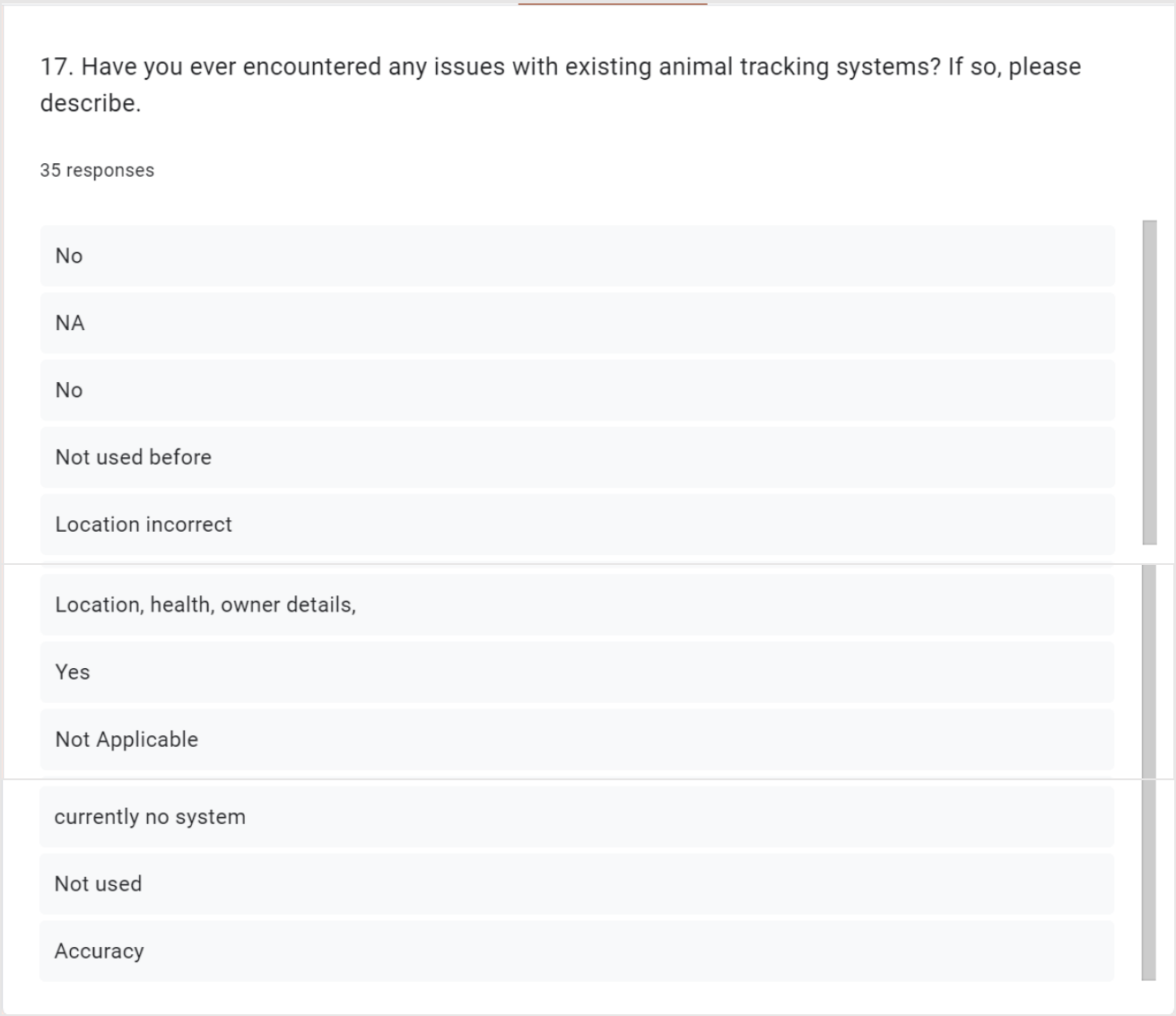


Figure 52: result about issues of the encountered any issues with existing animal tracking system.

In this survey, respondents were asked about any issues they encountered with existing animal tracking systems. Most respondents indicated that the issue was not applicable to them, meaning they did not encounter any problems. However, among those who did face issues, some mentioned problems with location inaccuracies. Others expressed a need for improvements in location tracking, health monitoring, and owner details within the existing systems.

18. Have you ever encountered an animal with special needs, and how did you accommodate them?

35 responses

- No
- NA
- Give them to animal shelters
- Direct them to a relevant authorised place
- Never
- Giving to the medicine or go to animal clinic
- Animal's owners
- Yes
- I treated
- Yes,give foods
- Never
- None
- Some times
- Take care them and provide them what they need

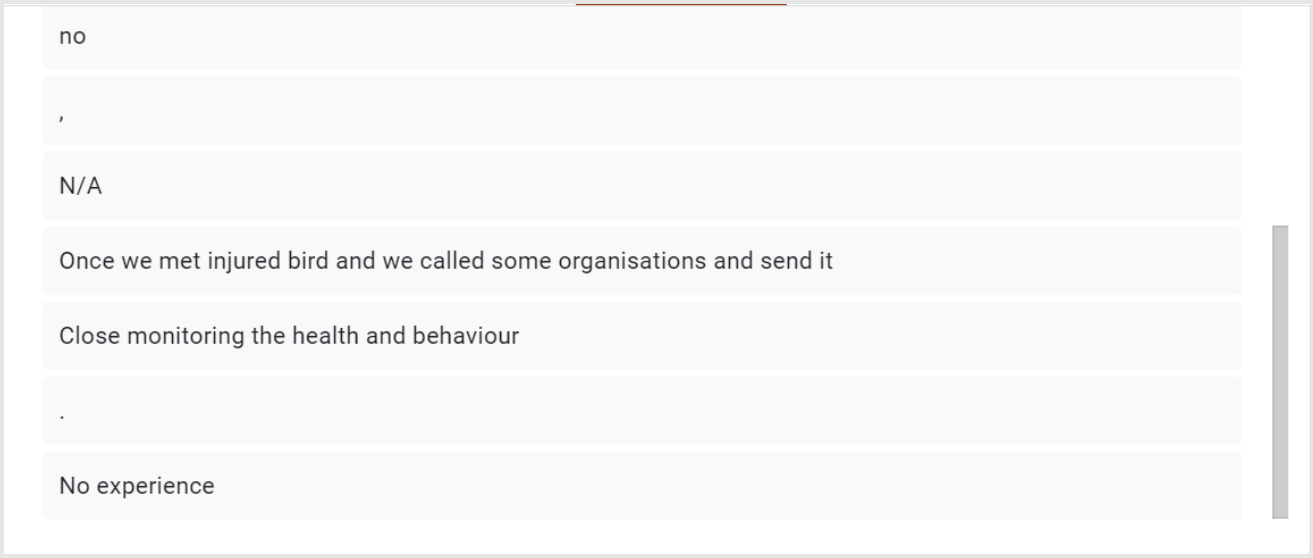


Figure 53: result about encountered an animal with special needs.

In this survey, respondents were asked about their experiences encountering animals with special needs and how they accommodated them. A total of 35 responders provided their answers. Some suggestions included giving the animal to a shelter, directing them to a relevant authorized place, providing necessary medicine or taking them to an animal clinic. Other respondents mentioned the importance of animal owners taking care of their needs, such as providing food and ensuring close monitoring of their health and behaviour. One person shared a personal experience where they encountered an injured bird and called relevant organizations to help and send it for proper care.

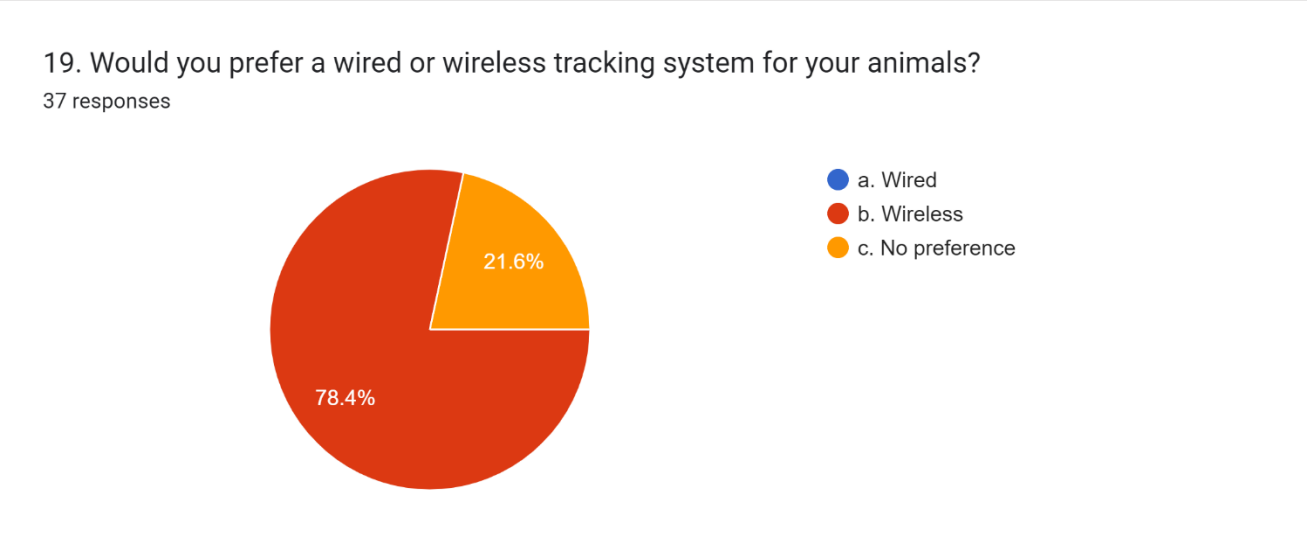


Figure 54: result about best wired or wireless tracking system for animals.

In this survey, most respondents, totalling 78.4%, expressed a preference for a wireless tracking system for their animals. Interestingly, there were no significant preferences for wired tracking systems. Additionally, 21.6% of the respondents indicated that they did not have a particular preference for either wireless or wired tracking systems.

20. What are your long-term career goals in the field of animal serving?

36 responses

NA

Not applicable

None

.

Fulfil animal needs

Not losing an animal

Social service

Health care

If i were to have a pet, I would like for them to always be healthy and well.

Social services

Easy to crack

Yes

Easy to crack

Yes

Animal protection

I want to feed the animals.

No

Protect animals

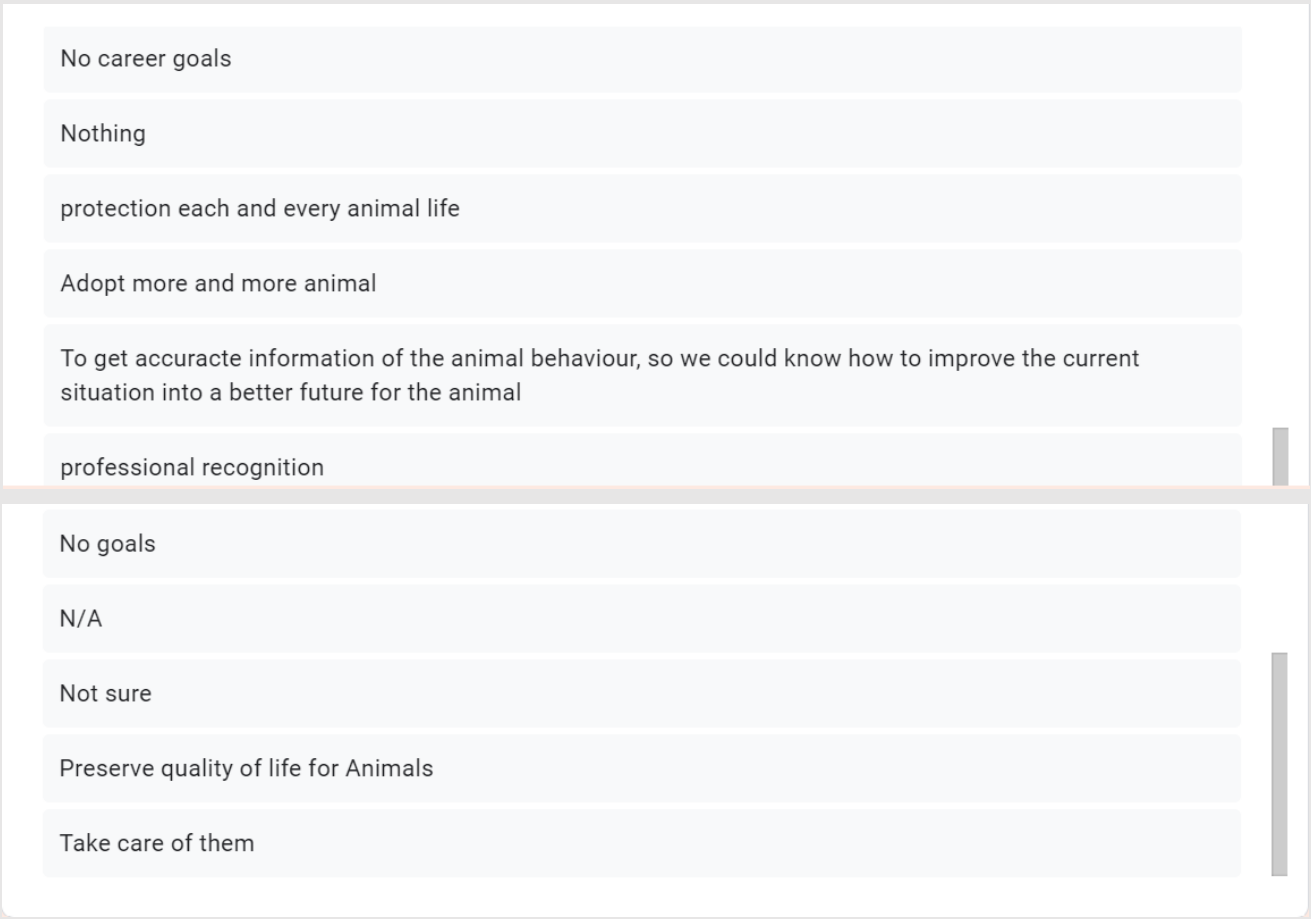


Figure 55: result about responders long term career goals.

In the final question of the survey, respondents shared their diverse long-term career goals in the field of animal service. These goals include fulfilling animal needs, engaging in social service, providing healthcare, ensuring animal protection, feeding animals, improving the health and well-being of animals, adopting more animals, seeking professional recognition, preserving the quality of life for animals, and obtaining accurate information about animal behaviour to enhance their current situation and create a better future for them. Some respondents did not specify any specific career goals in this field.

5.2 Conclusion of Primary data analysis

The animal tracking system comprises three key components: a mobile app utilized by the community, a separate mobile app specifically designed for authorized personnel at Shelter-Me, and a web portal that serves as a comprehensive database for all information pertaining to rescued street animals. All the data collected will be centralized and managed through a web server.

Our development objectives include creating a mobile app that allows users to make rescue requests, offer foster care for street animals, make donations, and sponsor street animals. Additionally, we aim to develop a web portal exclusively for the Shelter-Me organization, encompassing all relevant data on rescue operations, hospitalization, and adoption. This web portal will also include a dedicated section for monitoring ongoing rescue requests.

5.3 Features that reflect user reviews.

1. The community's mobile application supports their cause by offering various functionalities:

- Requesting assistance for rescued animals
- Fostering street animals
- Making donations
- Sponsoring street animals

2. When submitting a rescue request:

- User captures a photo of the animal in need.
- User provides a description of the current situation (e.g., accident)

3. The app uses device location services to determine the live location.

4. User can manually select the correct location from a map if needed.

5. Sponsors can track the progress of the animal they are supporting.

6. Users can donate to the organization dedicated to helping street animals.

7. The app facilitates animal adoption.

8. Once a animal is adopted, notifications are provided for treatment and medication schedules.

9. The Shelter-Me organization utilizes a web portal as a comprehensive data repository for:

- Rescue, hospitalization, and adoption processes

10. The web portal features:

- Dedicated section for ongoing rescue requests.
- Prioritization of requests based on case nature using text mining.
- Generation of reports summarizing handled cases and completed adoptions.
- Predictive analytics to forecast a animal's future health based on progress analysis.

11. The mobile application for authorized personnel tracks rescue locations and provides real-time updates on-site.

5.4 Software Requirements Specification

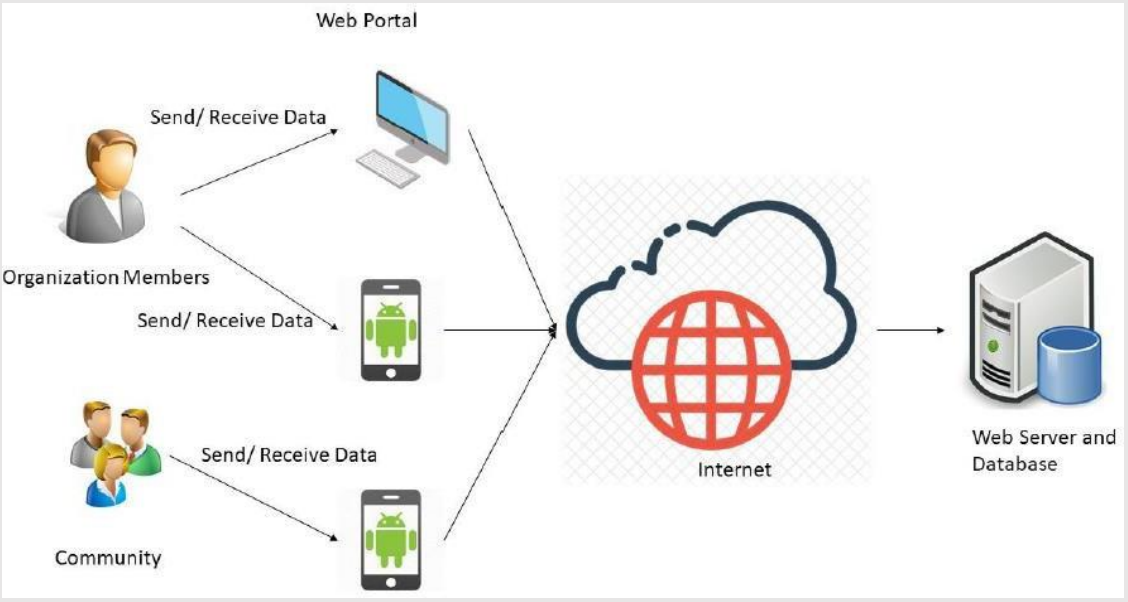
5.4.1 Functional Requirements

1. Shelter Management Administrator
   • The shelter management administrator should have the capability to log in and register within the system.
   • The shelter management administrator should have the authority to Add, Edit, Delete, View, Search, and Print detailed information about animals.
   • The shelter management administrator should have the ability to analyze data for future perspectives.

2. Canine Medical Center
   • Users of the canine medical center should be able to log in and register within the system. • The canine medical center should have the capability to add information regarding the animals admitted to their facility.
   • The canine medical center should have access to view the complete history details of a animal.

3. Android App Users (Animal Lovers)
   • Users of the Android app should be able to log in and register within the system.
   • Users of the Android app should be able to provide information about street animals.
   • Users of the Android app should have the ability to view details about puppies and animals.

- Function 1



System Administration:

• The system administration team is responsible for managing the central database, and the administrator has full access to all system functions. The administrator can also assign different levels of access and user roles to other users.

Data Archival and Retention:

• A web service is utilized to facilitate the transmission of data between the server and users. System users have the capability to configure data backups and schedule daily backups to ensure data retention.

User Profiles, Roles, and Privileges:

• Administrator: The administrator has the privilege to Add, Edit, Delete, View, analyze, Search, and Print detailed information about animals.

• Normal user: the user can add animals details and location will automatically coming to the details filed.

• Users (Android App): Users of the Android app have the privilege to send information about street animals.

5.4.2 Non-functional Requirements

Performance and Load Requirements

Current User Load	**Around 1000**
Expected Growth	**10000 or more**
Number of concurrent users	**500**
Transaction Size (files sizes etc.)	**1Kb**
Maximum Average Transaction TimeAcceptable	**2Sec**

Table 5: performance & load requirements

Compatibility Requirements

NoSQL Versions to be supported	**Mongo DB**
Browser Versions to be supported	**Any browser which supported java Script**
Database Versions to be supported	**Mongo DB 6.0.6 version**
Communication Protocol	**TCP/IP**
Platform Version to be supported	**Android**

Table 6: Compatibility Requirements

User Manual:

A comprehensive guide that provides instructions on how to effectively use the system.

• Help Desk: Documentation that includes contact information and resources for users to seek assistance and support.

• Installation Manual: A detailed guide that outlines the step-by-step process for installing and setting up the system.

Purchased Components:

• To track the animal, a GPS locator or a suitable Android mobile phone must be purchased.

• A Virtual Private Server is also required.

5.4.3 Technical Requirements

The development environment has the following requirements for the operating environment.

• An online cloud-based server.

• The Android platform.

Certification Requirements: No certification is necessary.

5.4.4 External Interface Requirements:

- To host the servlet container, the system necessitates a dedicated server.
- Accessing the server requires a static IP address.
- A cloud application is essential to handle the system load and implement load balancing effectively.

5.4.5 Security and Authentication Requirements:

Data Storage Security: The system employs a customized encryption method that guarantees the secure storage of data collected from devices. The database ensures that third parties cannot access the stored data. Additionally, the database incorporates various user levels to control data access.

Administrator: An administrator-level user possesses complete access to the entire database. They have the authority to delete, enter, or modify any data within the database.

Moderator: A moderator-level user has limited access to specific components within the database. They can view, delete, and modify selected data.

User: Users with user-level access have restricted permissions within the database. Typically, they are only able to view and write location data into the database.

6. Chapter 6: Design

6.1 Diagrams for the Reminiscence app

6.1.1 Use Case Diagram

A use case diagram is a visual representation that depicts the functionality of a system by showcasing different use cases, each representing a distinct interaction between users and the system. These use cases are designed to break down the system's behaviour into discrete transactions, each fulfilling a specific user need or goal. The users involved in these interactions are represented as "actors," which represent the roles they play in relation to the system. In this scenario, the identified actors are the administrator, user, and guest.

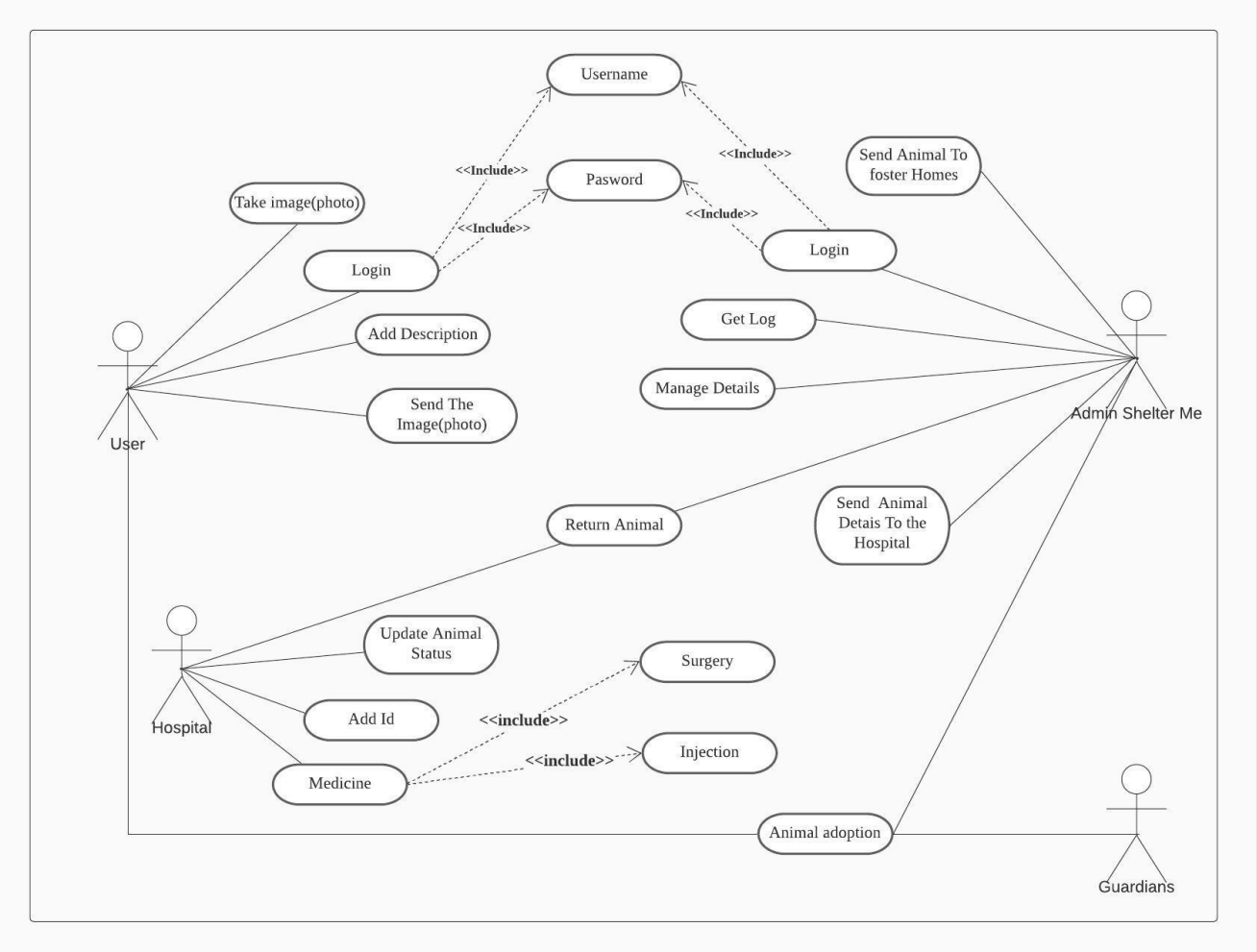


Figure 56: Use case.

The system's functionality is depicted through various use cases, which represent different ways users can interact with the system. These use cases help organize and categorize the system's behaviour into distinct transactions, each of which fulfils a specific action from the user's perspective. Actors, on the other hand, represent the roles played by users in relation to the system. In this context, the chosen actors are the administrator, user, and guest, signifying the different roles and privileges each user type possesses within the system.

6.1.2 Activity Diagram

Activity Diagram

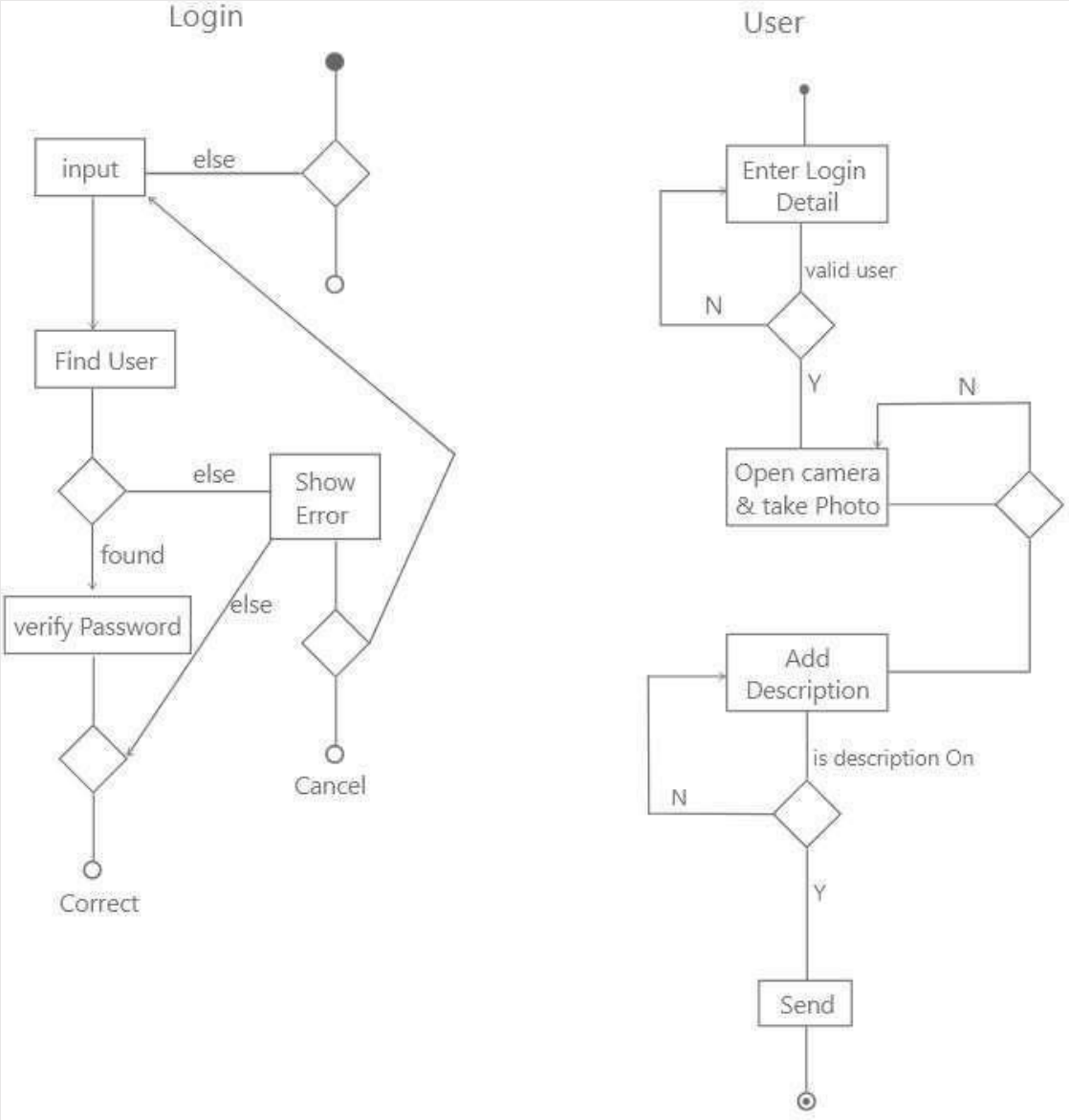


Figure 57: Activity Diagram.

6.1.3 Sequence Diagram

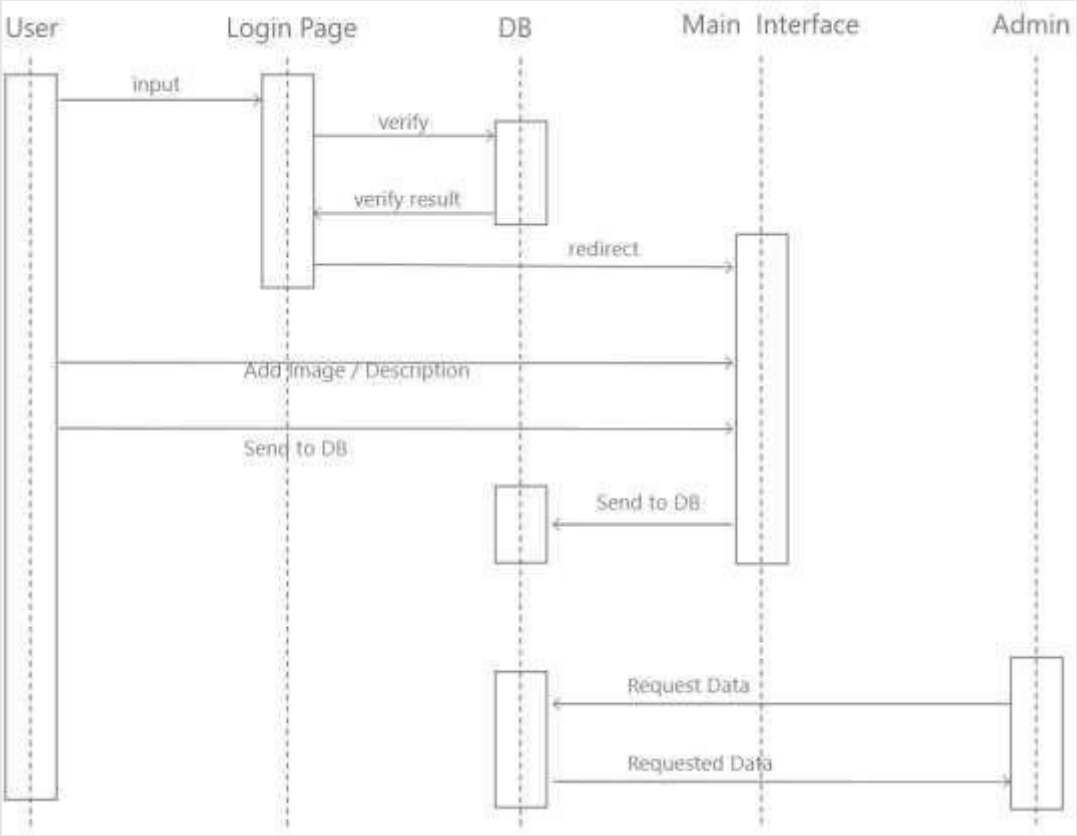


Figure 58: sequence Diagram.

6.1.4 Entity Class Diagram

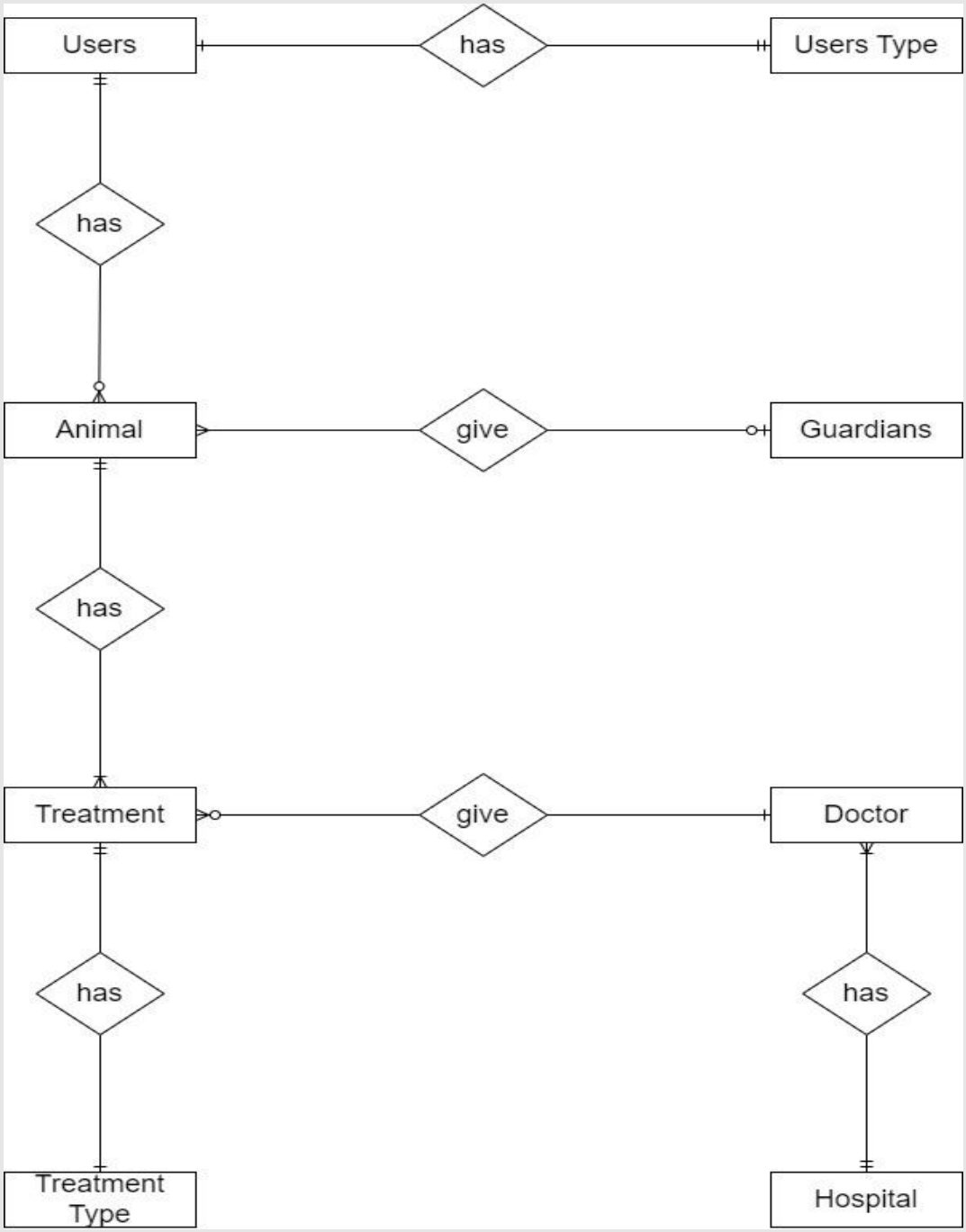


Figure 59: Entity Class Diagram.

6.2 Prototype

This project consists of three distinct sets of applications. The initial stages of the Recollection app prototype involved the creation of a Wireframe design. Allow me to present you with the wireframe for my mobile application.

6.2.1 Mobile App Wireframe

Figure: Wireframe for mobile application pages.

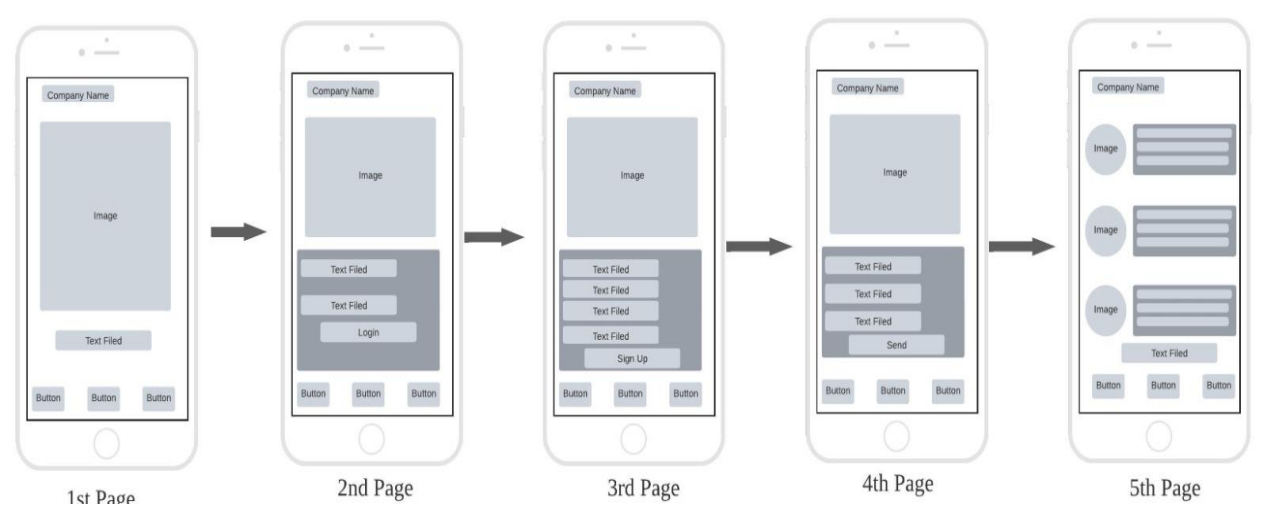


Figure 60: Mobile App wireframe.

The mobile application design includes a wireframe that serves as the blueprint for its front end. It encompasses five distinct pages, each serving a specific purpose. The first page is the home page, providing users with an overview of the application. The second page is dedicated to the login process, ensuring secure access for users. Moving on, the third page is the Sign-Up page, allowing new users to register for the application. The fourth page facilitates the addition of animals and files, providing detailed information for each entry. Finally, the fifth and last page consolidates all the details in a single, comprehensive view, offering users a convenient way to access and review the information briefly.

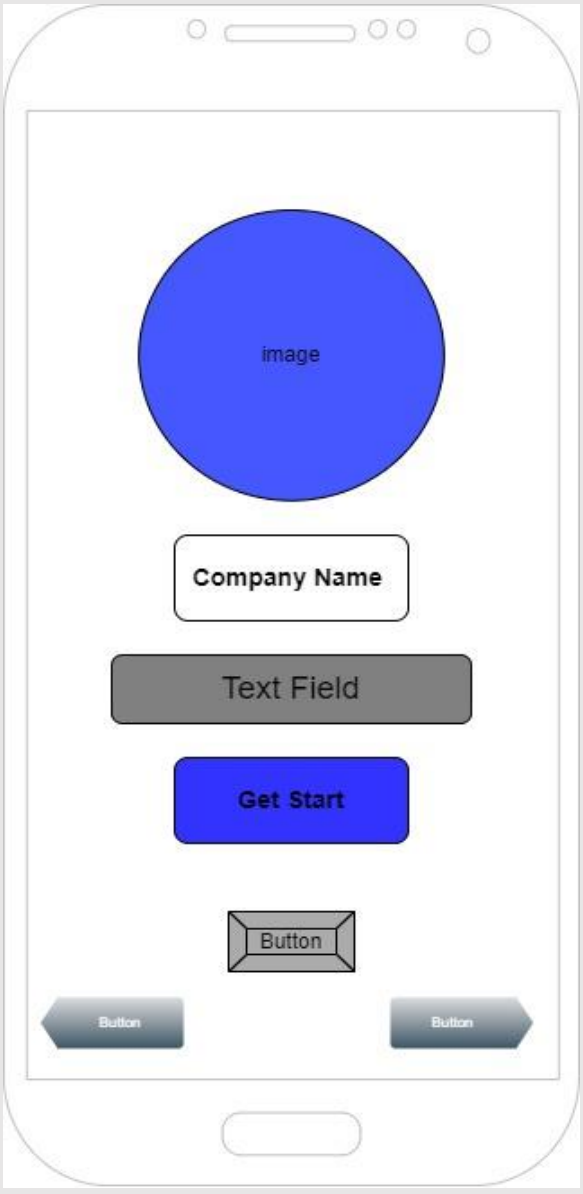


Figure 61: In this picture, the company's homepage is displayed, featuring a single button.

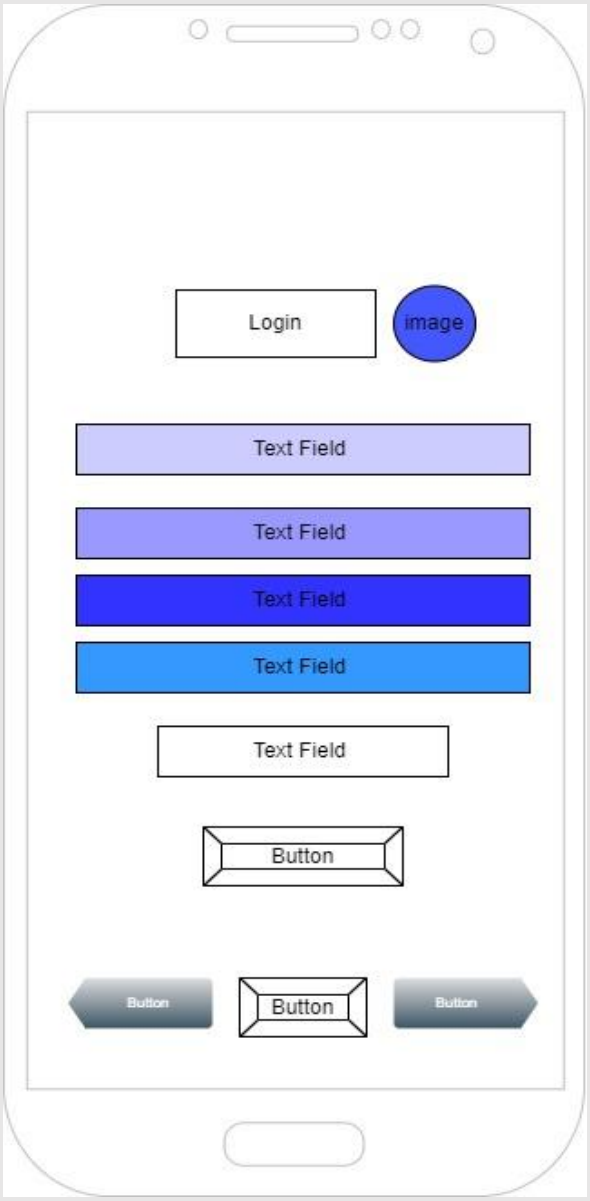


Figure 62: This picture illustrates the company's sign-up page.

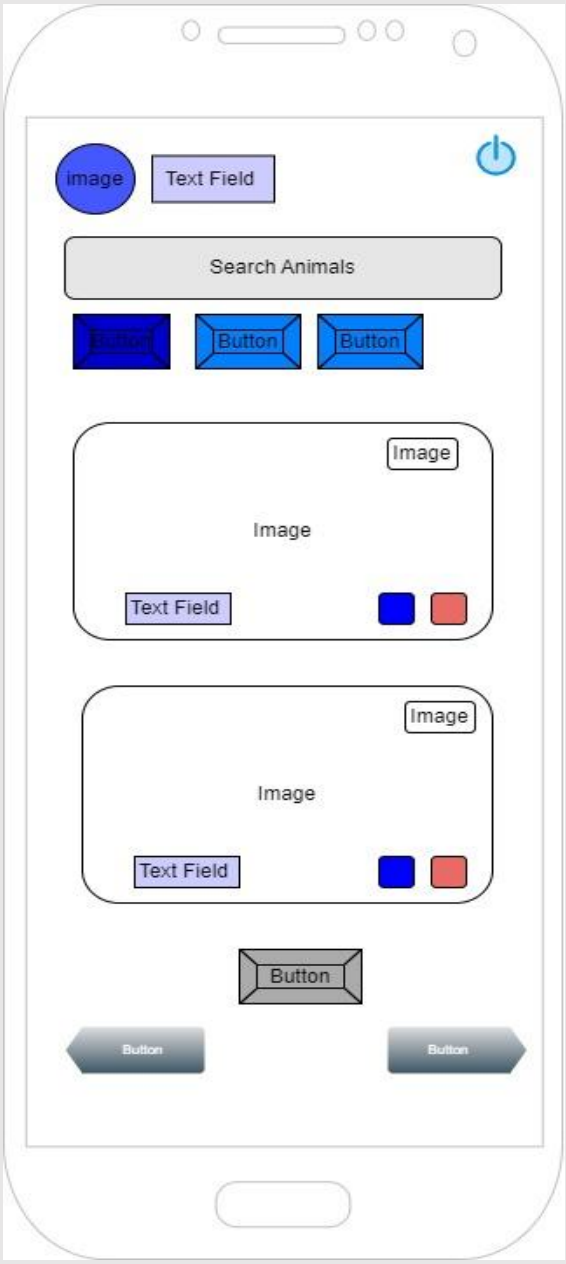


Figure 63: This picture illustrates the company's sign-up page.

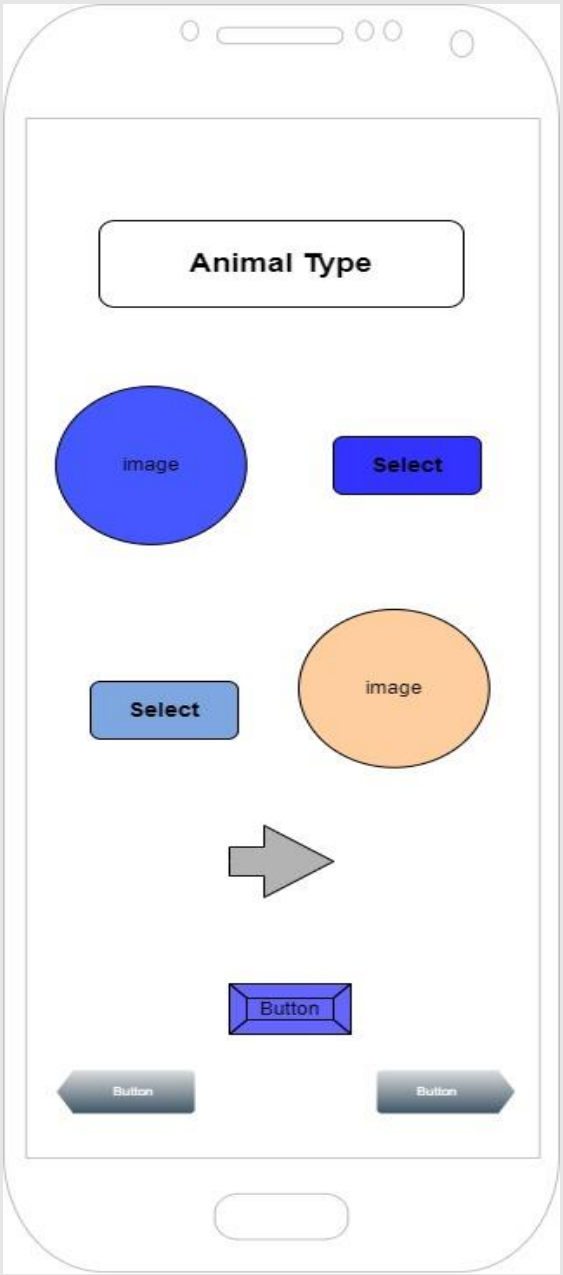


Figure 63: Add animal.

This picture showcases the company's page dedicated to adding animals.

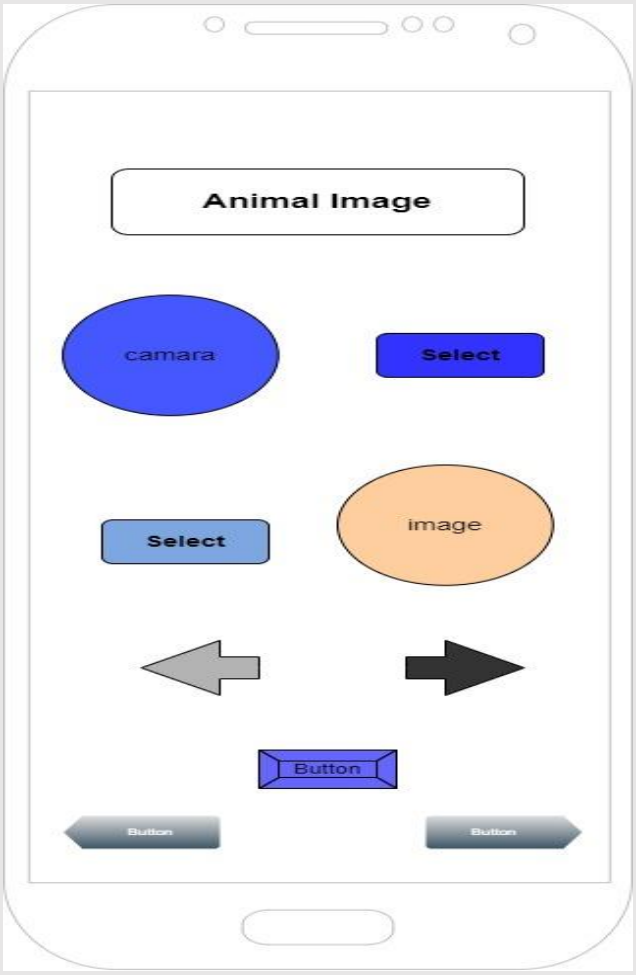


Figure 65: Animal image.

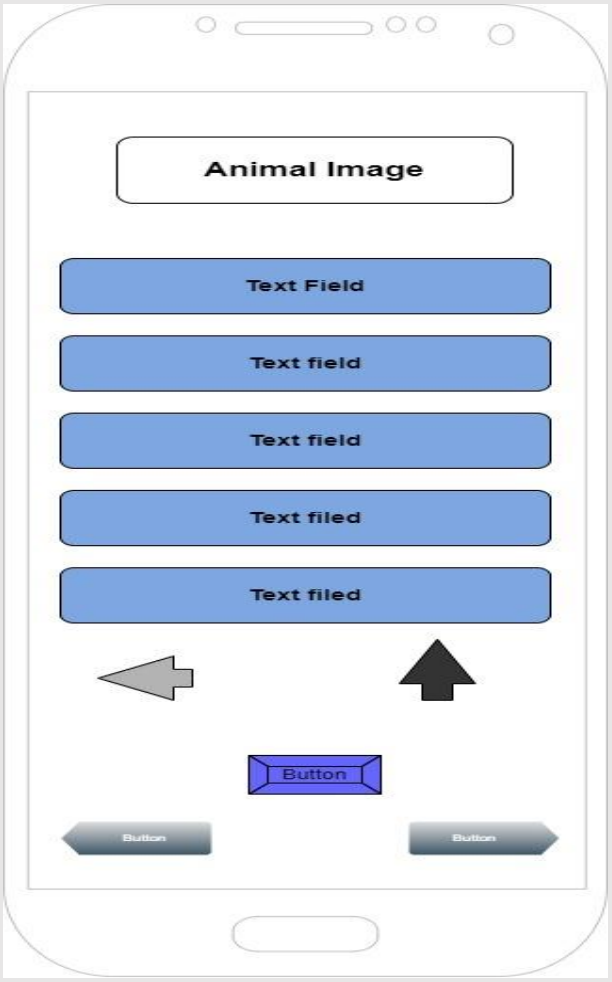


Figure 64: Details for animal.

In this picture, there is an option to add an animal image for the page. You have two choices available. The first option allows you to open the camera and capture a picture, while the second option allows you to select a picture from the gallery. Additionally, there are two arrows present that enable you to navigate through the pages, moving forward or backward.

In this picture, the animal details are displayed, providing information and relevant information about the animal being depicted.

7th Page of android

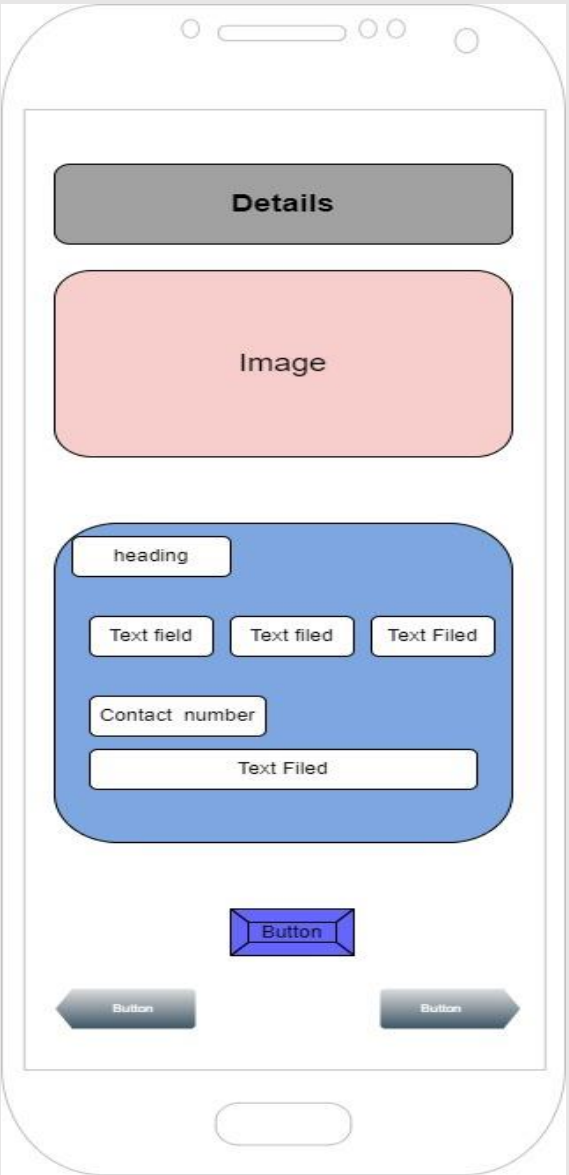


Figure 66: view animal details.

In this image, once an animal is added, you can view all the information and details pertaining to the newly added animal.

6.2.2 Website Wire Frame

Home Page

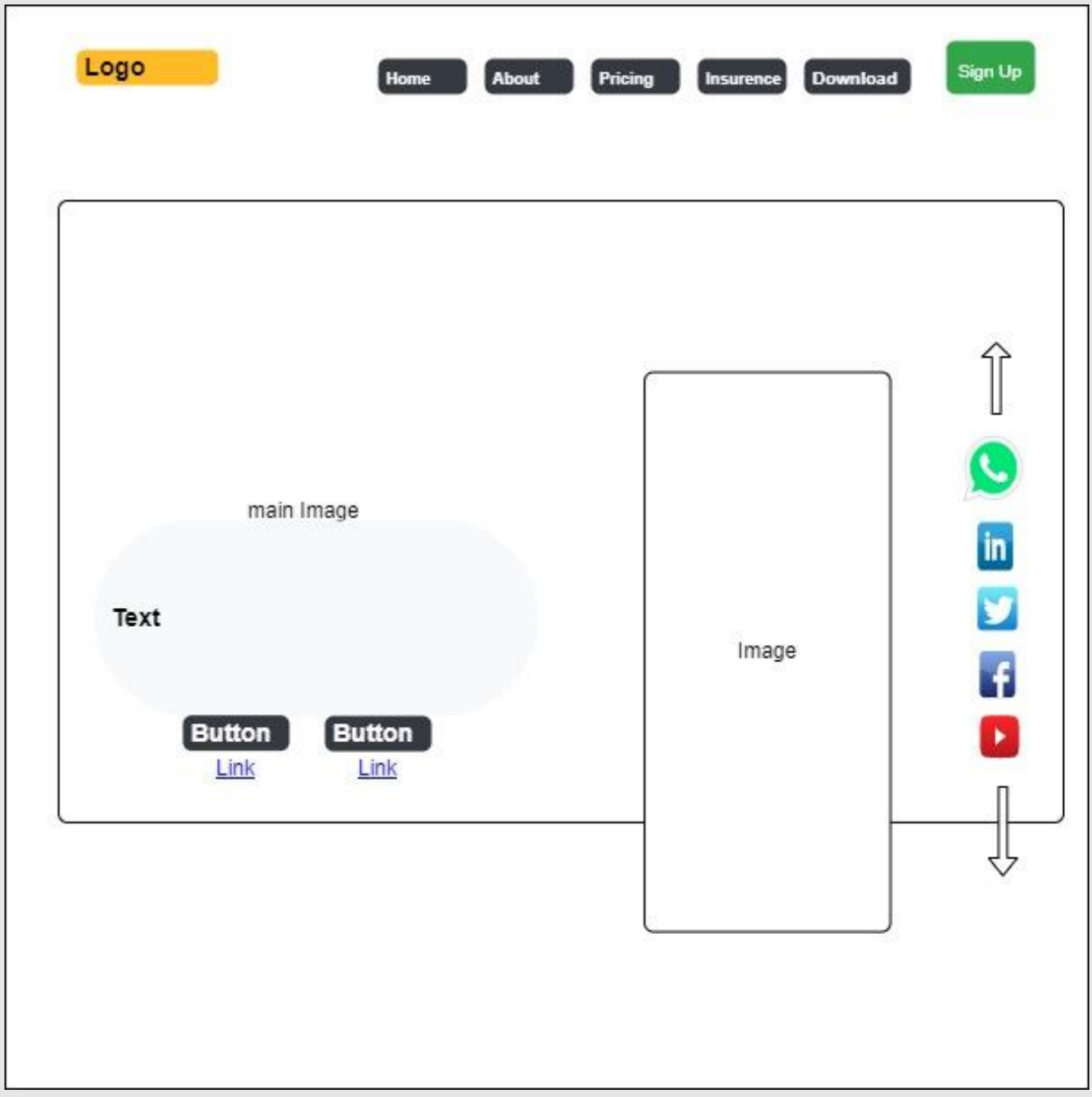


Figure 67: home page.

In this homepage, you will find six different pages available. These include the home, about, pricing, insurance, download, and sign-up pages. At the top of the page, there is a logo prominently displayed. Additionally, on the right-hand side of the homepage, you will find five social links.

About Page

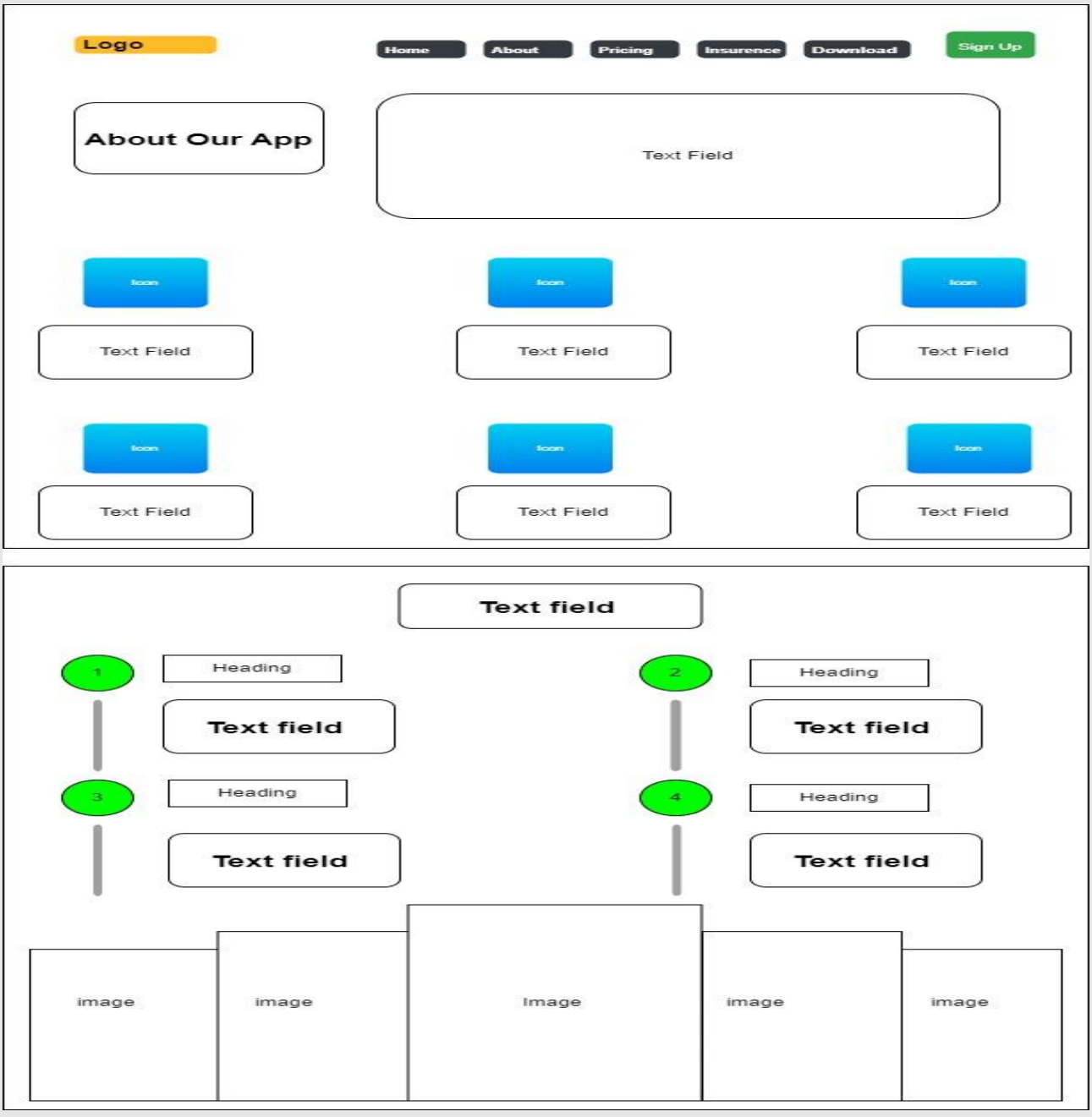


Figure 68: About page.

On this About page, you will discover six distinct pages that you can explore. These pages encompass the home, about, pricing, insurance, download, and sign-up sections. The page consists of six text fields where you can input and provide relevant information. On this About page, you will come across a heading and four text fields where you can input and provide information. Additionally, there are seven Android app pages displayed below on the page, showcasing the different sections and features of the app.

Pricing page

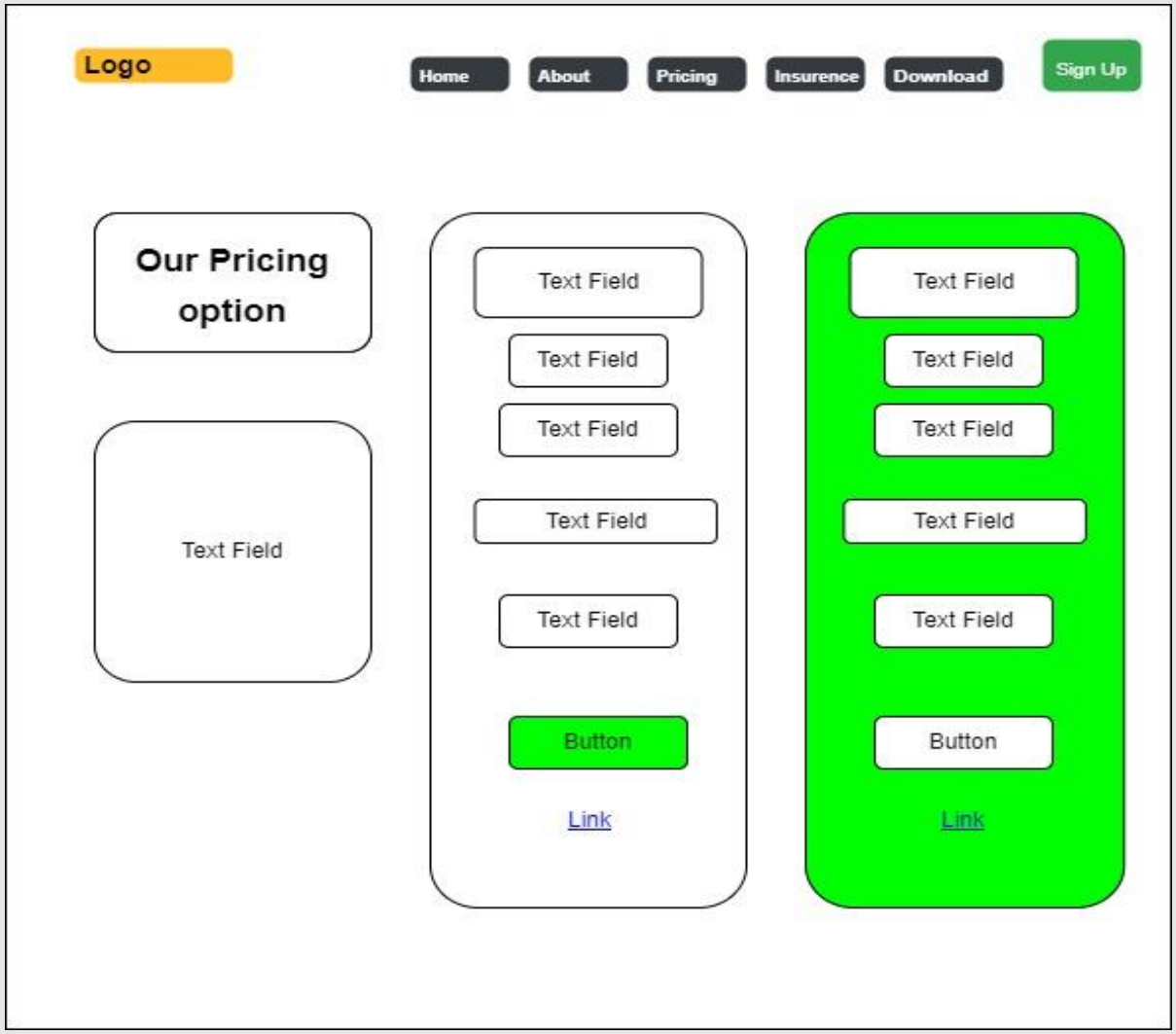


Figure 69: Pricing Page.

This is the pricing page, which consists of six different pages: home, about, pricing, insurance, download, and sign-up. The purpose of this app is to promote my mobile application. On the pricing page, there are two plans available for users to choose from.

Hospital Page 1st Page

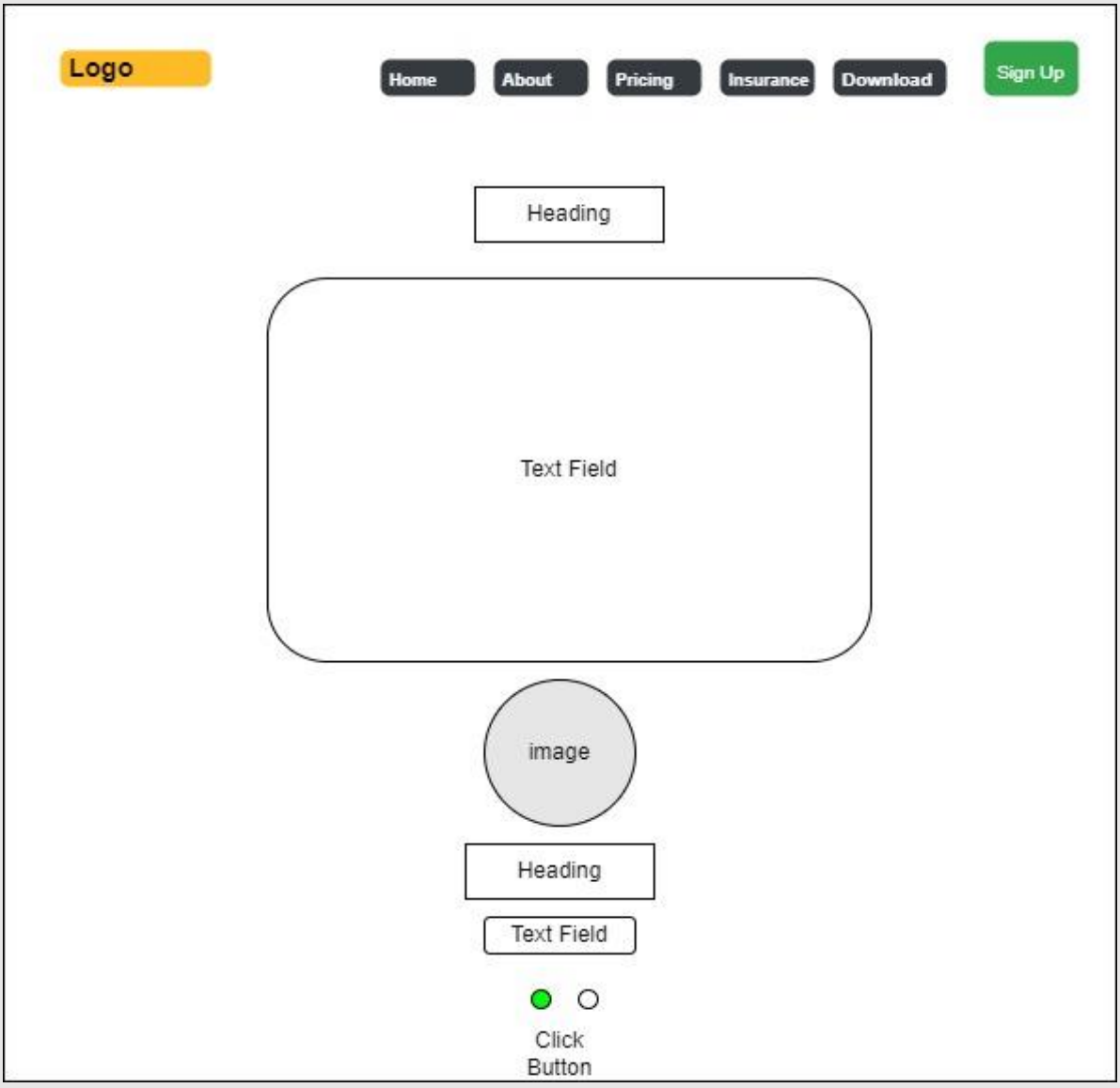


Figure 70: Hospital page.

This is the hospital page, which contains one smaller description. The hospitals featured on this page are New Hospital, Madu Emergency.

Hospital 2nd page

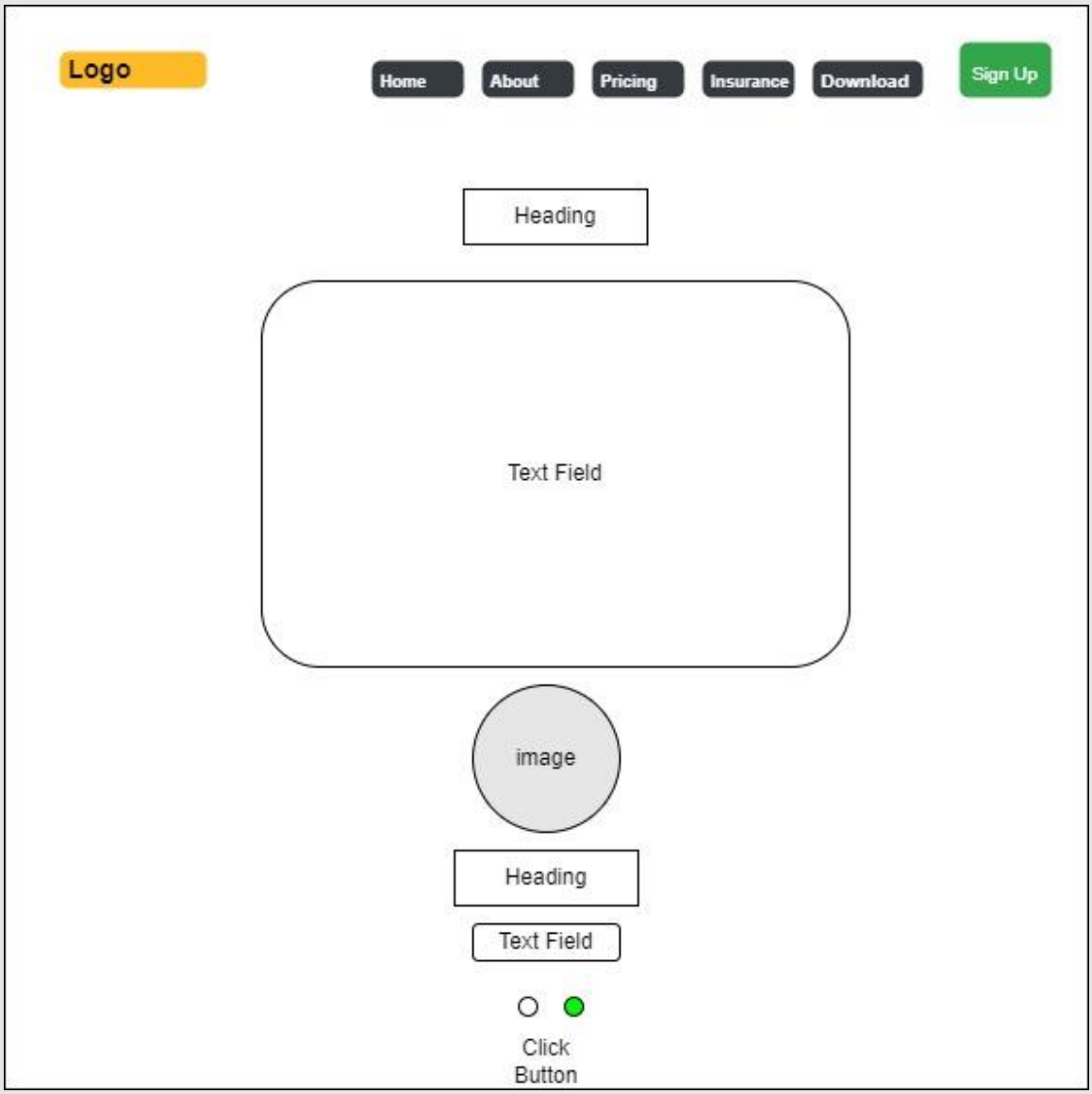


Figure 71: Hospital Page 2nd.

This is the hospital page, which contains two smaller descriptions. The hospitals featured on this page are New Hospital John Doe.

Insurance Page

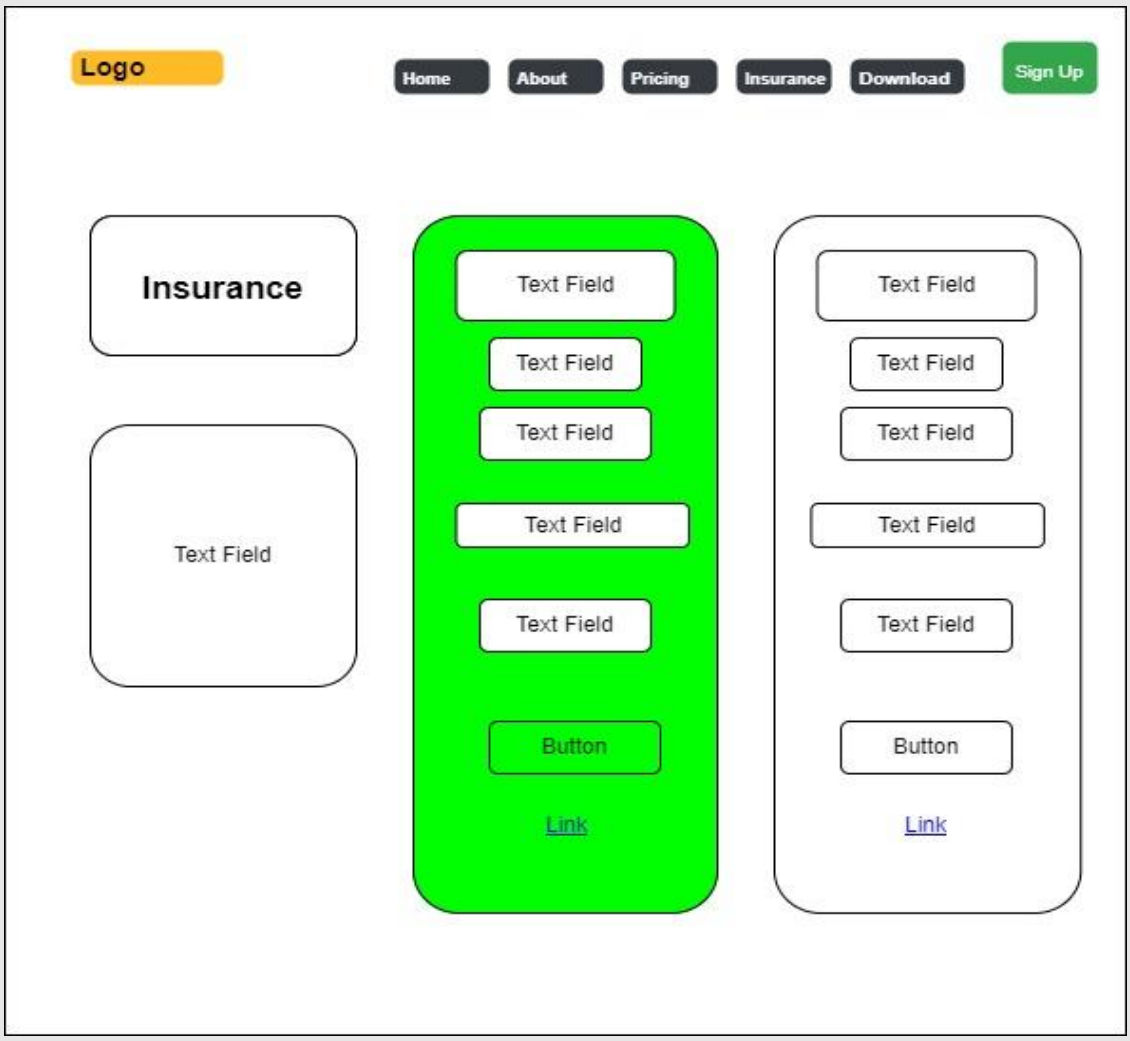


Figure 72: Insurance Page.

On this Insurance page, you will find a total of six pages: home, about, pricing, insurance, download, and sign-up. The page is adorned with a logo at the top. A comprehensive description of the insurance services is provided on the page. Additionally, there are two insurance plans available for users to choose from.

Download page.

Figure 73: download Page.

On this download page, you will find a total of six pages: home, about, pricing, insurance, download, and sign-up. The page features a prominent logo at the top. The heading and description of the download page are included, providing relevant information about the download process. Additionally, there are two images displayed along with corresponding links, offering further options for downloading content.

Footer Page

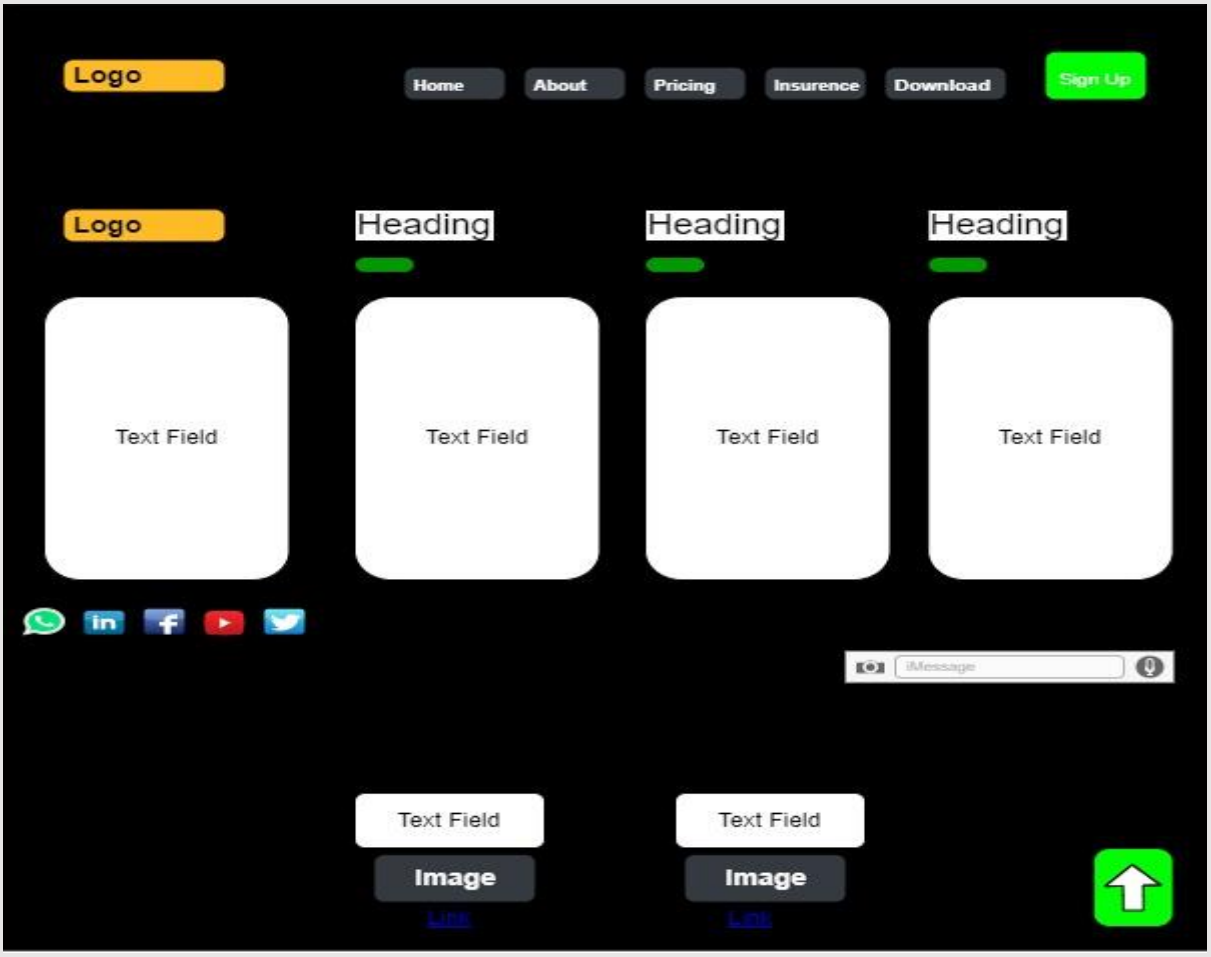


Figure 74: footer page.

On this footer page, you will find six pages available for navigation: home, about, pricing, insurance, download, and sign-up. The page includes a logo positioned at the top. Each field and heading on the footer page consist of four fields, providing relevant information and options. Additionally, there are five social links displayed on the footer page, allowing users to connect through various social media platforms. Towards the bottom of the page, there is an arrow button for navigation. Furthermore, the footer page contains two text fields, images, and a link, providing additional content and functionality.

Style home Page

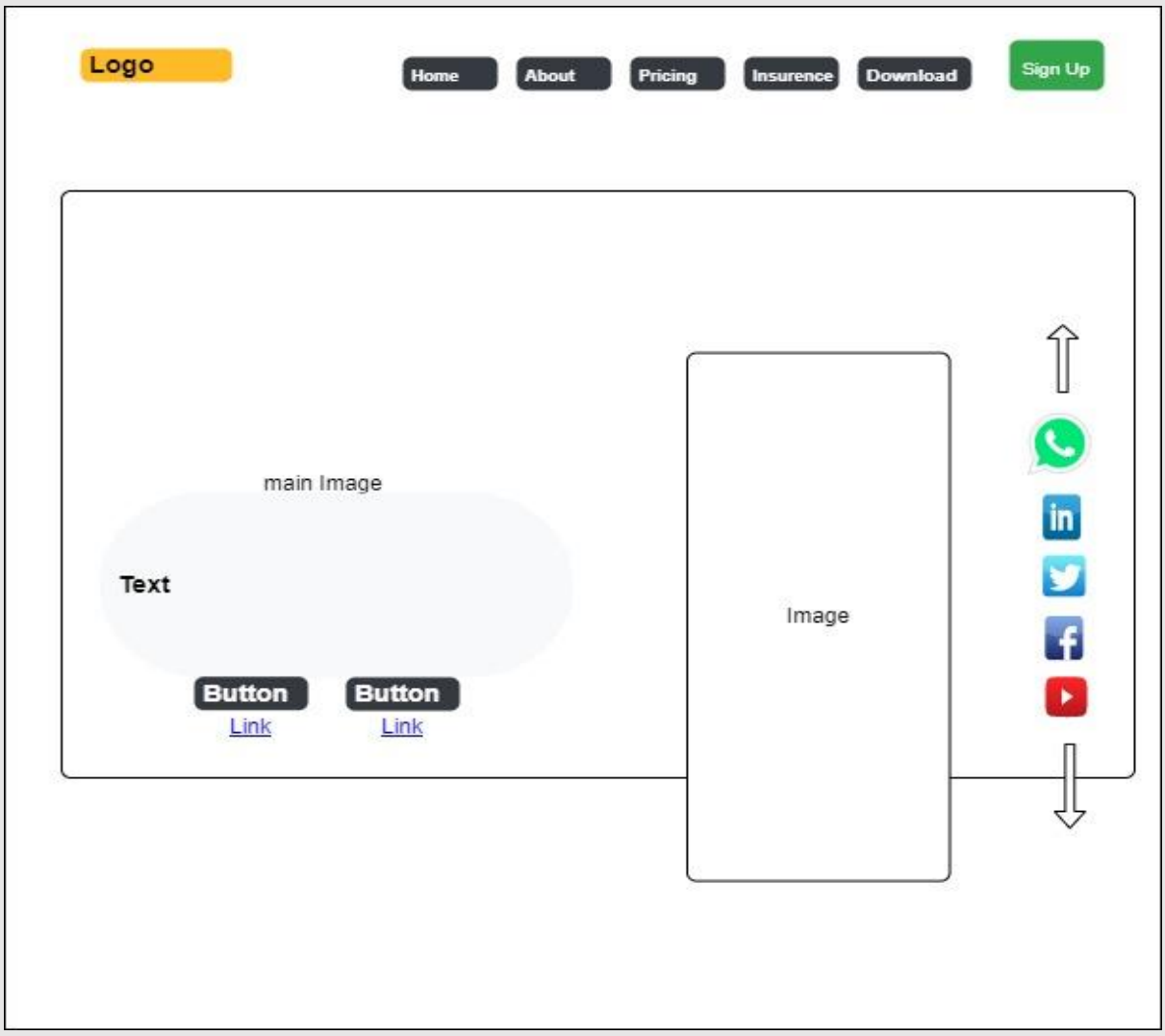


Figure 75 :Style Page.

Style Download Page

Figure: style for download page

Figure 76: Style download Page.

On this footer page, you will find six pages available for navigation: home, about, pricing, insurance, download, and sign-up. In top of the page there is heading, and text filed and 2 images and 2 links.

Footer Page

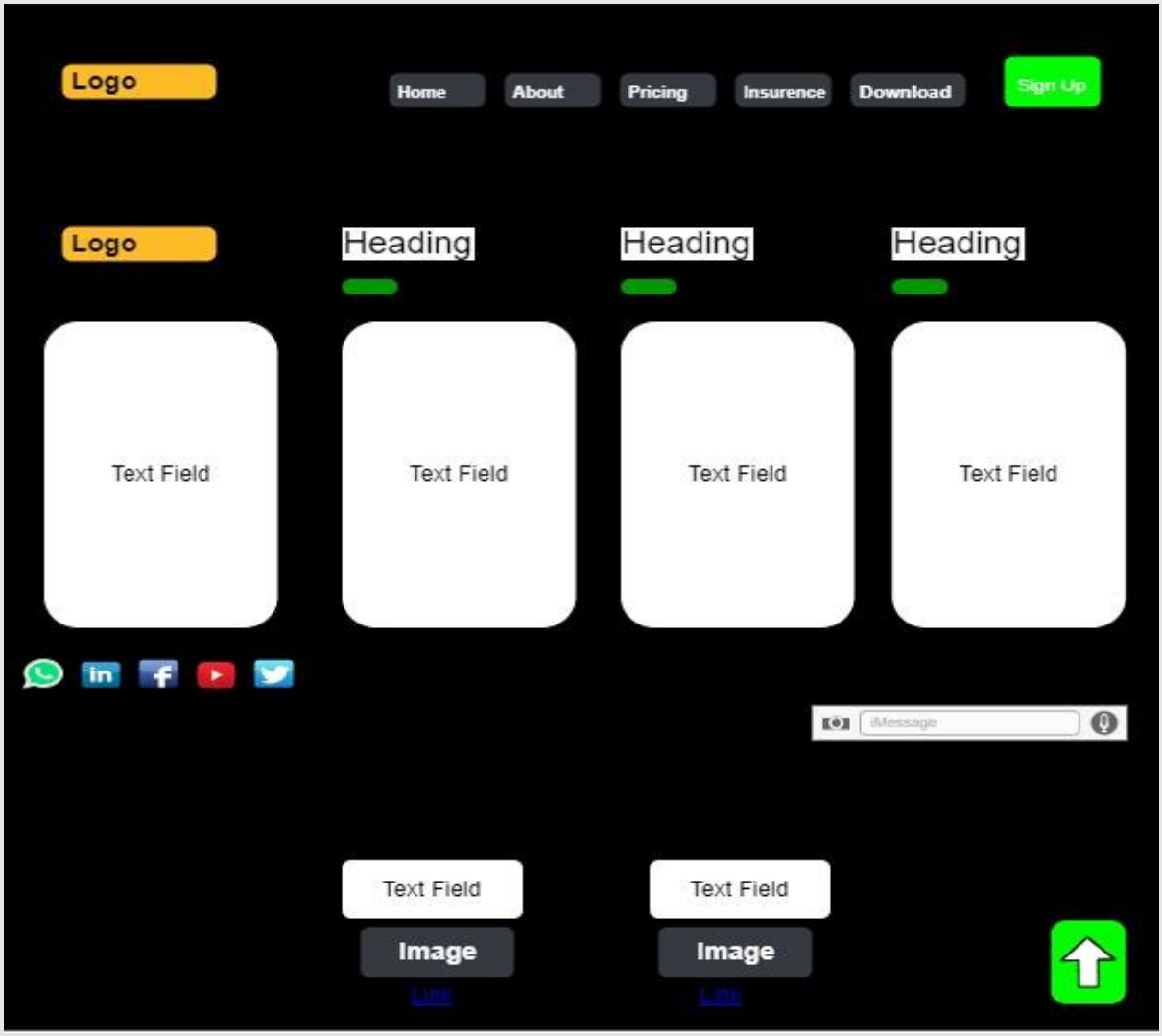


Figure 77: Style Footer Page.

On this footer page, you will find six pages available for navigation: home, about, pricing, insurance, download, and sign-up. The page includes a logo positioned at the top. Each field and heading on the footer page consist of four fields, providing relevant information and options. Additionally, there are five social links displayed on the footer page, allowing users to connect through various social media platforms. Towards the bottom of the page, there is an arrow button for navigation. Furthermore, the footer page contains two text fields, images, and a link, providing additional content and functionality.

6.2.3 Web Application wireframe

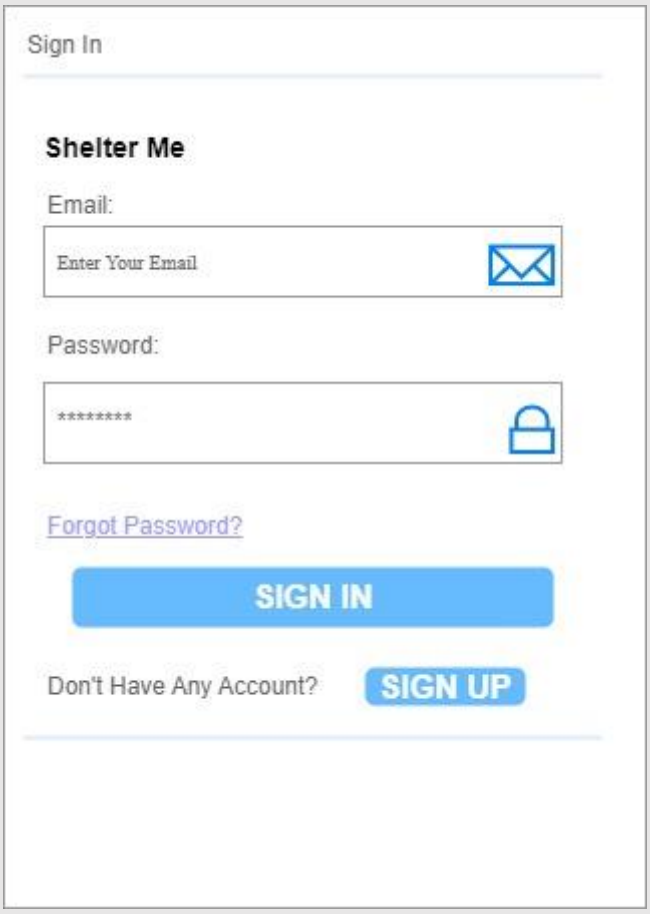


Figure 78: web application for the login page.

This web application features a login page where users can authenticate their accounts. Additionally, there is a "forget password" link provided for users who need to recover or reset their passwords. If a user doesn't have an account yet, they can navigate to the "SIGN UP" page to create a new account.

Dashboard

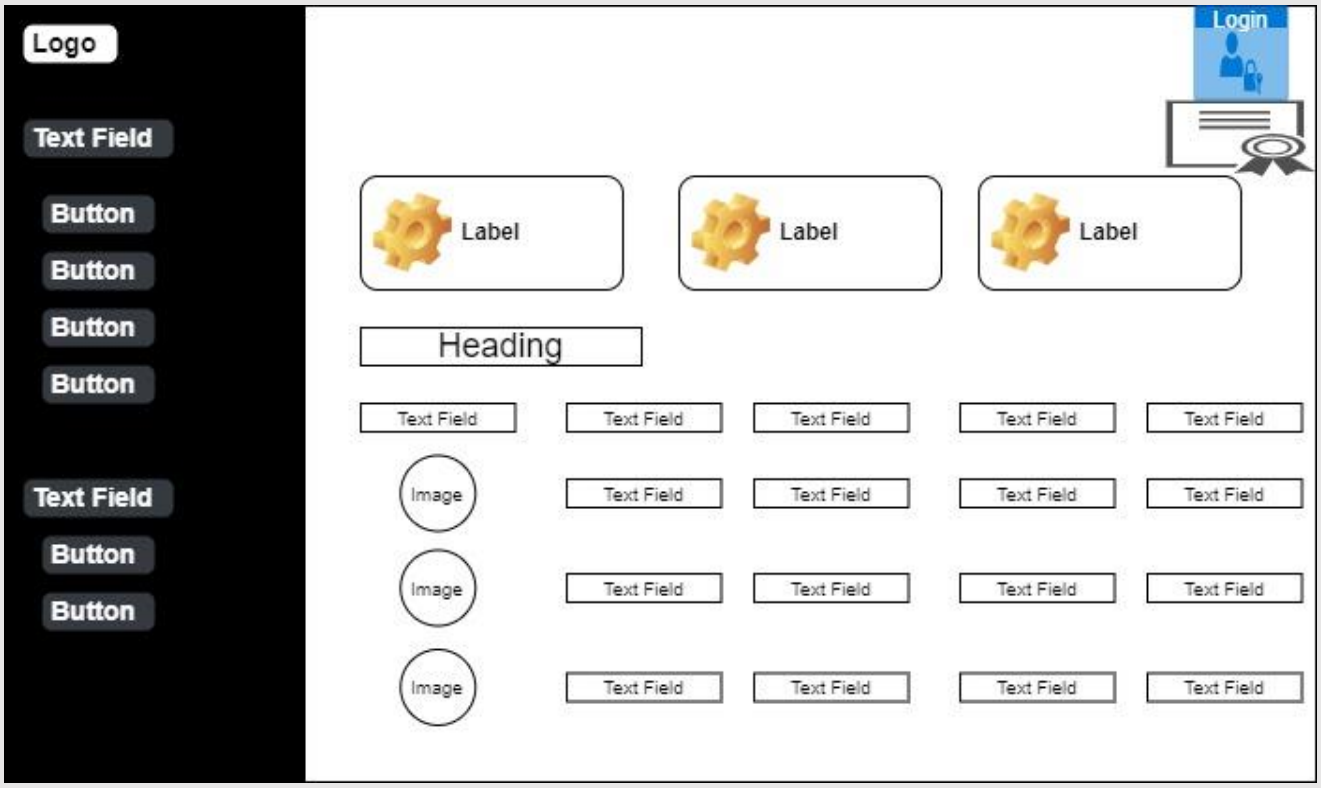


Figure 79: dashboard of the web application.

This is the dashboard of the web application, featuring a logo at the top of the page. In the top right corner, there is a profile image indicating the user's login status. The dashboard provides a summary of the animal details, allowing users to quickly view and access relevant information about the animals within the application.

Animal list 2nd page dashboard

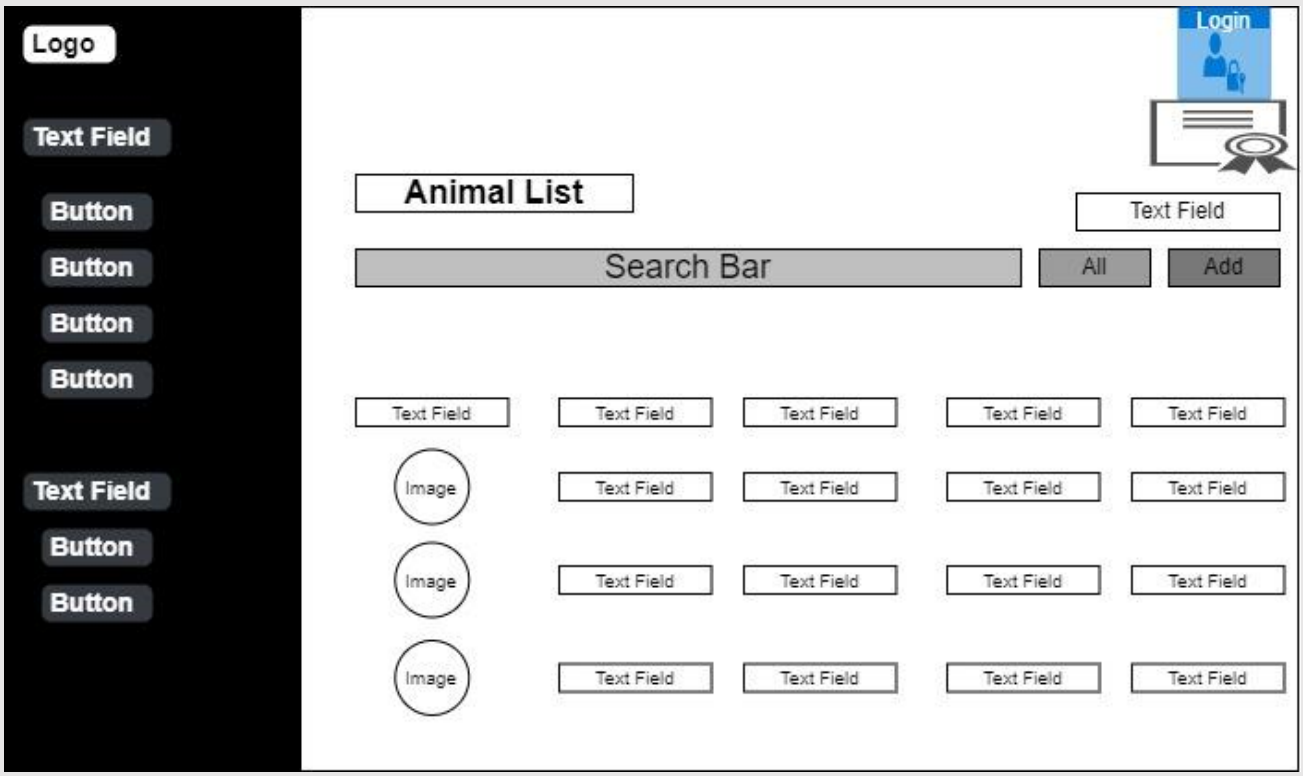


Figure 80: Animal List.

This web application's dashboard showcases a prominent logo positioned at the top of the page. In the top right corner, users can observe a profile image that reflects their login status. The dashboard provides a concise overview of the animal details, enabling users to swiftly access relevant information within the application. Additionally, users can perform keyword searches to find specific information. Furthermore, the dashboard allows users to conveniently add new animals to the application.

Animal Found list 3rd page dashboard.

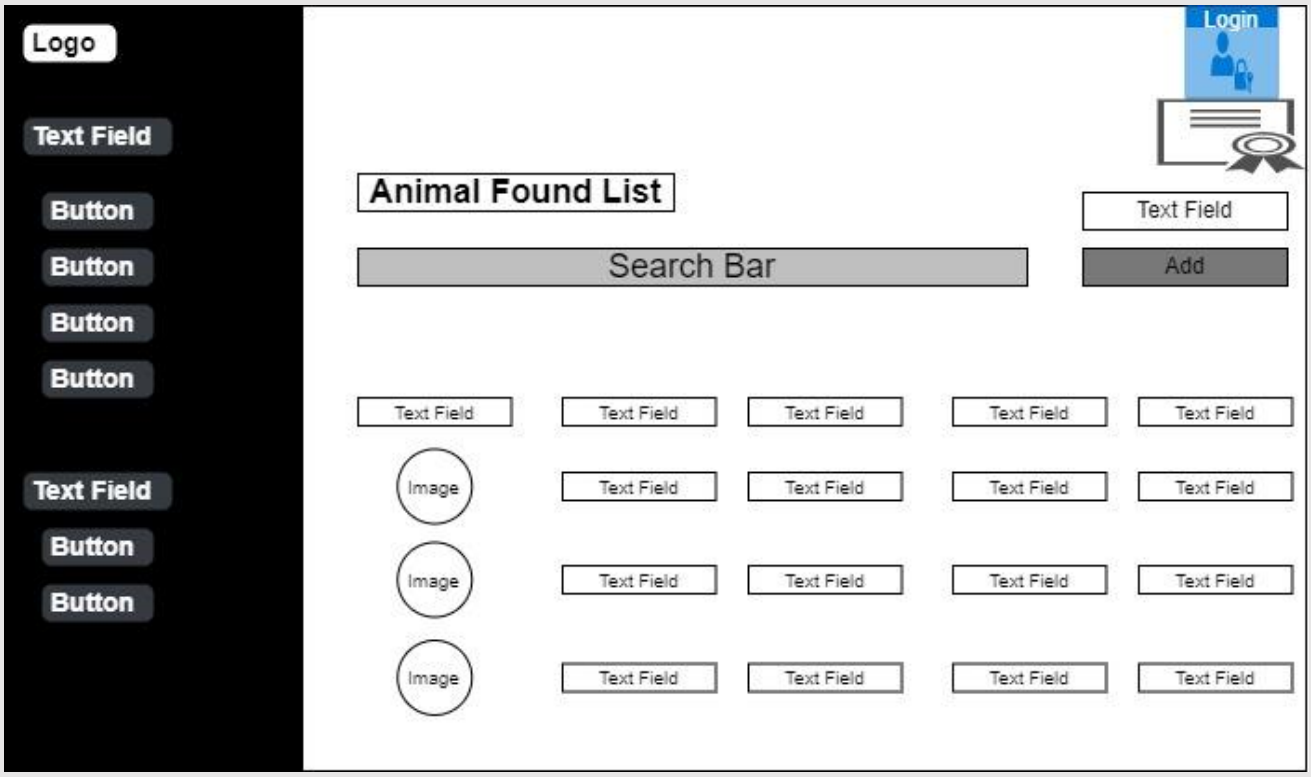


Figure 81: Animal Found.

This web application's dashboard showcases a prominent logo positioned at the top of the page. In the top right corner, users can observe a profile image that reflects their login status. The dashboard provides a concise overview of the animal details, enabling users to swiftly access relevant information within the application.

Users List 4th page dashboard

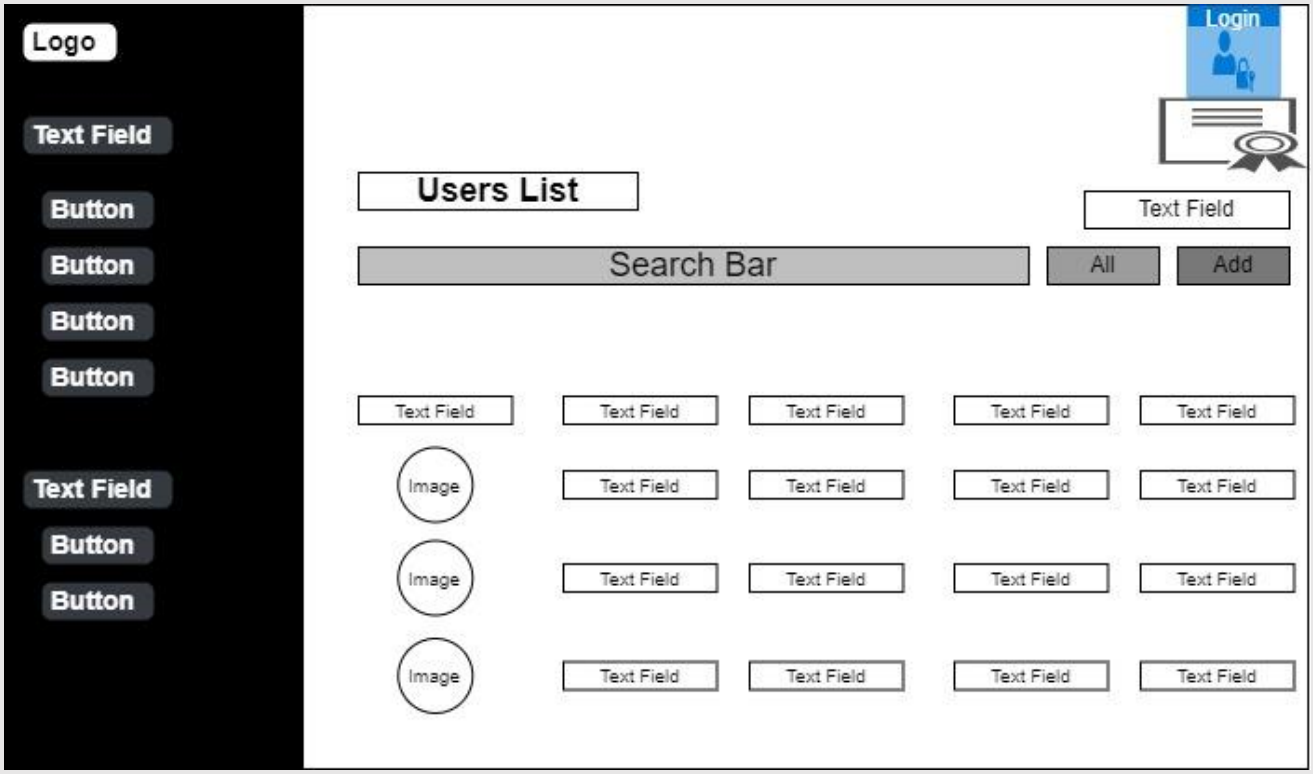


Figure 82: User List.

This web application's dashboard showcases a prominent logo positioned at the top of the page. In the top right corner, users can observe a profile image that reflects their login status. The dashboard provides a concise overview of the animal details, enabling users to swiftly access relevant information within the application.

Profile 5th page Dashboard

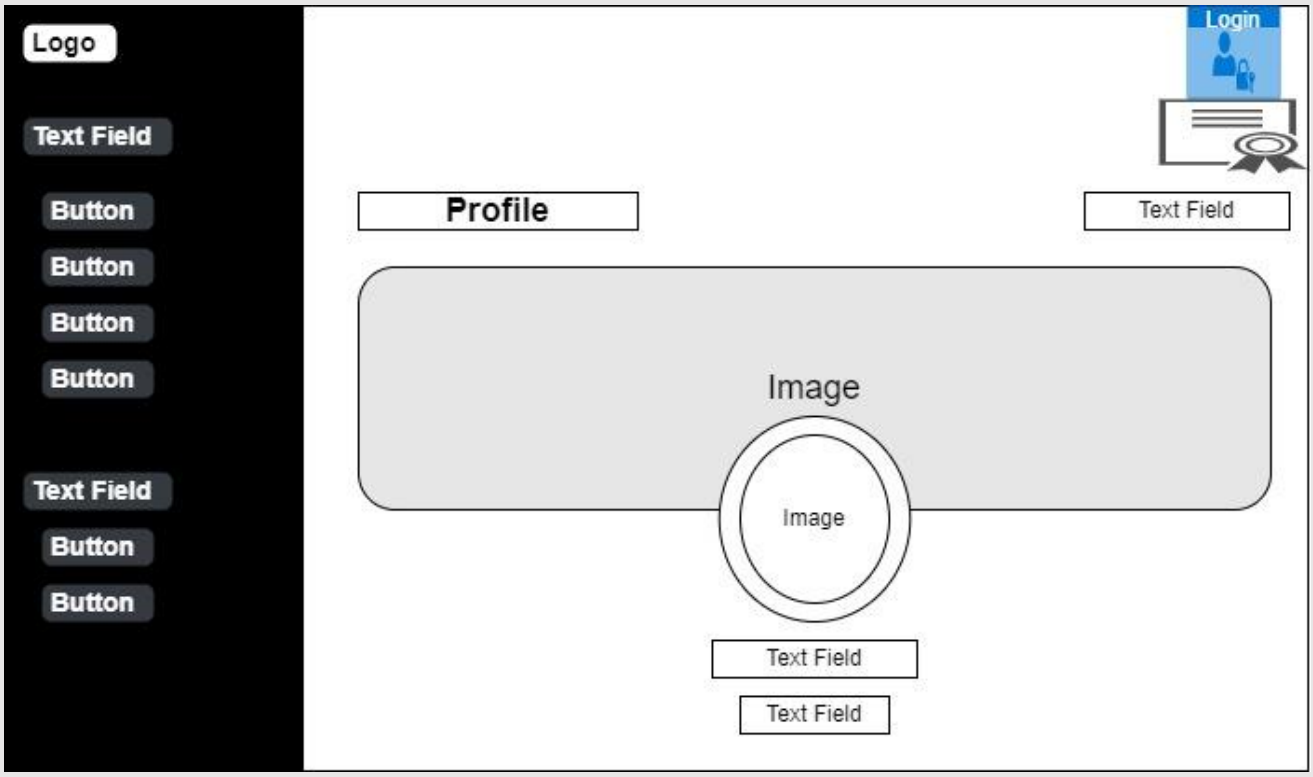


Figure 83: Profile page.

This web application's dashboard showcases a prominent logo positioned at the top of the page. In the top right corner, users can observe a profile image that reflects their login status. The dashboard provides a concise overview of the animal details, enabling users to swiftly access relevant information within the application. This is page of the profile.

Setting 6th page dashboard

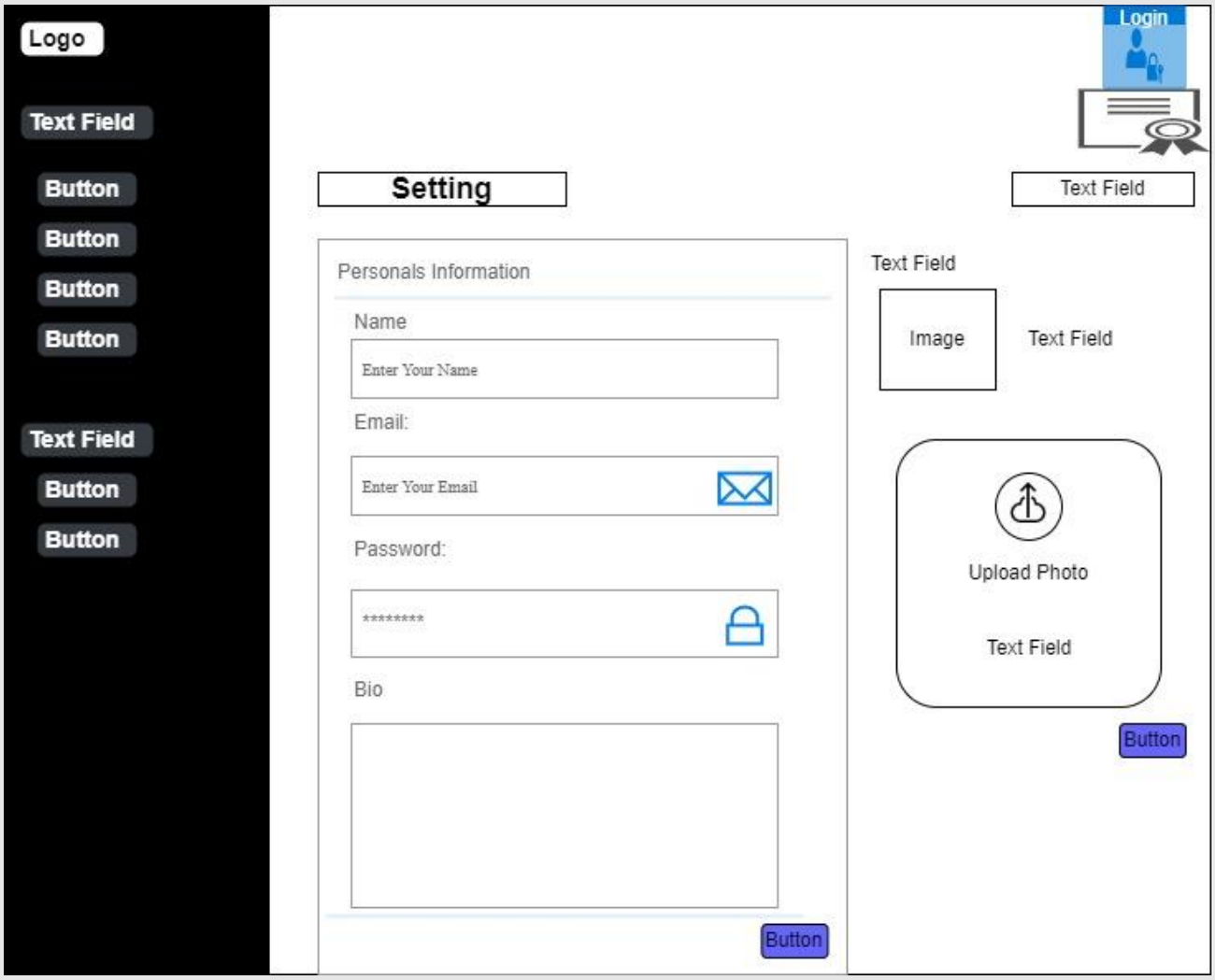


Figure 84: Setting.

This web application's dashboard showcases a prominent logo positioned at the top of the page. In the top right corner, users can observe a profile image that reflects their login status. File up this personals Information and update your picture for this account.

7. Chapter 7: Implementation

7.1 Building

The project encompassed the creation of a mobile app, web application, and website, all of which were designed according to the Wireframe specifications. Included below are screenshots of the functioning screens. Figures 85 to 103 represent the Android mobile application, while figures 104 to 135 showcase the web application. Finally, figures 136 to 149 depict various pages of the website.

7.1.1 Frontend: ANDROID APPLICATION

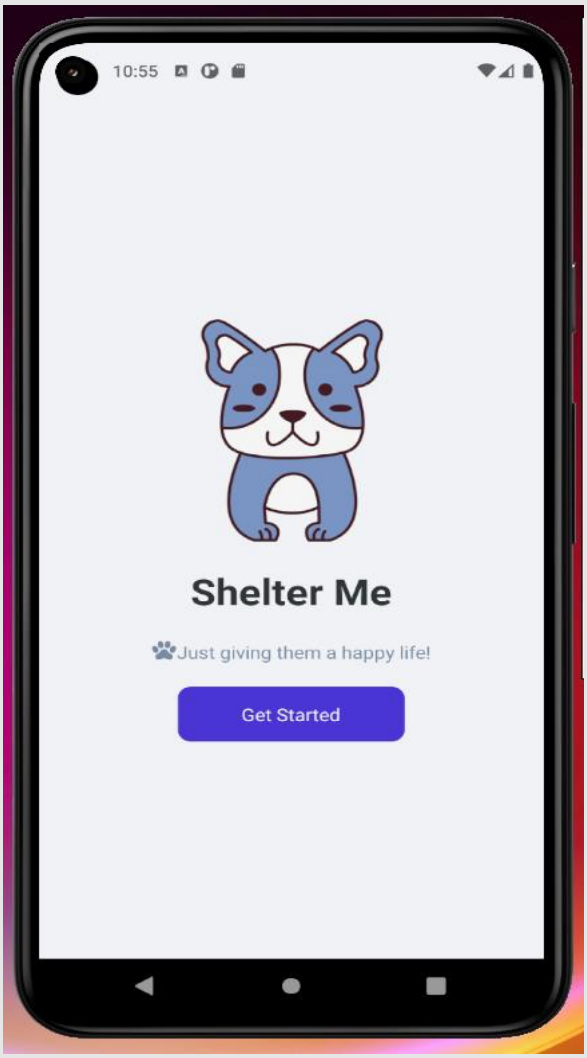


Figure 85: Starting page.

This is the first impression of the application. and this is the android application. this is the starting page interface.

Login page android app

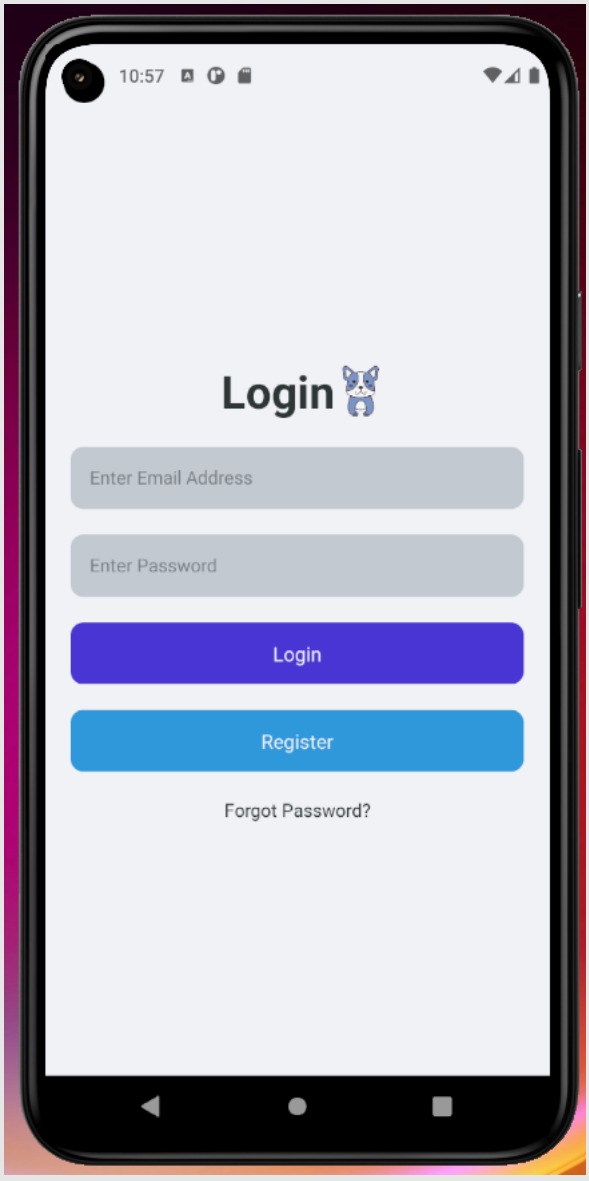


Figure 86: Login page.

After Get Started then this is the login page.

Register Page App

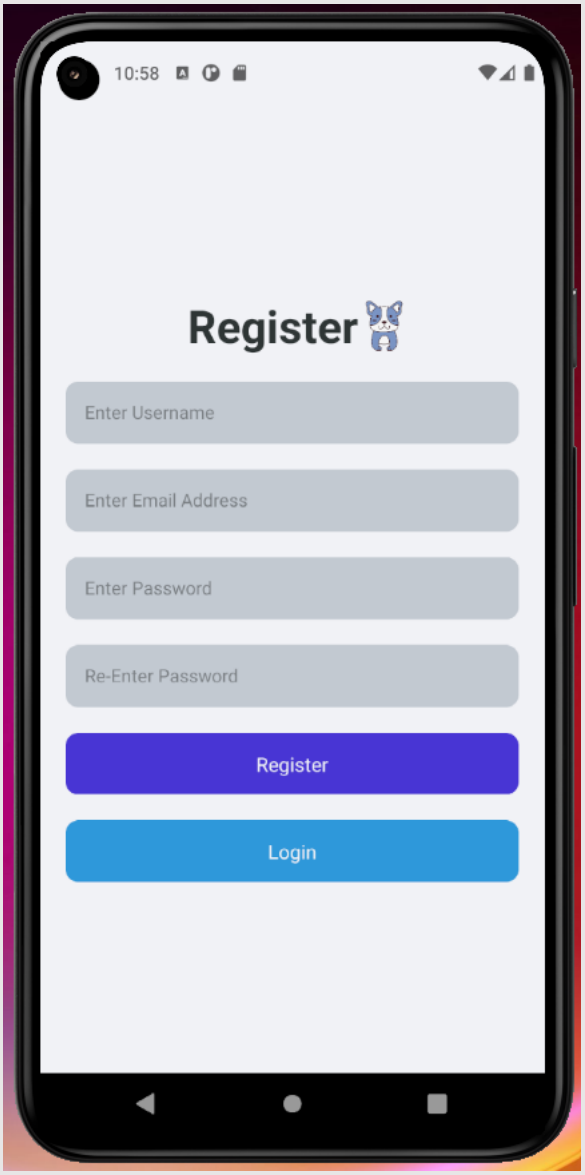


Figure 86: Register page.

This is the register page for android app.

Verification Code of email

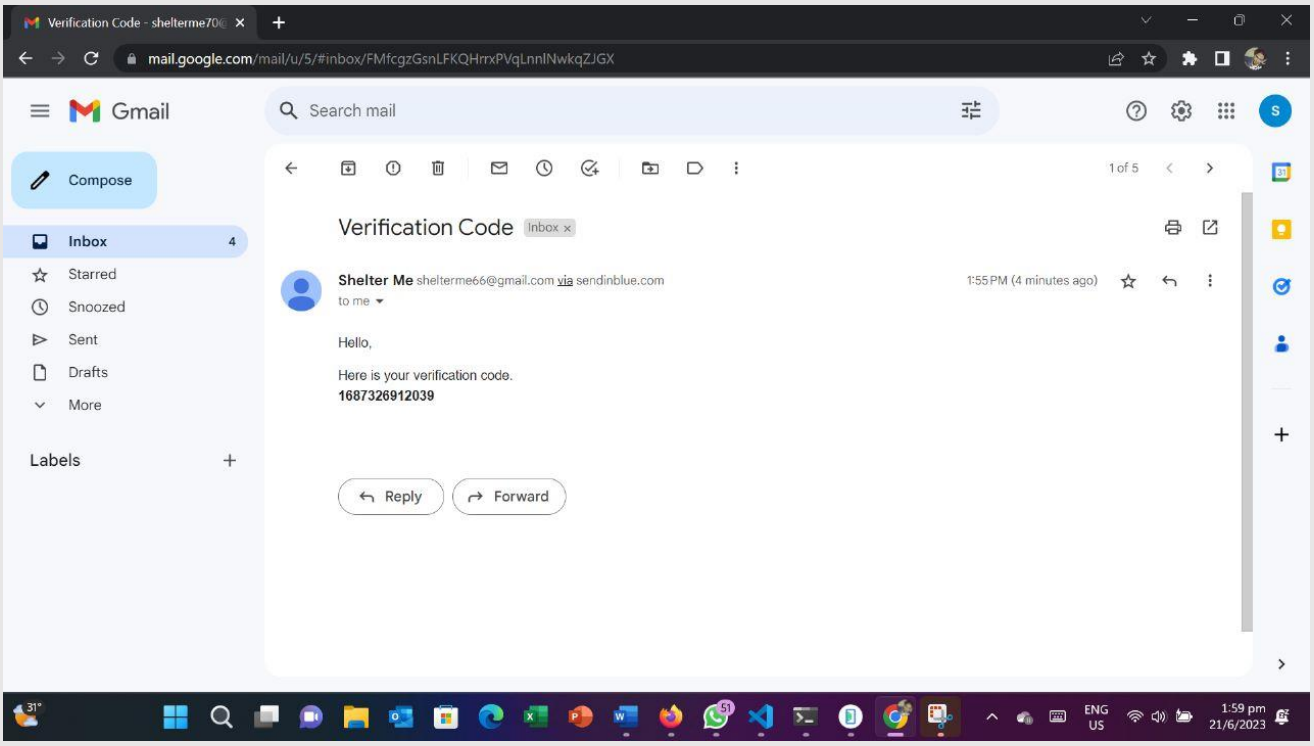


Figure 86: Verification code via email.

After completing the registration process, a verification email containing an authentication message is sent to the provided email address. I have attached a screenshot displaying the verification code for reference.

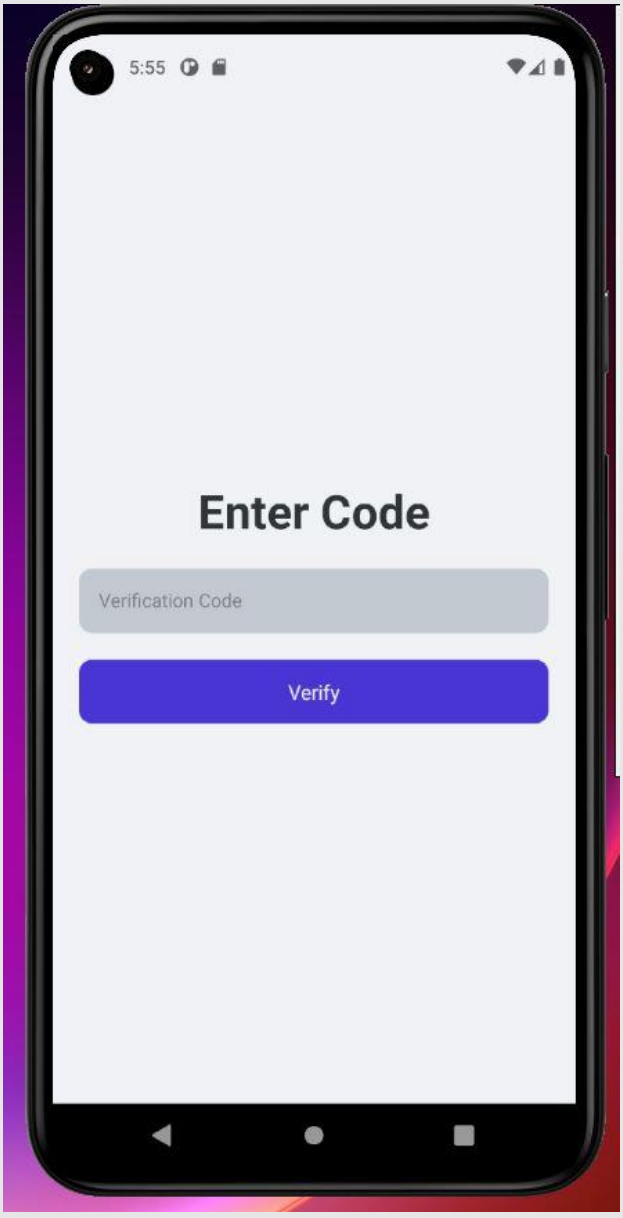


Figure 87: enter the verification code.

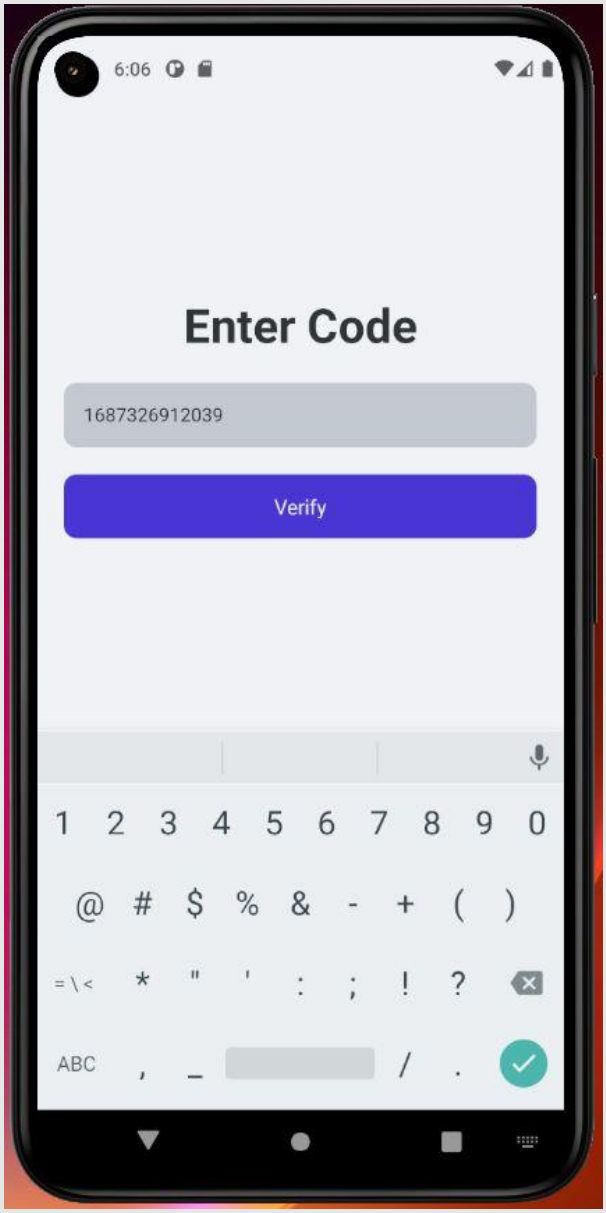


Figure 88: after enter verification code.

Once the email arrives at the designated email address, there will be a specific section where you can enter the verification code.

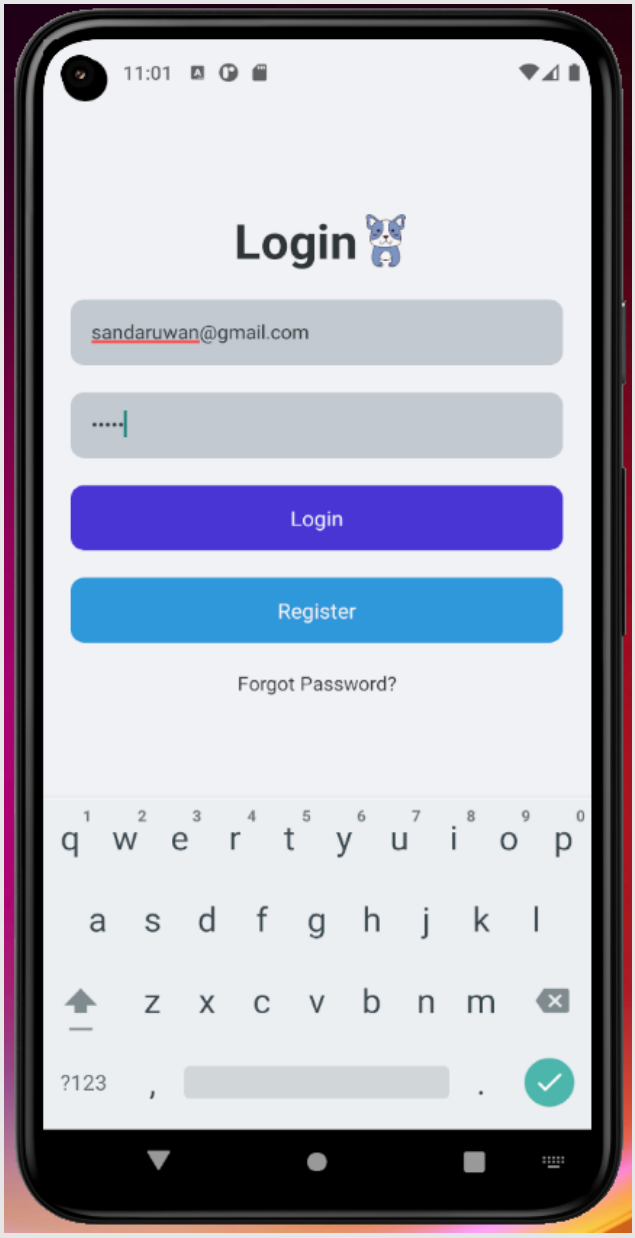


Figure 90: login with my credential.

Please provide your email address and password on this page.

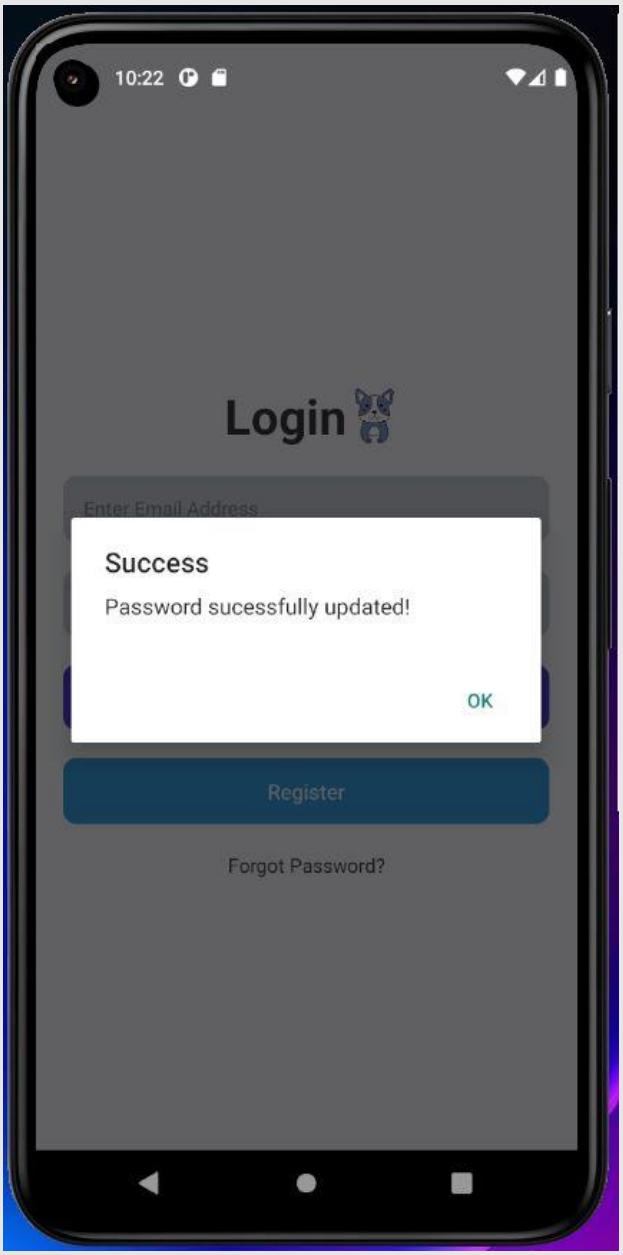


Figure 89: pop message of successfully updated.

Pop message of successfully alert message.

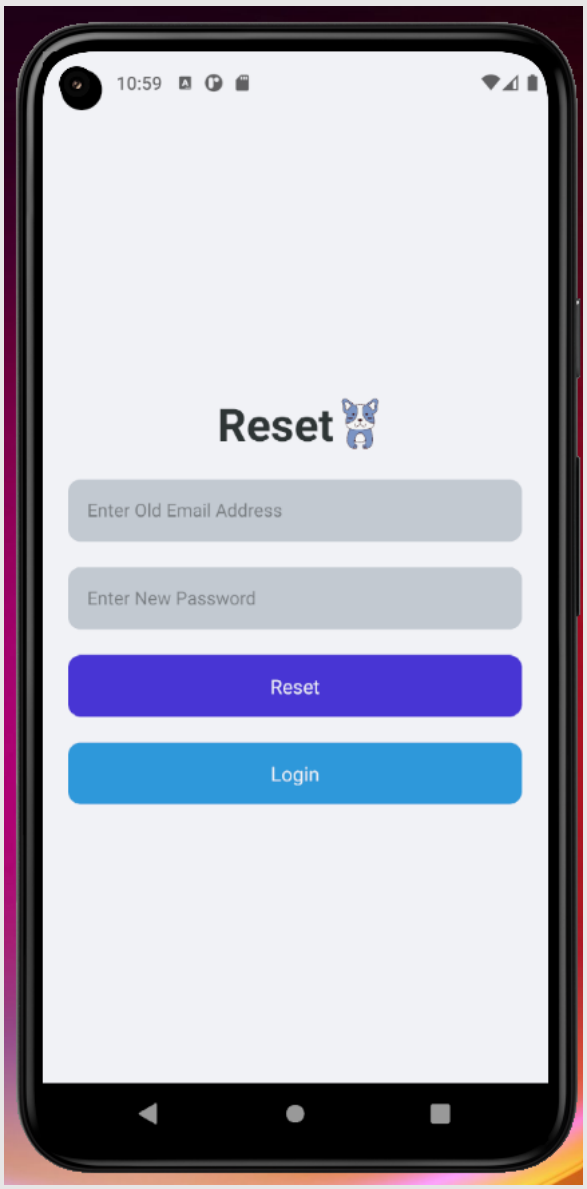


Figure 91: Reset email address.

To reset your email address, please refer to the following interface.

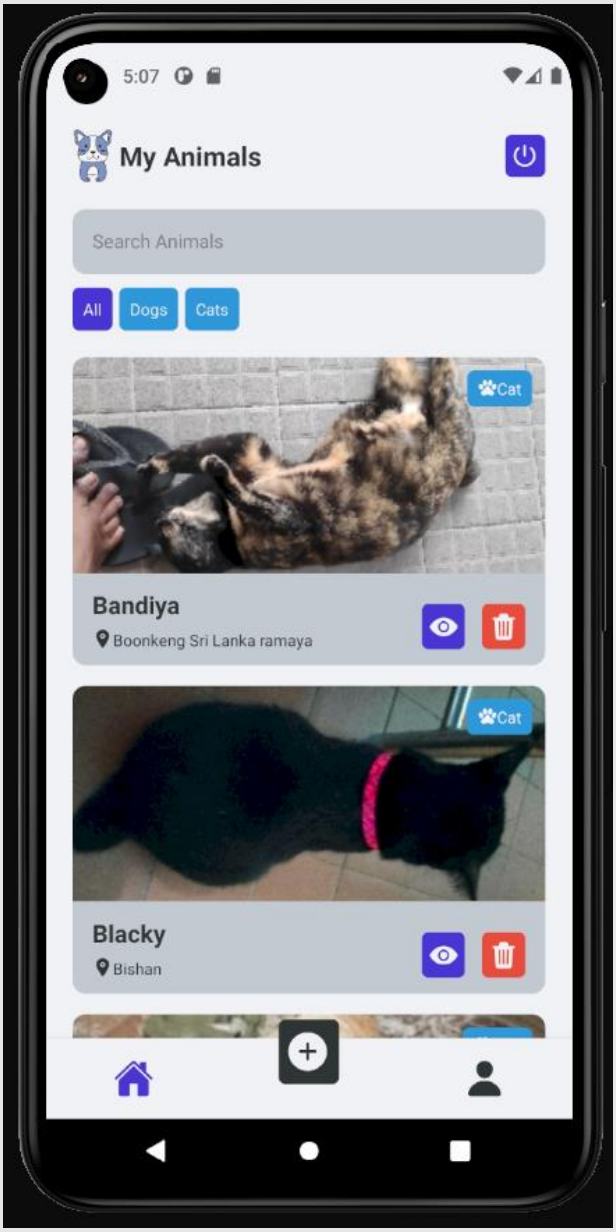


Figure 92: home page Mobile app.

On the homepage, you will notice a power-off button located on the right-hand side. At the top middle, there is a search bar. Below the search bar, you will find three buttons labelled "All," "Dogs," and "Cats." These buttons allow you to filter the displayed content based on the animal category.

Each animal's name and location are displayed on the page. If you wish to view more details about a specific animal, simply click on the eye icon associated with that animal. Additionally, if you want to remove an animal from the list, you have the option to delete it.

Upon clicking the "+" icon, this page is displayed, revealing a comparison between the non-selected and selected options.

A middle button presses then you can Select that animal.

Figure 93: add animal pages.

Upon clicking the "+" icon, this page is displayed, revealing a comparison between the non-selected and selected options.

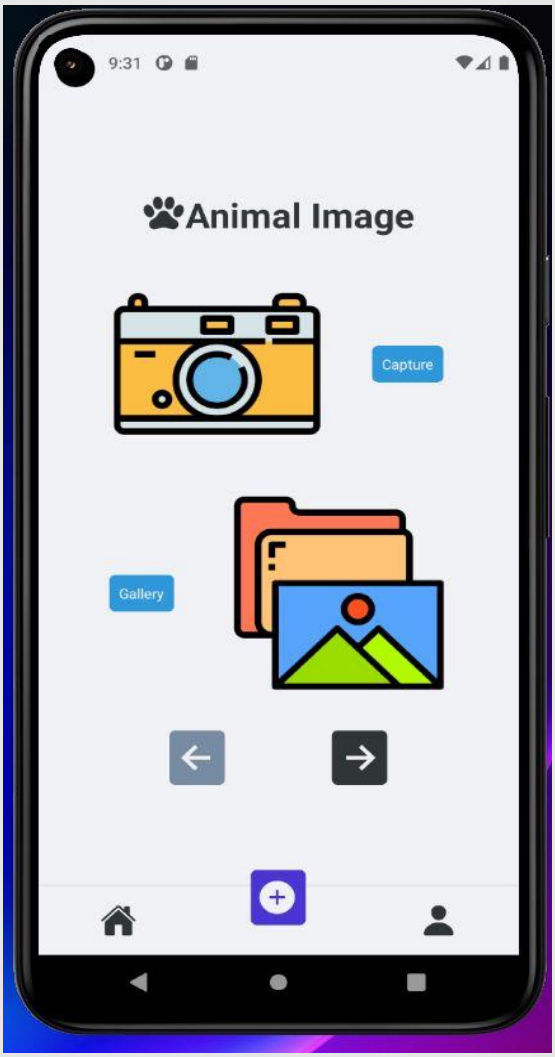


Figure 94: add image for the animal.

If you encounter any animals while on the road, you have the option to upload their pictures to this page. There are two methods available. Firstly, you can open the camera and capture a photo to send. Alternatively, you can choose Gallery button and access your phone's image library to select and upload a picture.

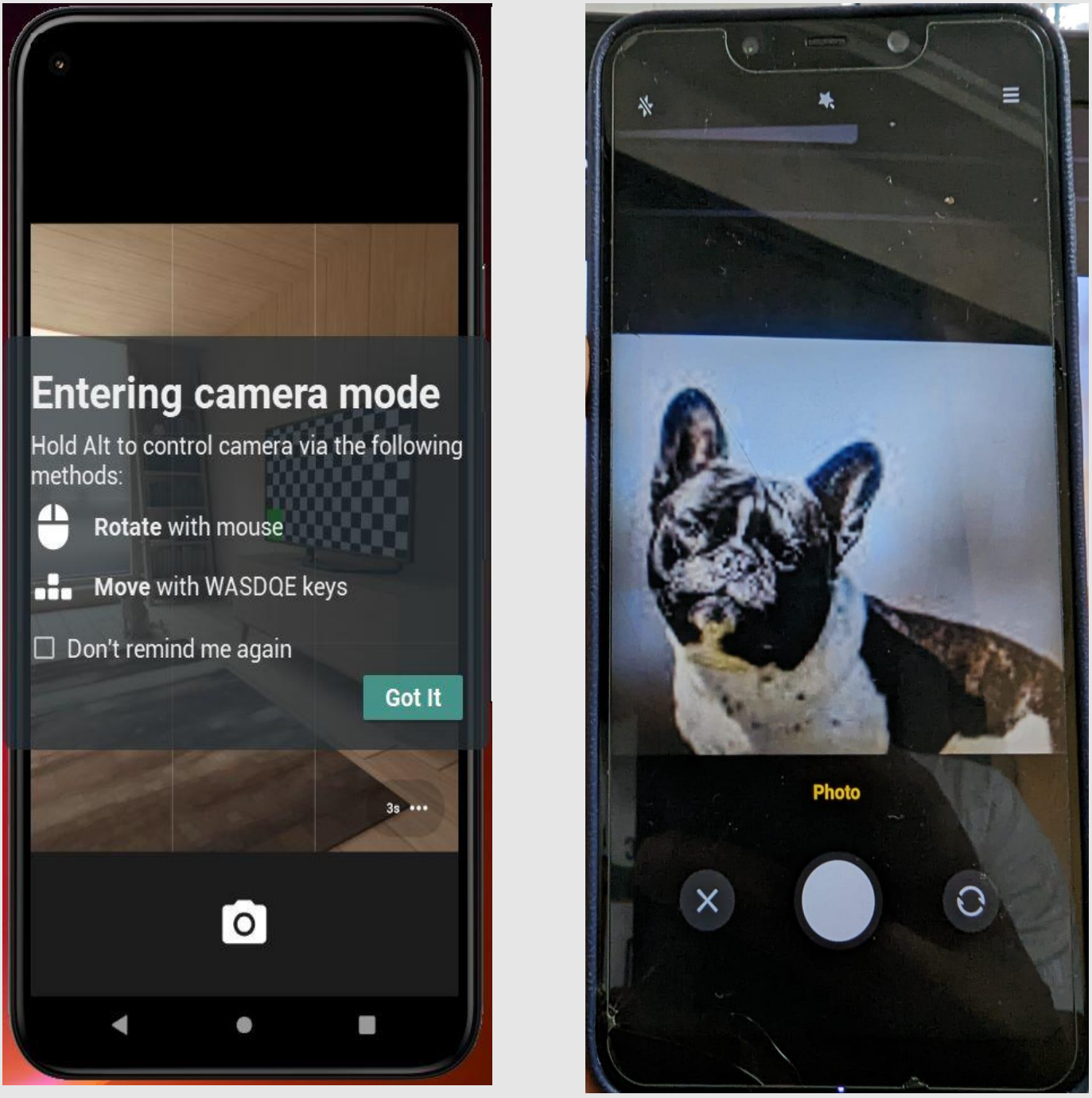


Figure 95: Camera capture option.

By clicking on the Capture button, you will be directed to a screen where you can take a photograph of the animal.

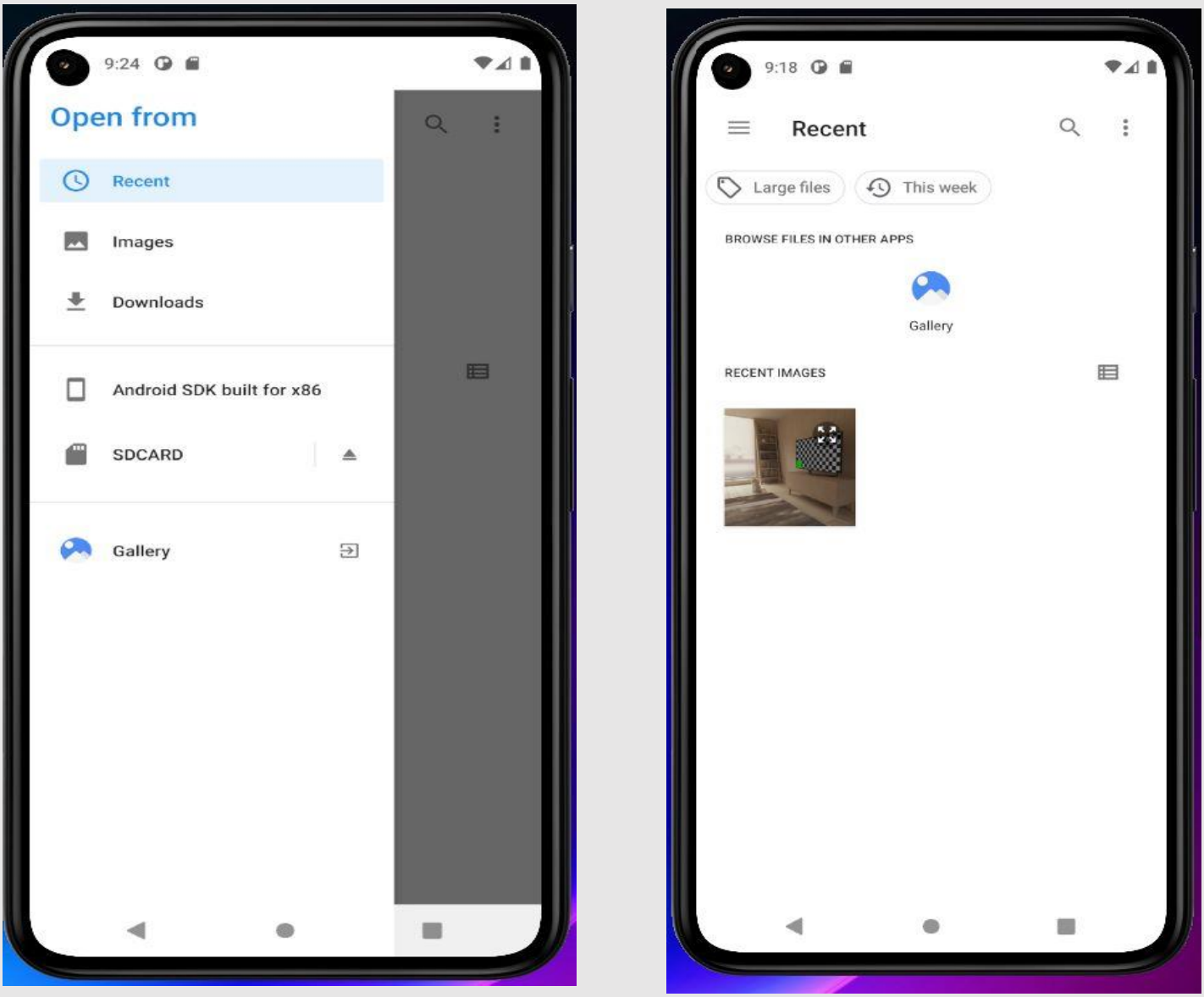


Figure 96: Choose Gallery.

Upon selecting the gallery option, you will be able to access the gallery on your mobile phone. From there, you can choose a picture of the animal. This option is provided to accommodate situations where there may be no available data on the phone. In such cases, you can take a picture, return to the application, turn on Wi-Fi, and proceed with creating a description for the animal.

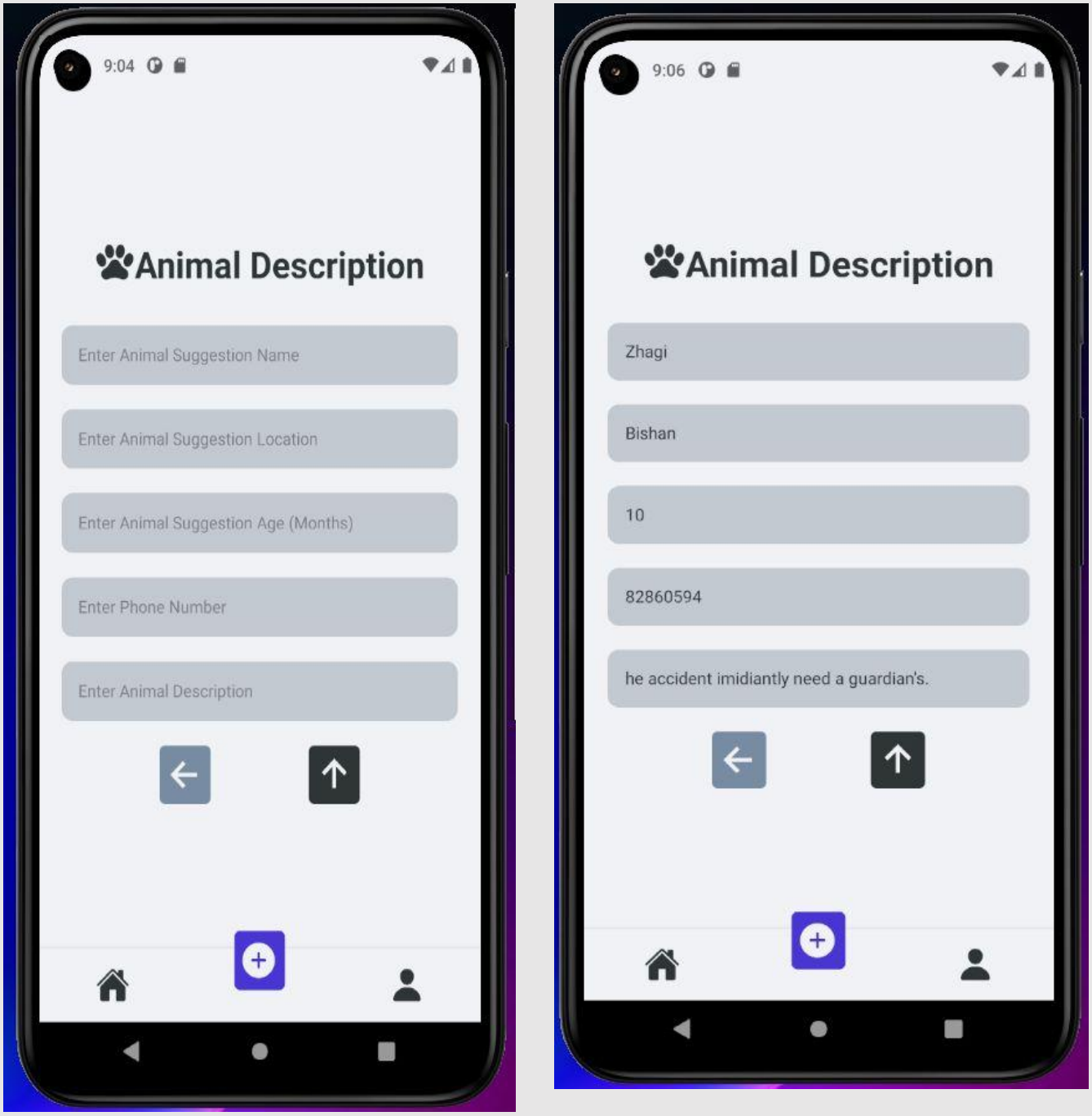
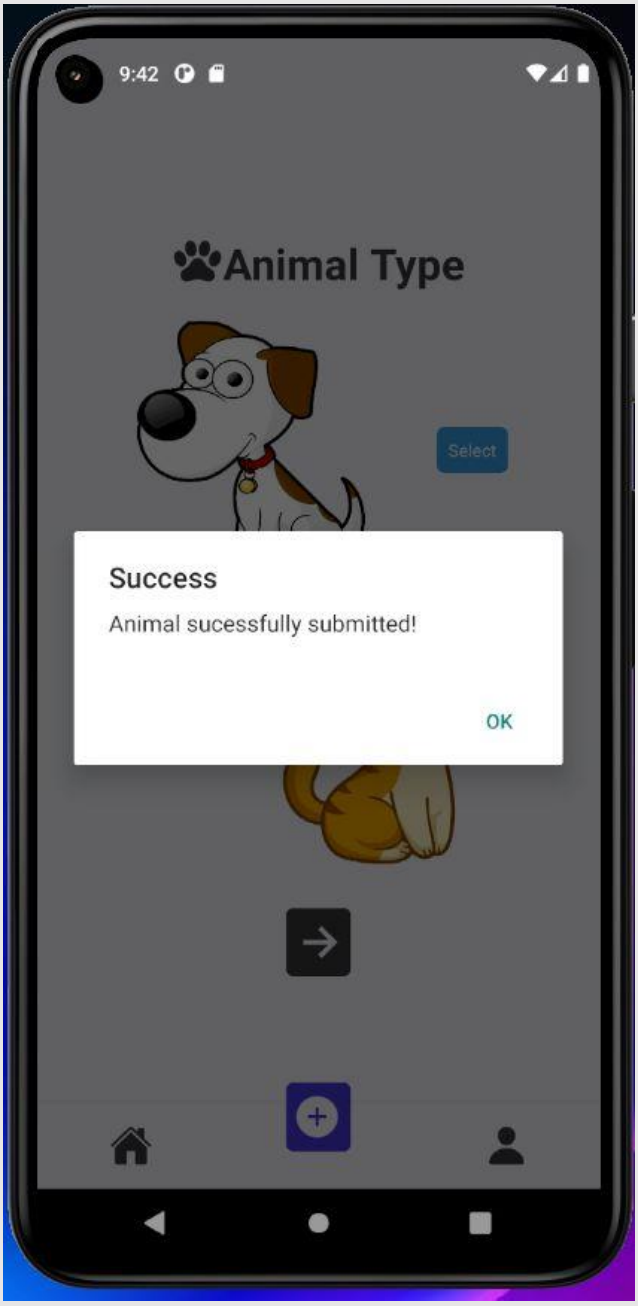


Figure 97: Description of the animal.

The right-hand side of the page displays a screenshot of the animal, accompanied by a description. Additionally, there is a form where you can provide further details about the animal.



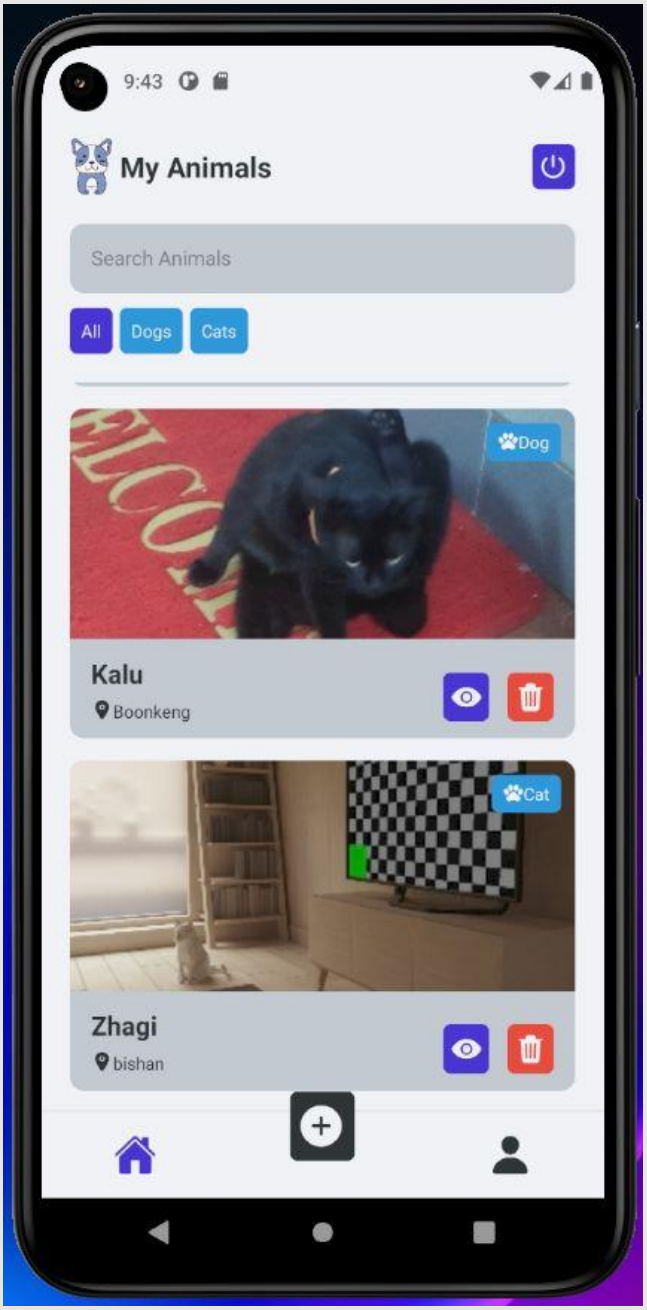


Figure 98: POP message Successful adding & Adding animals list.

This is the alert message of the after adding animal.

This is all added animal details in this list.

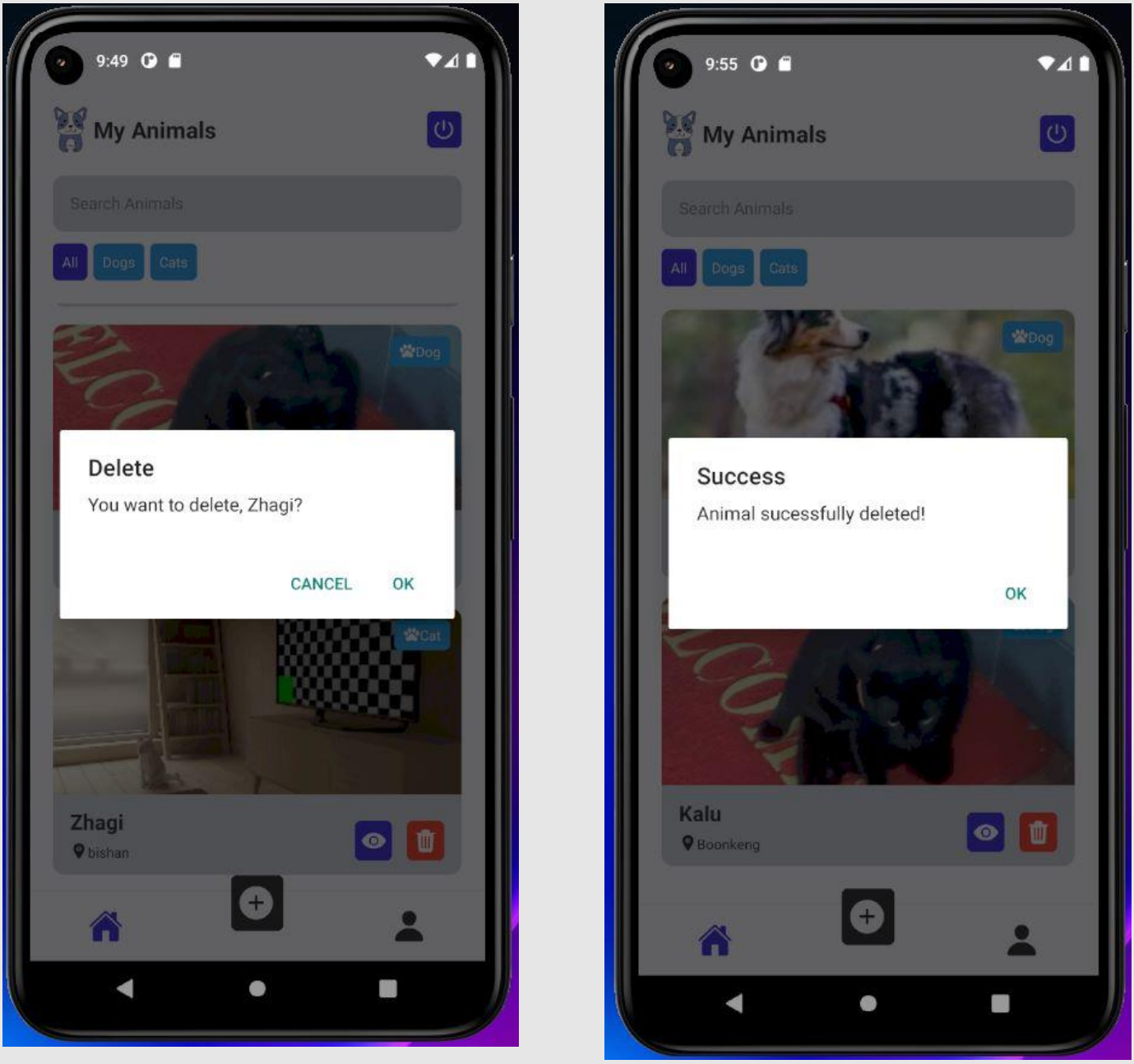


Figure 99: Added animal deleted & Pop message after deleting ok.

If you are adding animal, then this page shows deleted pop message.

After delete animal then ok. Then this pop message was coming.

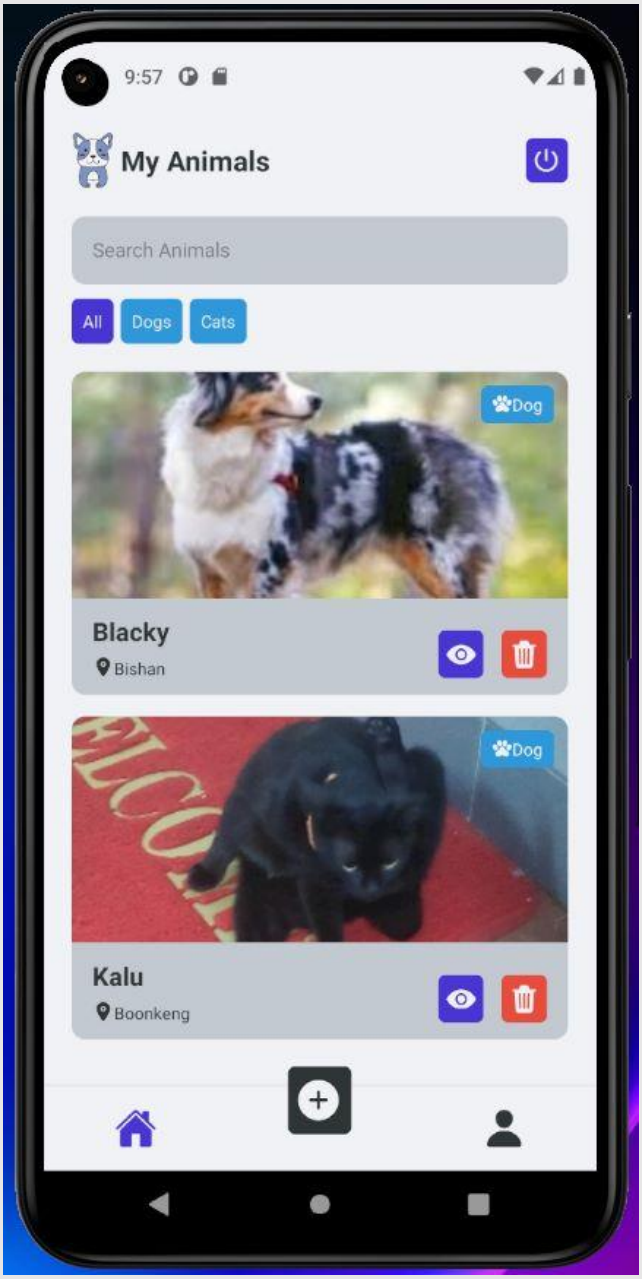
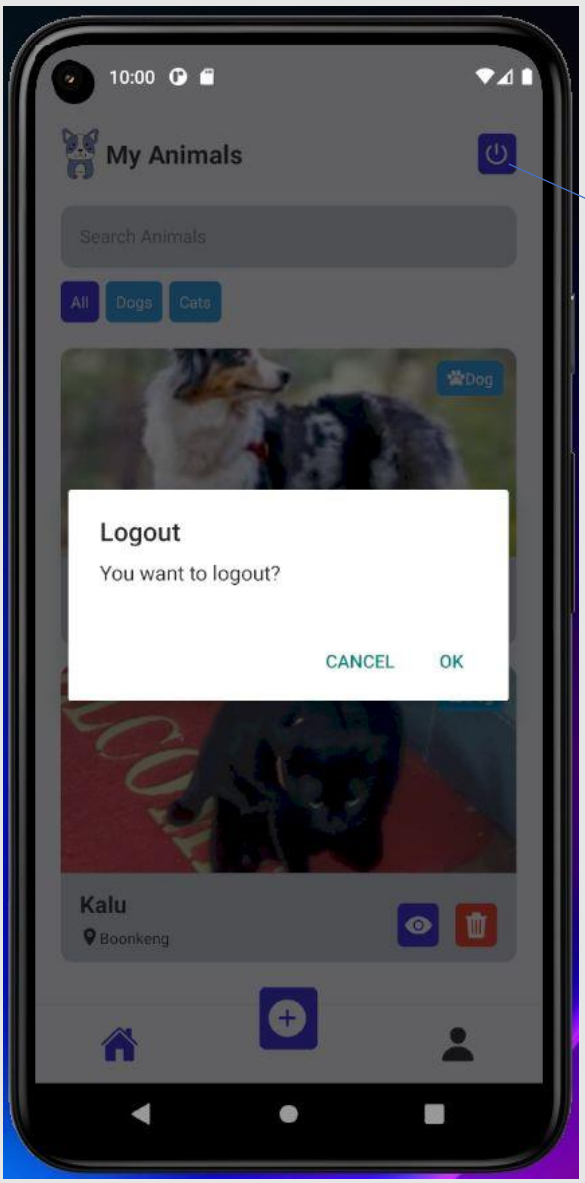


Figure 100: after deleting dog then this page can't see that dog.

After Zhagi dog was deleted then can't see the dog in this screen,

Logout 2 ways.



When you select the logout icon, this page appears.

Figure 101: after clicking logout button pop message.

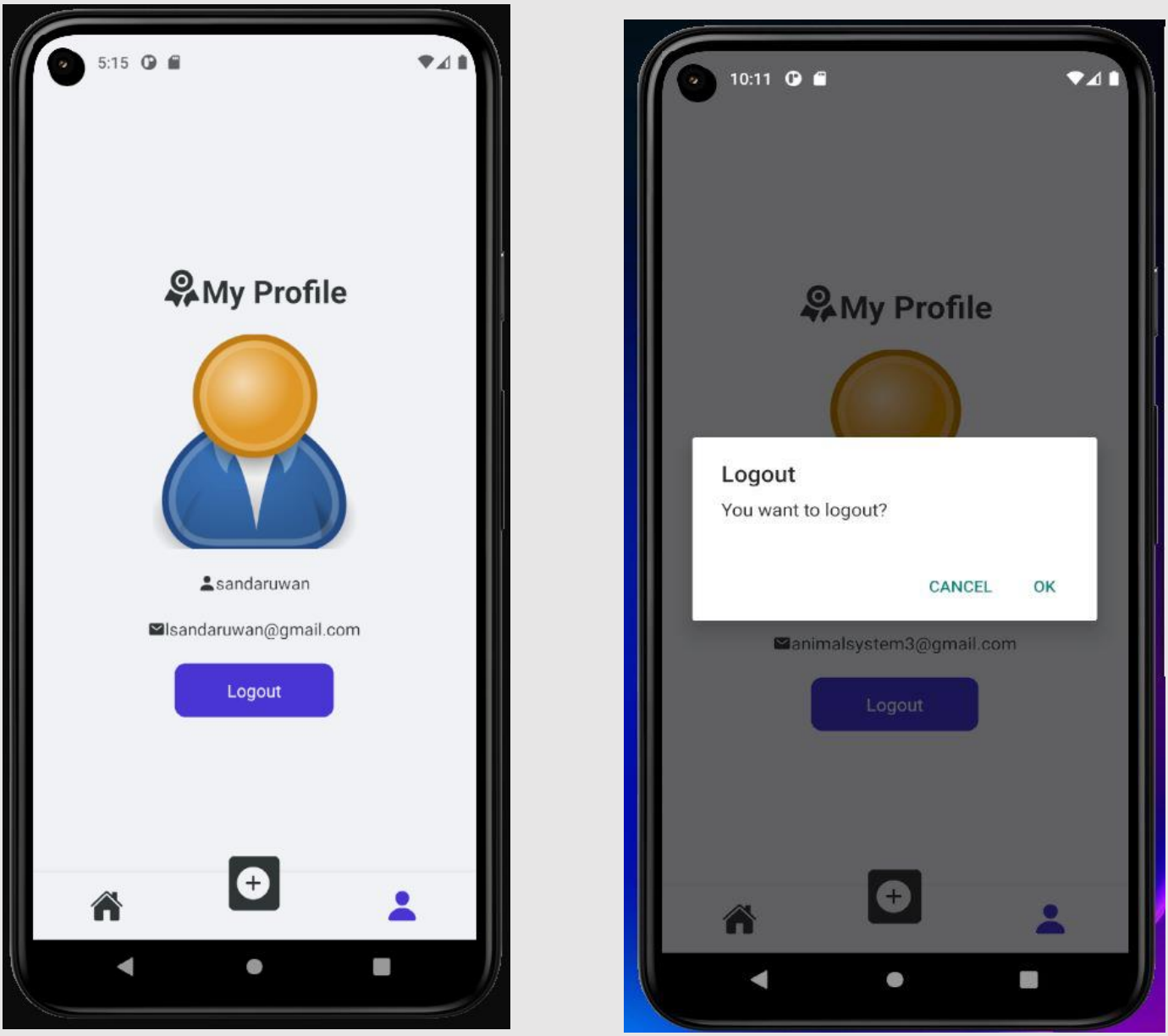


Figure 102 : after clicking icon of the men & pop message for logout.

This screen coming after clicking blue colour men.

after clicking Logout button this is the pop message

7.1.2 Backend: WEB APPLICATION

Login to backend

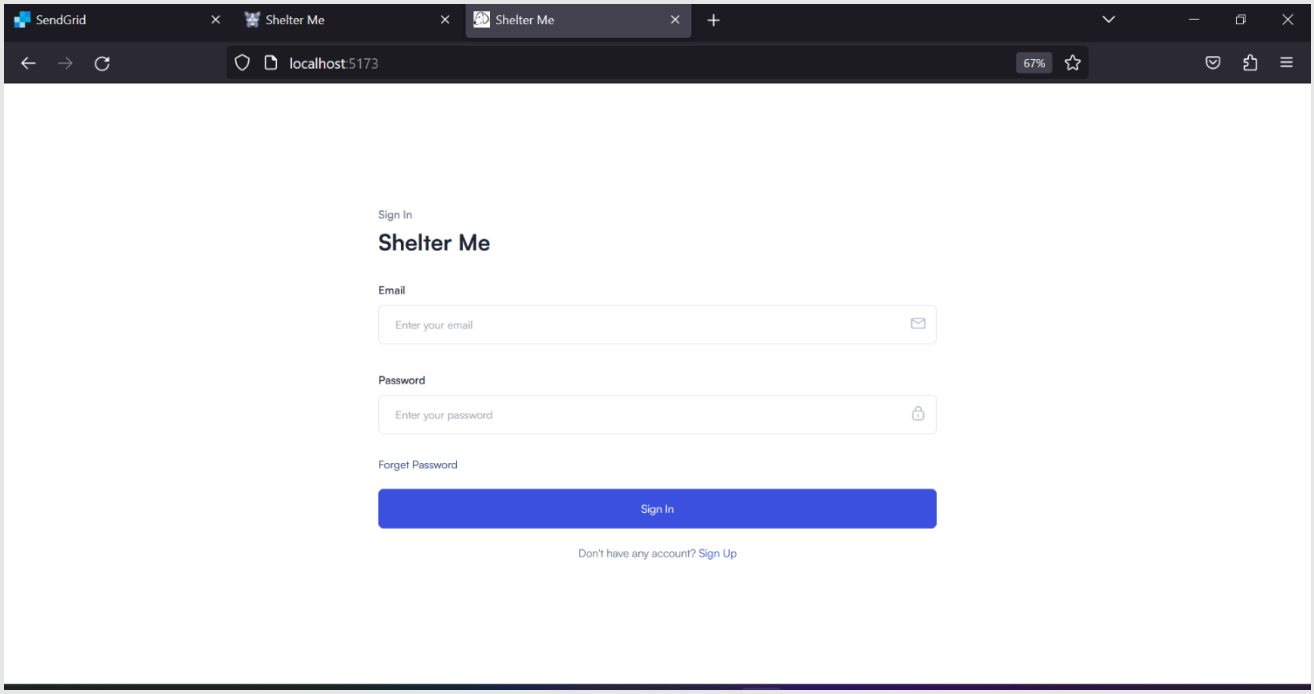


Figure 103: Sign in page web application

This page serves as the sign-in interface for a web application.

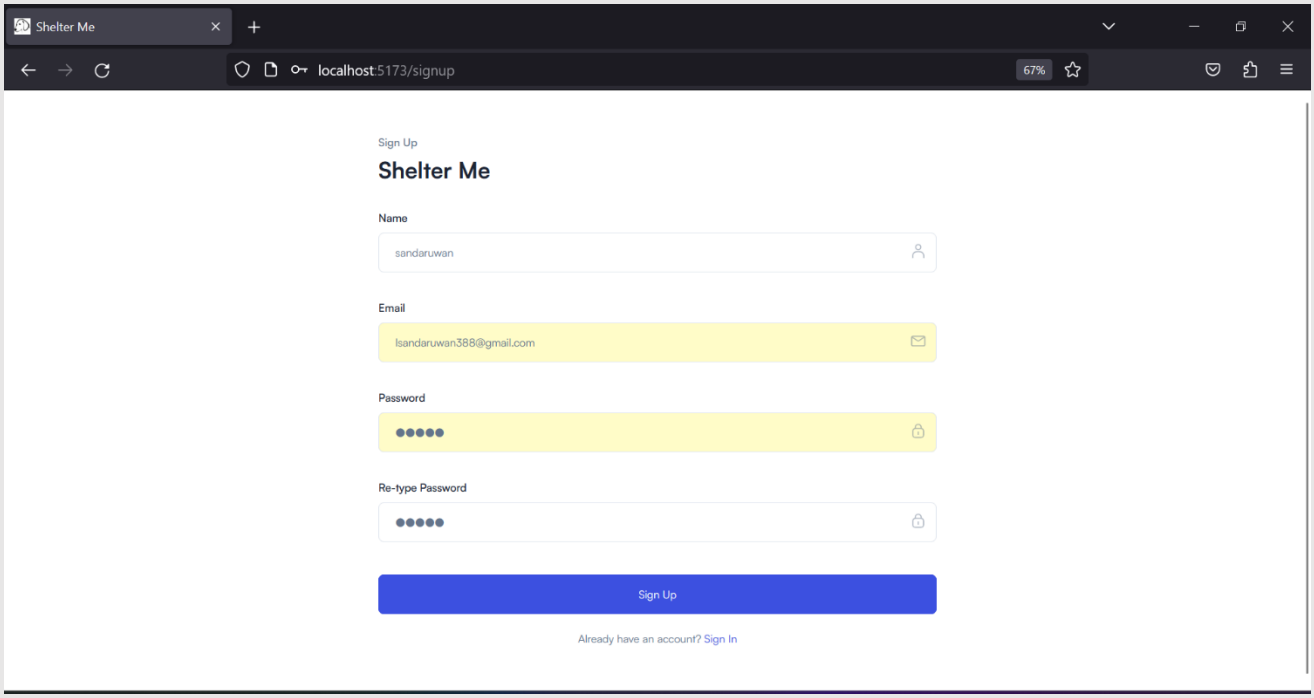


Figure 104: Signup form of the web app.

This page serves as the sign-in interface for a web application.

fi

Sign up page Verification code send mail addres.

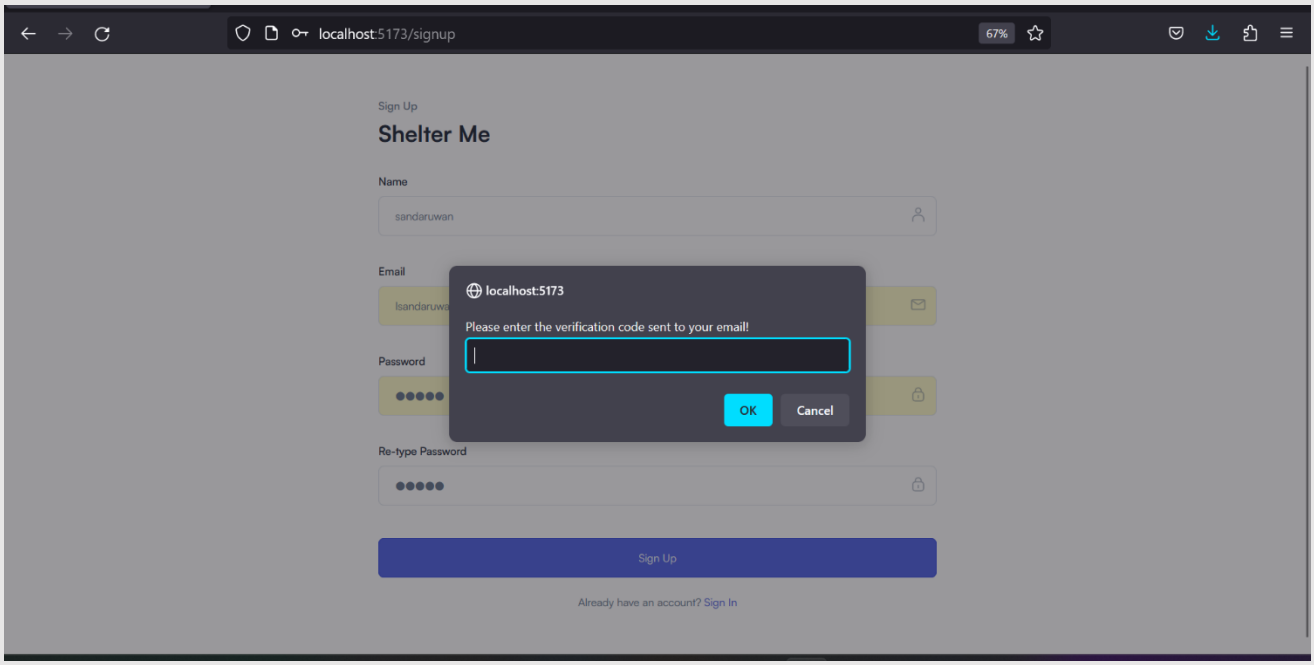


Figure 105: Verification code pop message.

This page is designed for entering the verification code during the sign-up process for the web application.

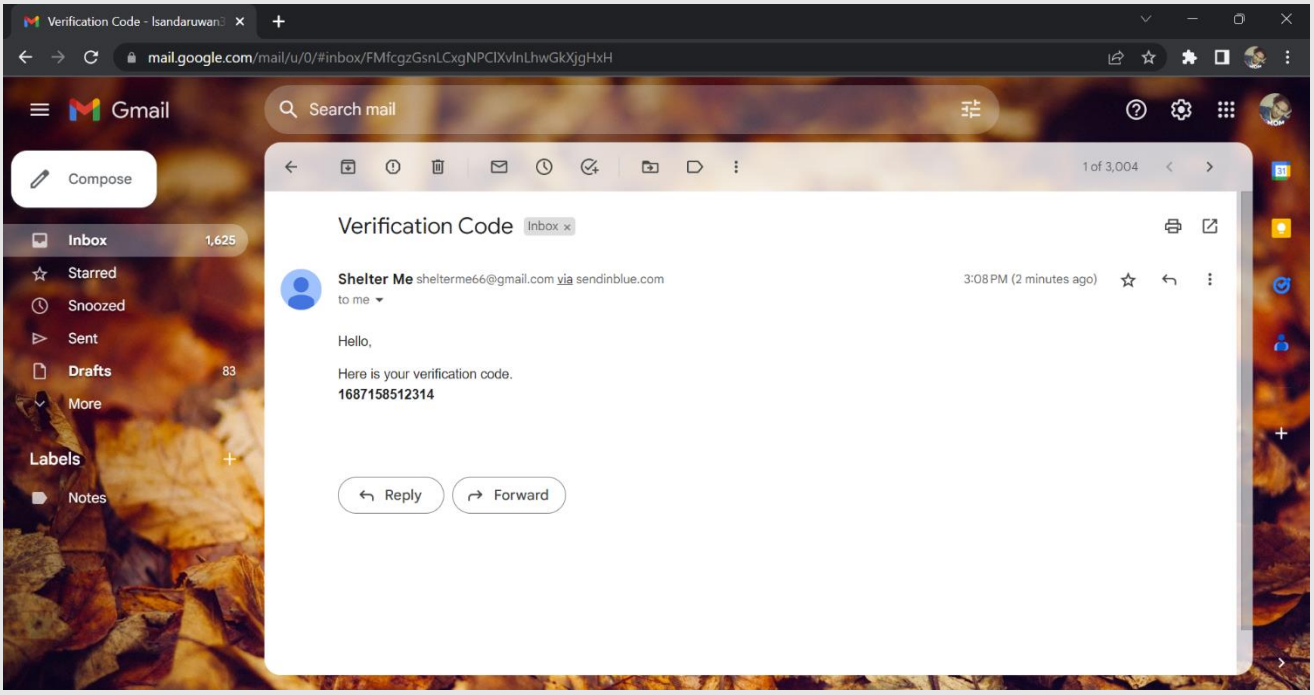


Figure 106: Verified via email notification message.

This is the automatic email notification sent when a new user signs up. It is a crucial security measure for our system.

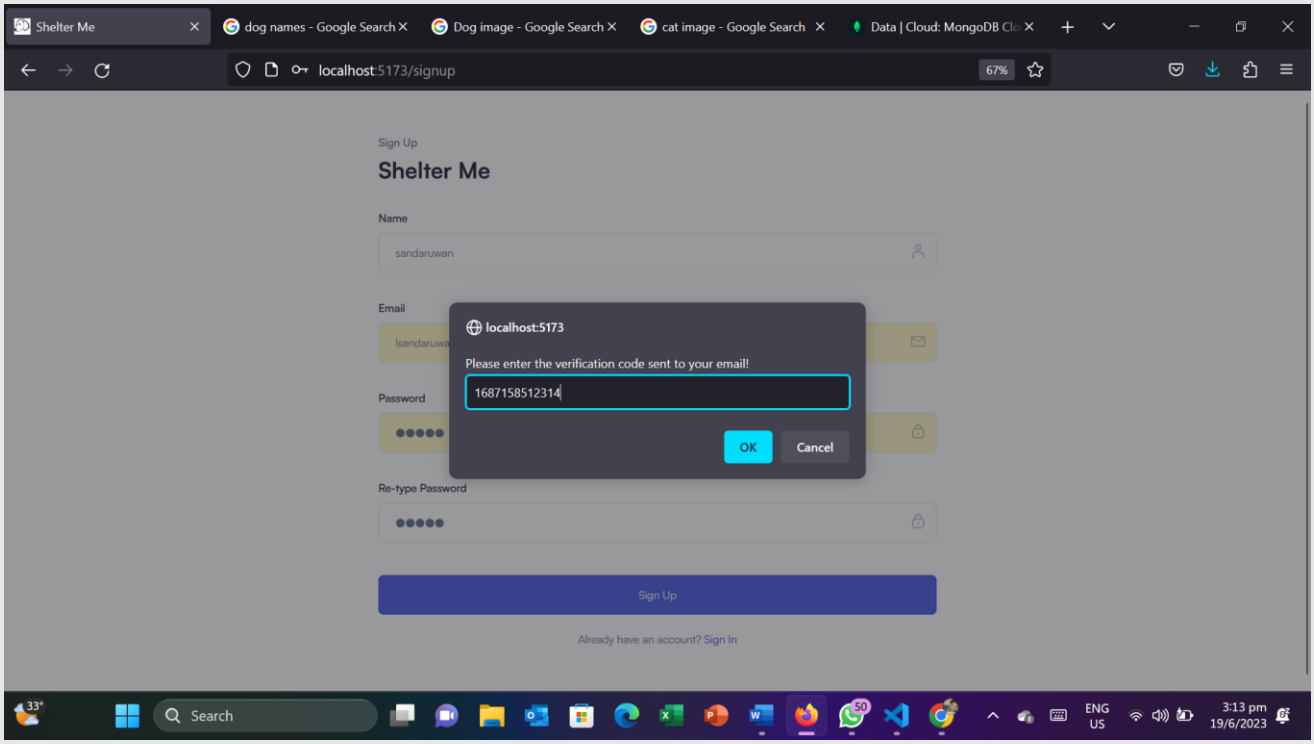


Figure 107: Place to write a verification code.

Upon entering the verification code, you will be able to verify your registration and see a confirmation of successful registration.

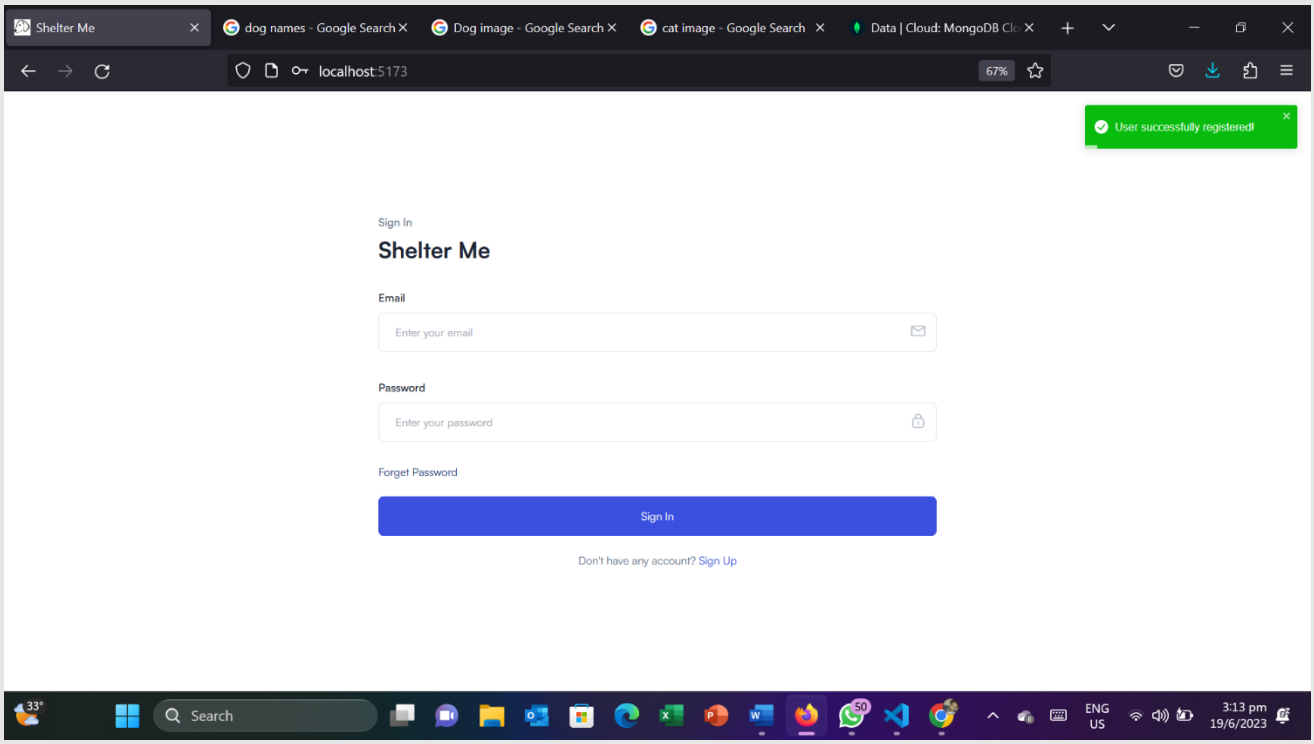


Figure 108: Sign in page.

Next, you can enter your newly created credentials into the provided text fields.

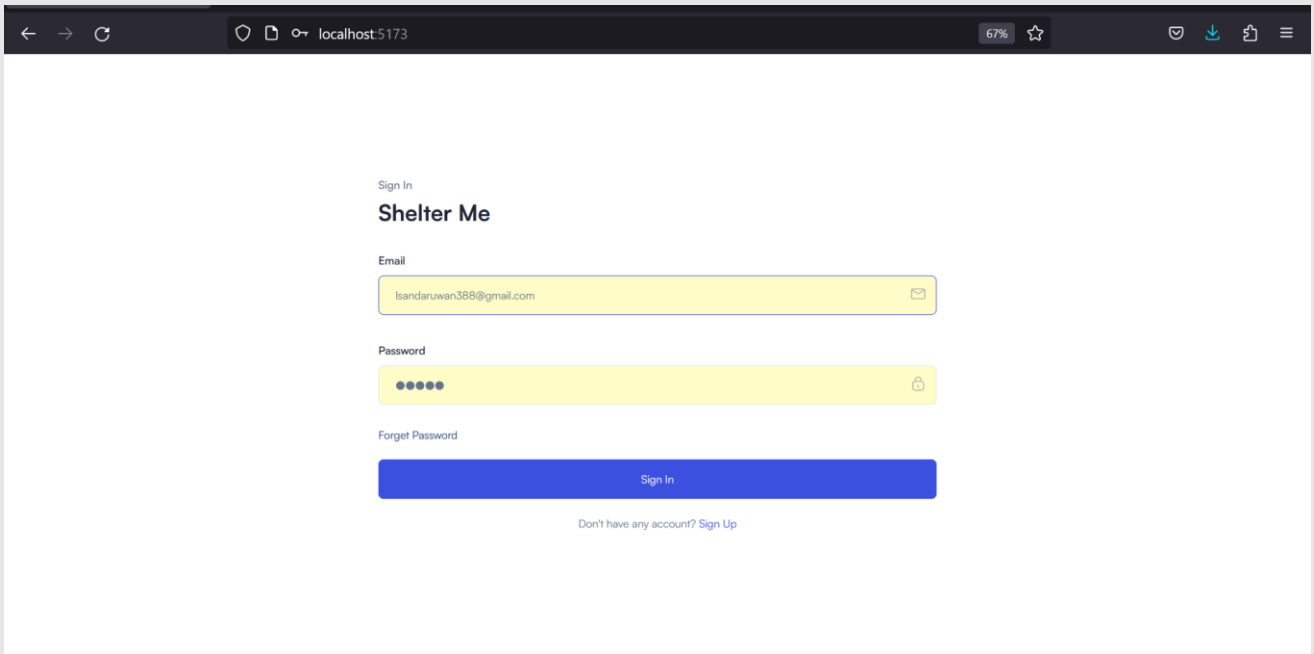


Figure 109: after putting your newly credentials.

This is look like when you put your newly created credentials into the provided text fields.

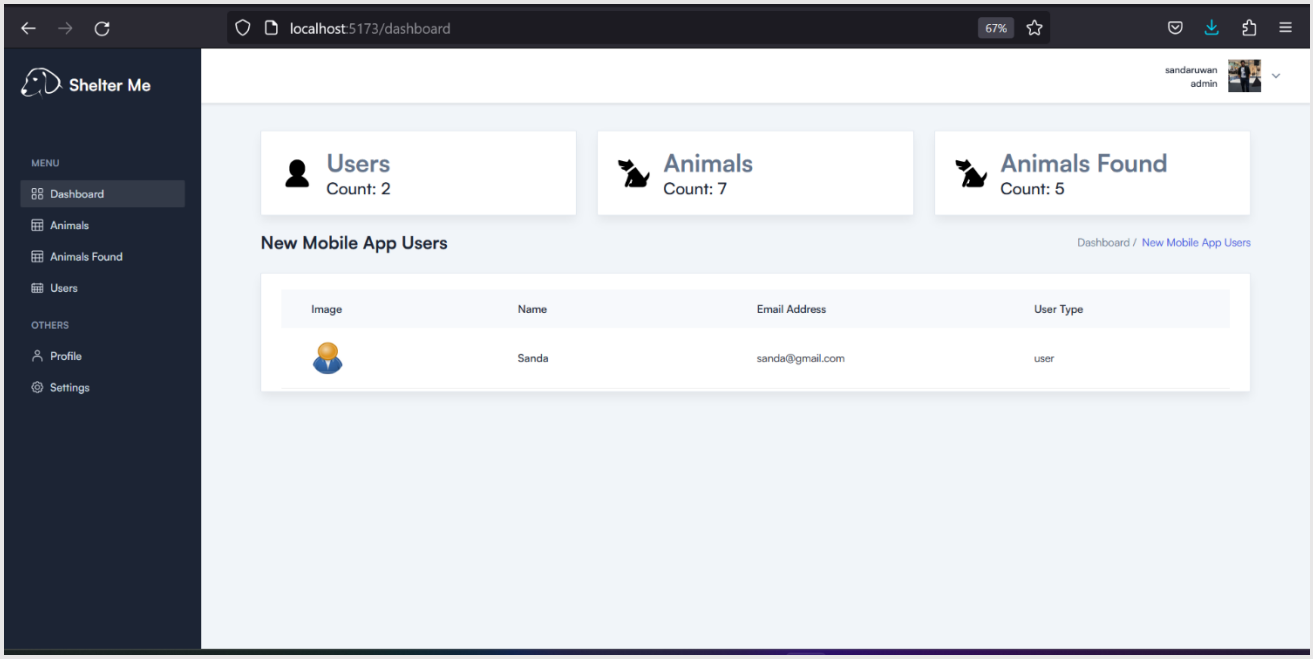


Figure 110: Dashboard.

When the user created then it is coming like this.

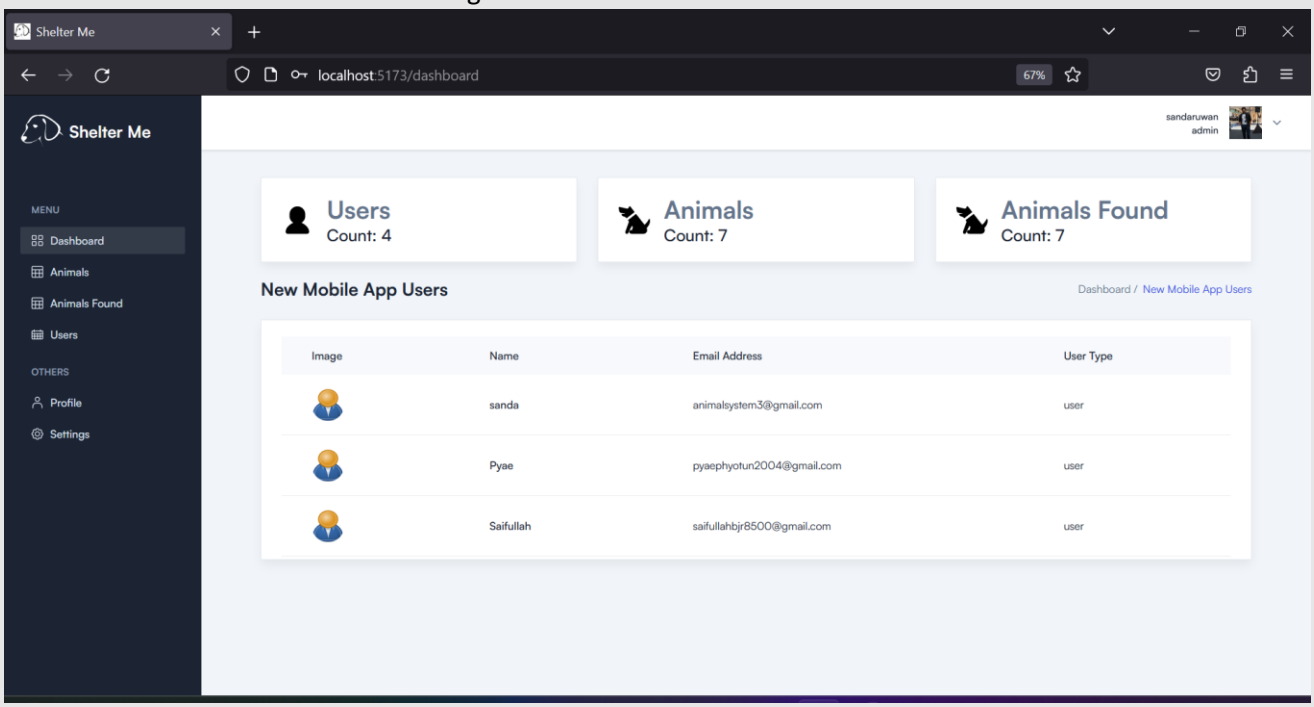


Figure 111: Dashboard with all users.

This is the dashboard displaying the credentials of all users.

Interface for animals

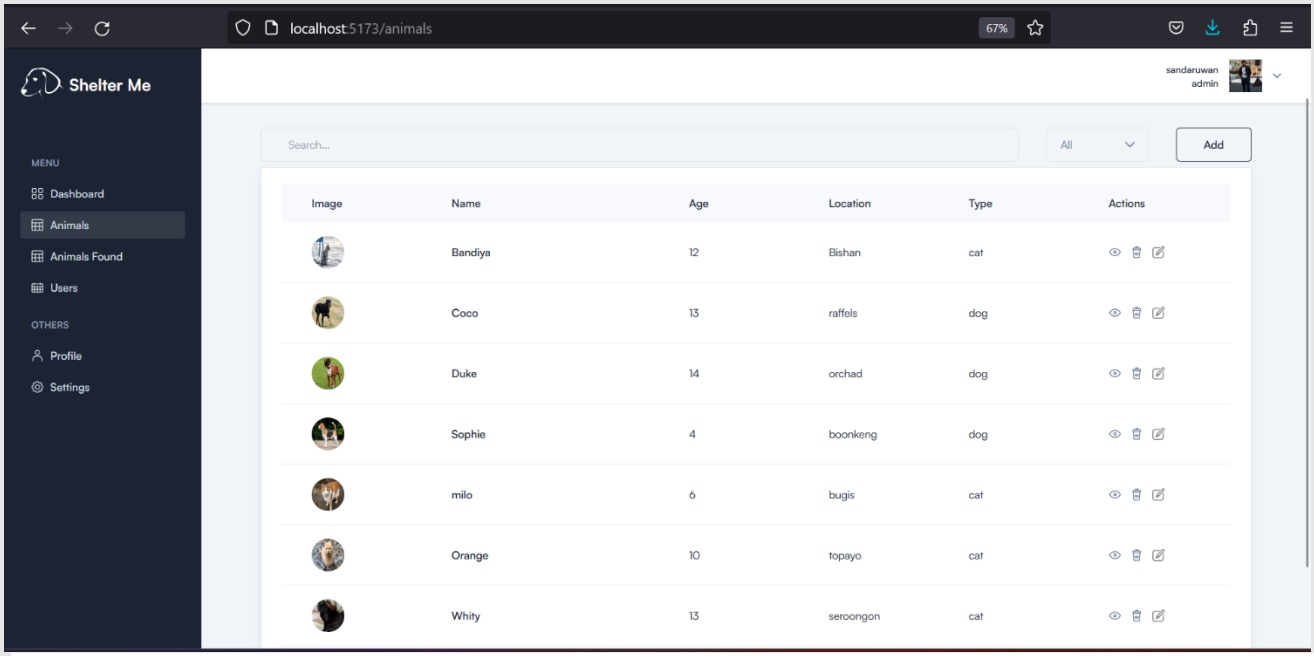


Figure 112: Animals page.

On this page, you can find comprehensive details about all the animals available.

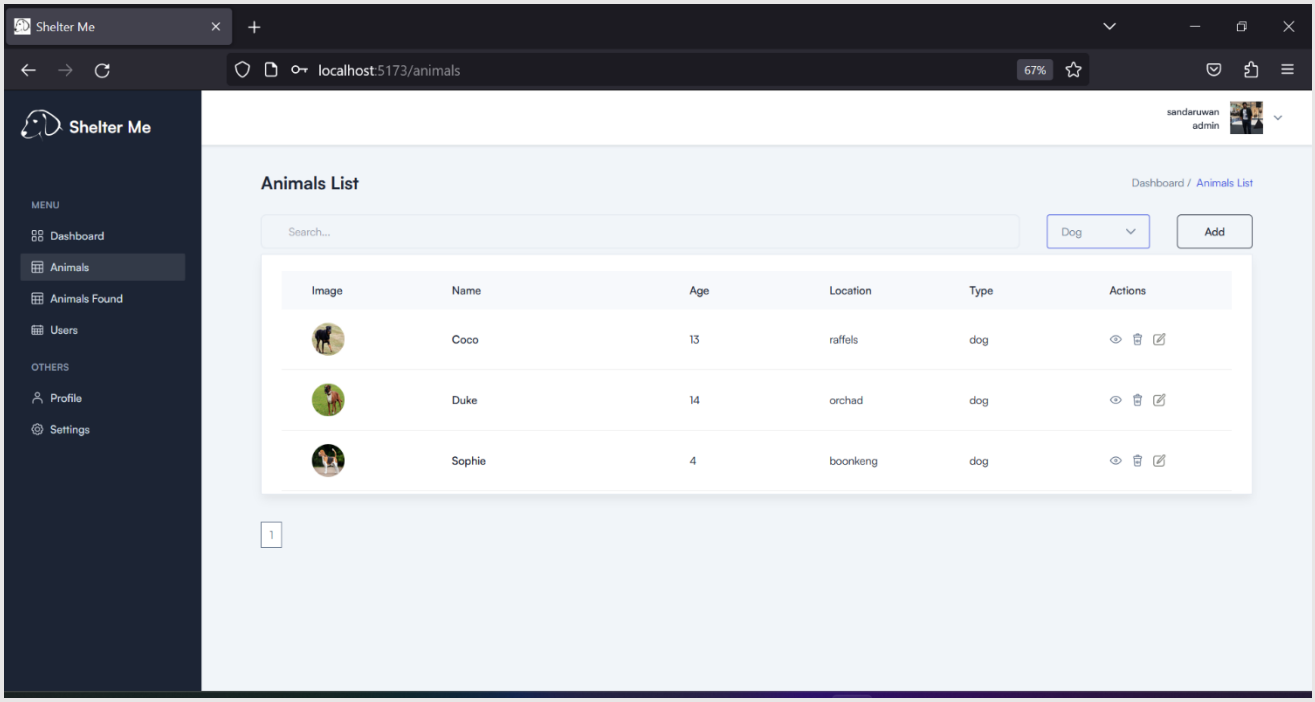


Figure 113: Only search Dog category.

This is page shows only all dogs details in this page.

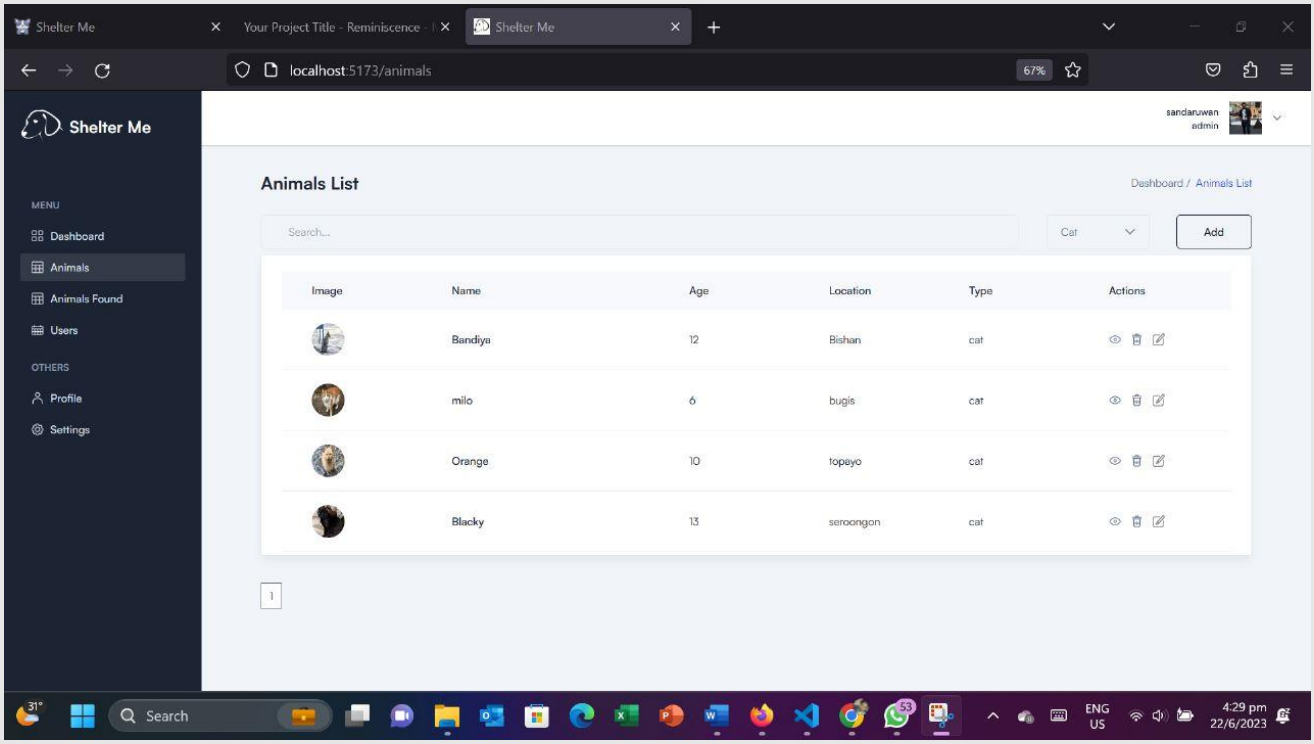


Figure 114: only search for cat category.

This is page shows only all cats details in this page.

ADD Button

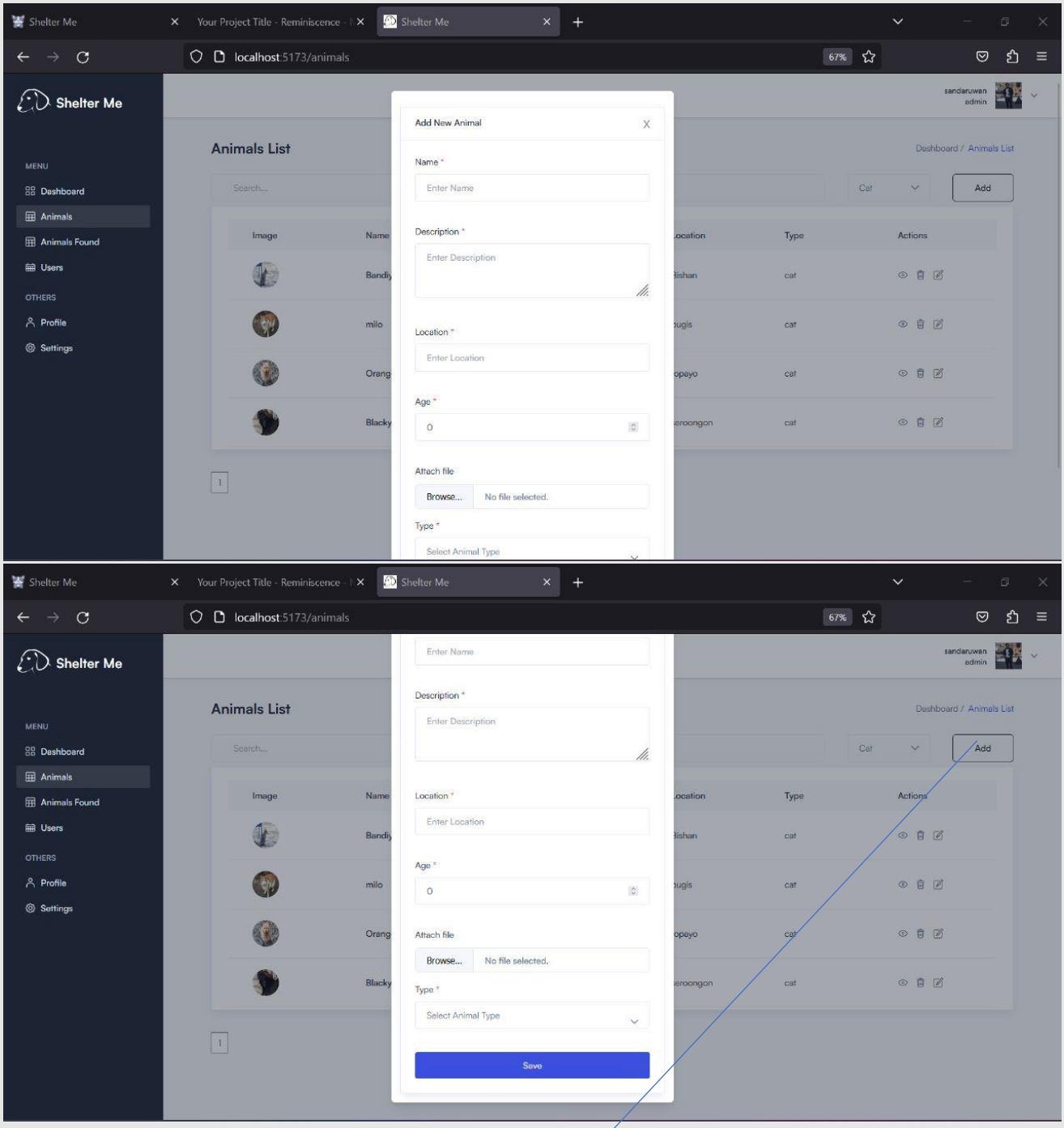


Figure 115: ADD another cat details.

If need to add another cat detail. Then you can click on Add button. Then this page coming.

Animals' actions

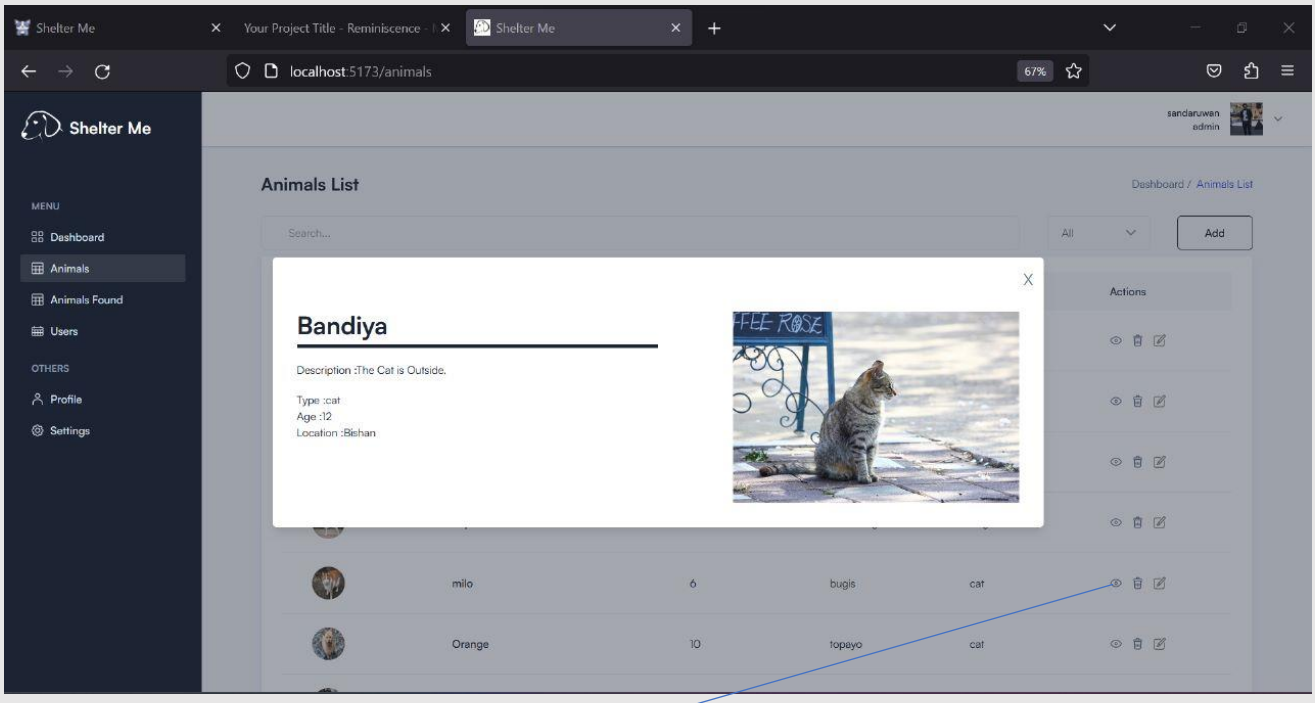


Figure 116: Select view icon.

When you click on the view icon you can see the pop details like this.

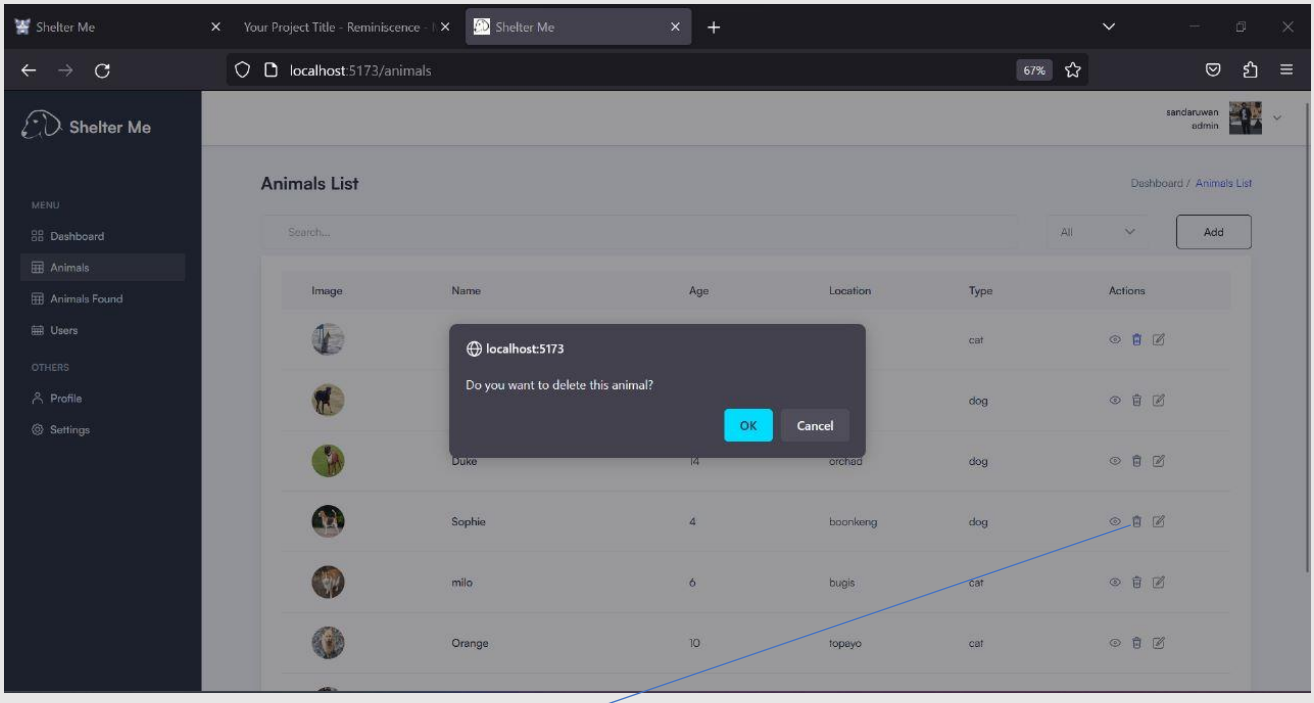


Figure 117: Delete pop message.

When you click delete button, then you can see this pop message.

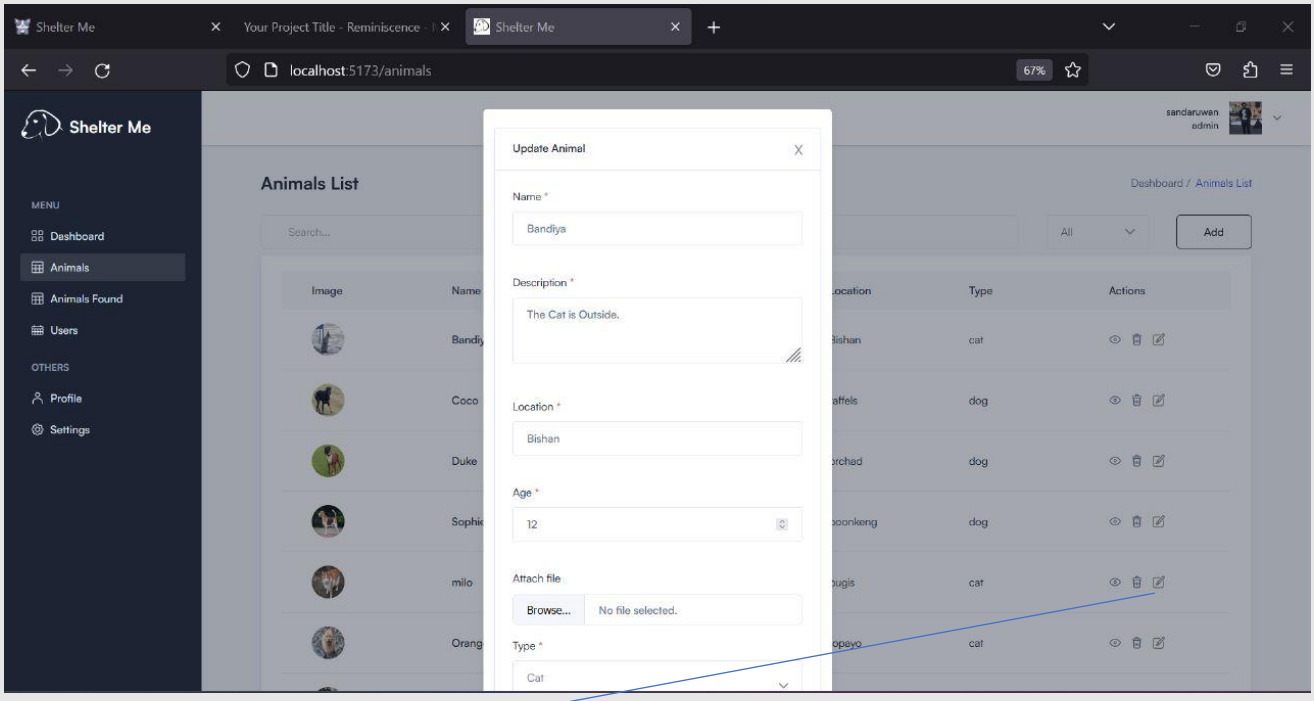


Figure 118: Updated window

When you click on update icon. You can see the window like that.

Interface for animal found page.

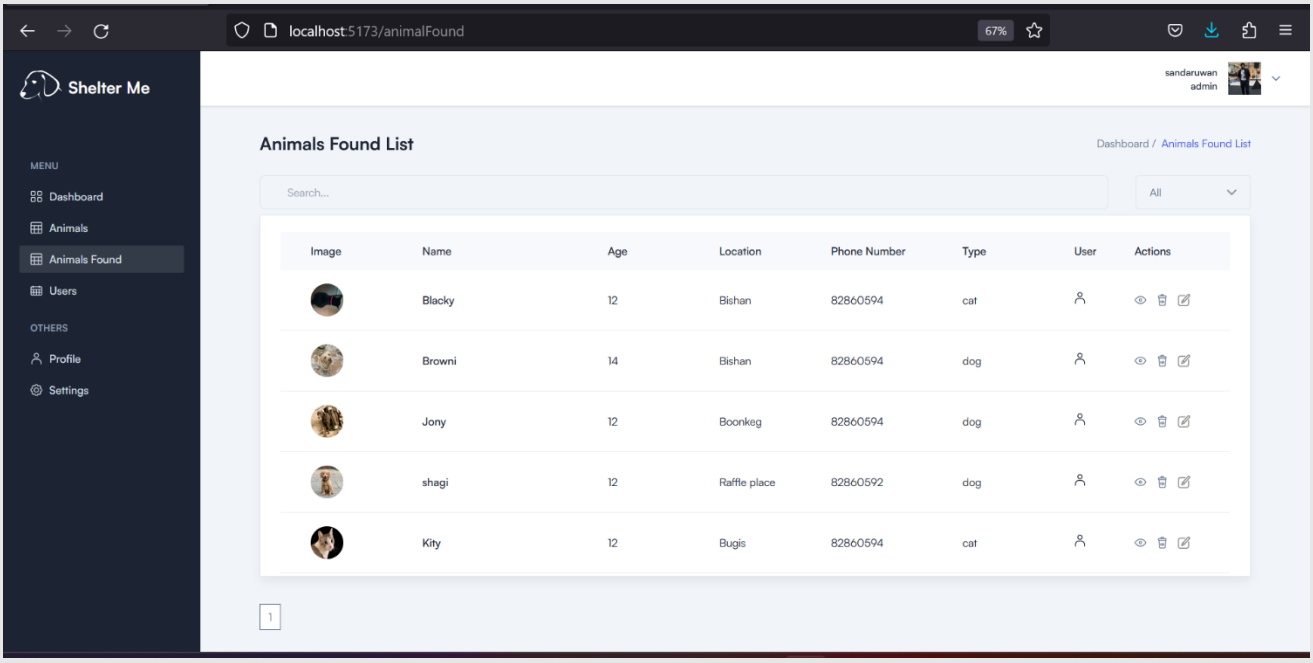


Figure 119: Animals found listing screen.

This is the animal found listing screen of all animals.

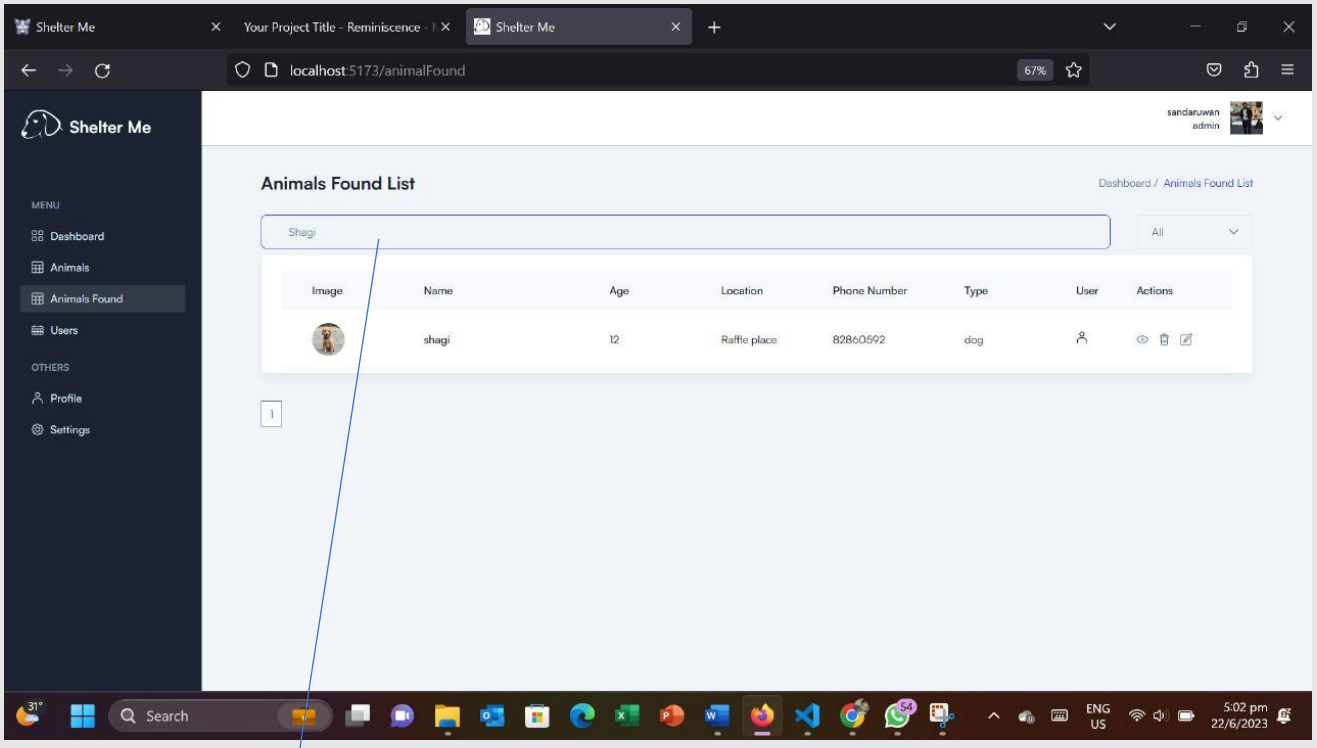


Figure 120: Search button of Animal found listing screen.

If you need to search animal name in animal found list. Then you can type name on the search bar.

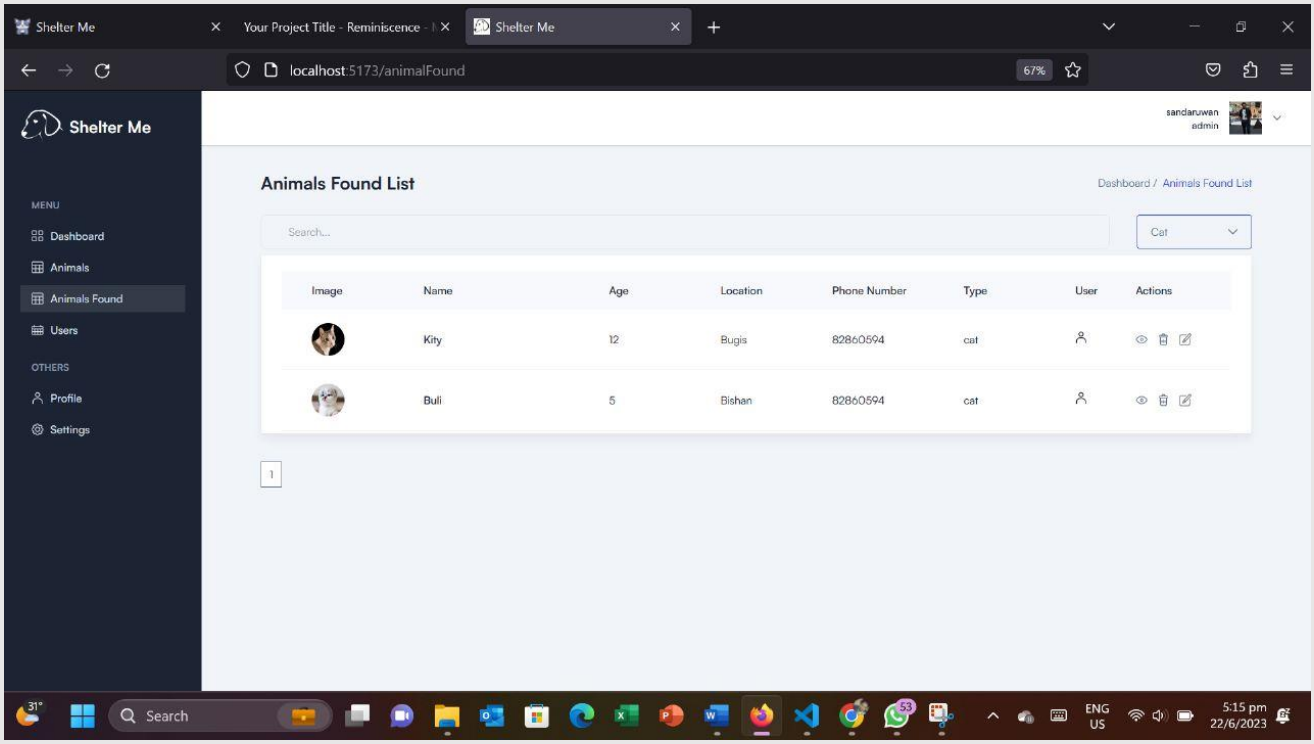


Figure 121: only search for cat category.

This is page shows only all cats details in this page.

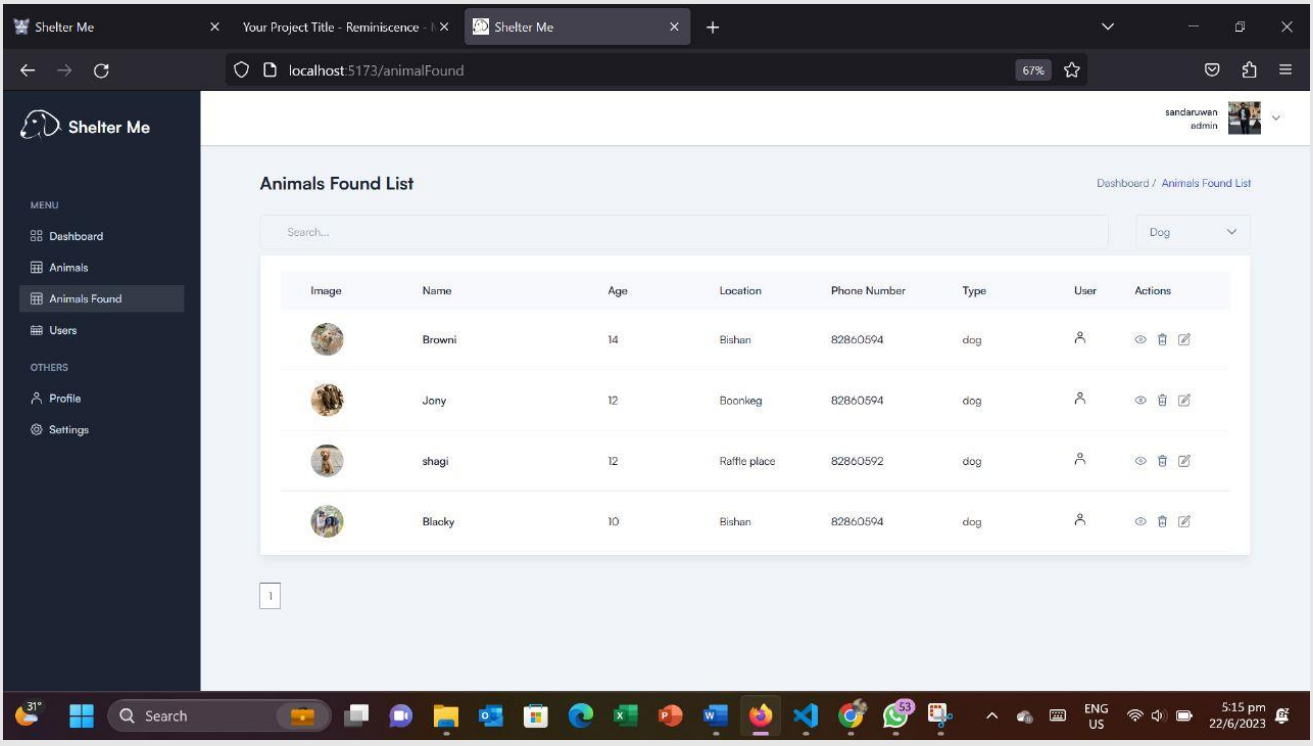


Figure 122: only search for cat category.

This is page shows only all dogs details in this page.

The core component of my project revolves around providing a visual representation of the animals' habitats. You can explore the actual locations through the screenshots displayed below.

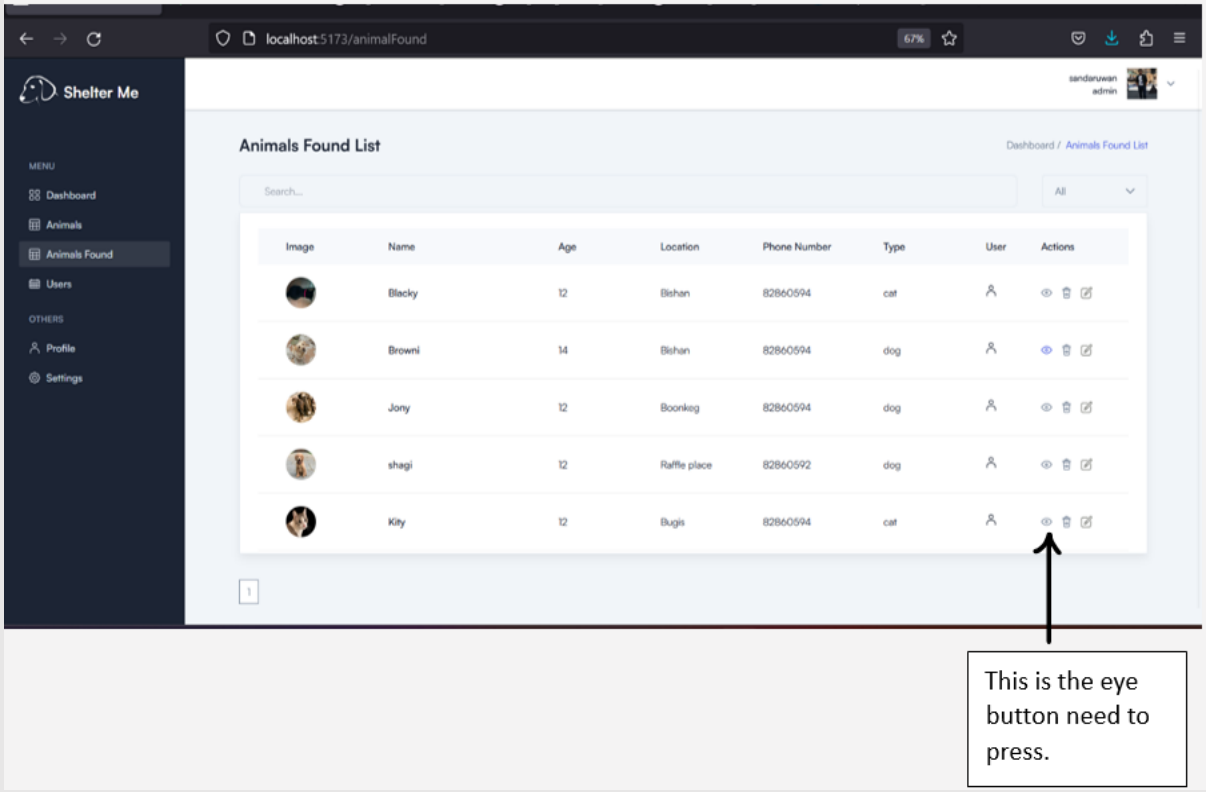


Figure 123: Animals' found interface for view button.

When the user clicks on the small eye button within the action's menu, they will be able to view the real-time location of the animal's discovery.

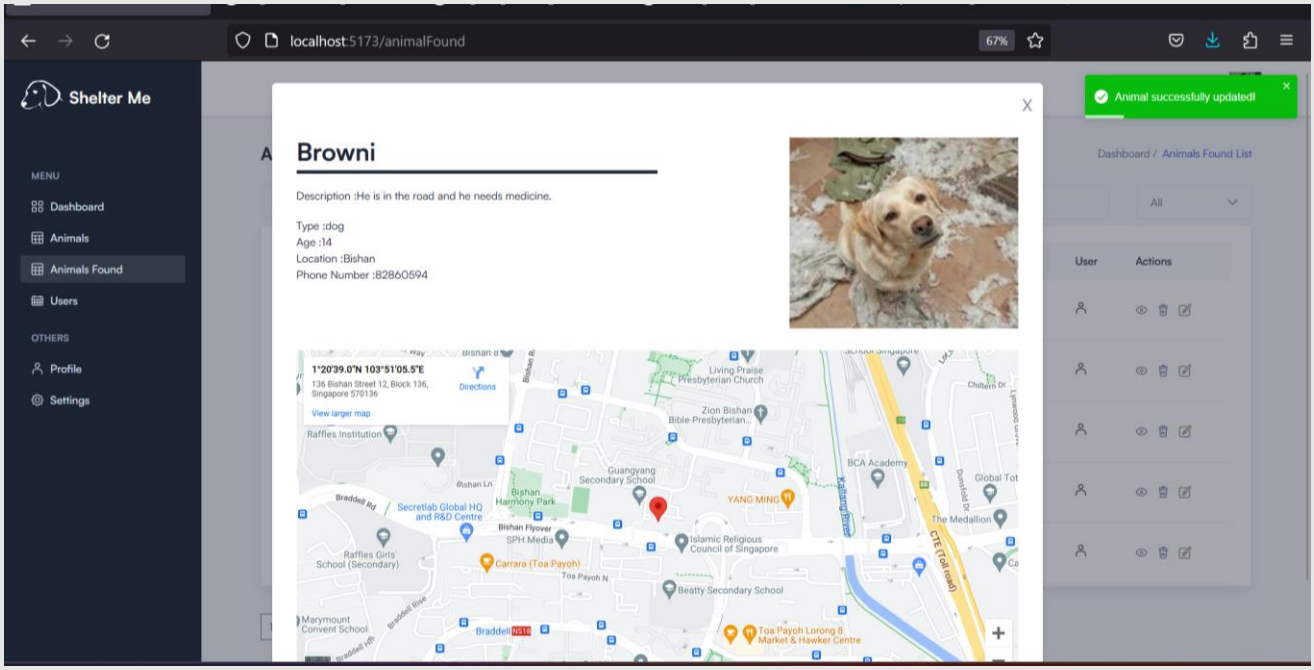


Figure 124: Details of the animal and founding location in the map.

Within this screenshot, you will find essential information regarding the animal, such as its name, type, age, location, the phone number of the person who reported it, and its pinpointed location on the map.

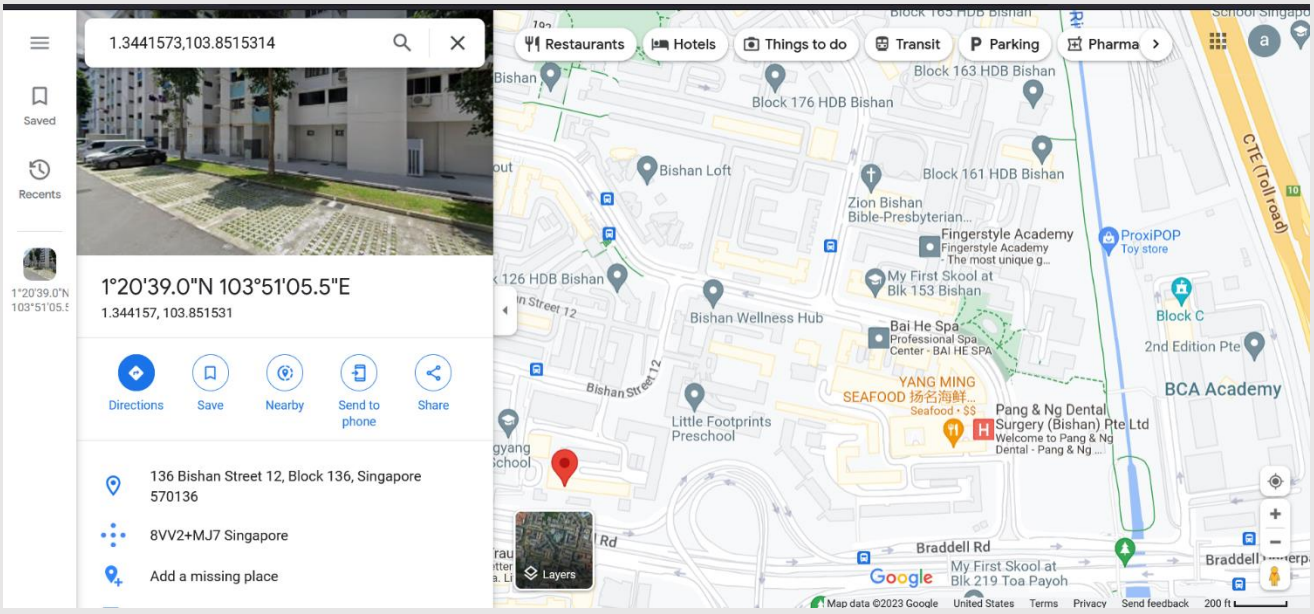


Figure 125: view of the location.

You can see the direction of the location. How to go to the animal found place.

This is another animal found in kitty we can see his location is 12 Raffles Asia square tower 2.

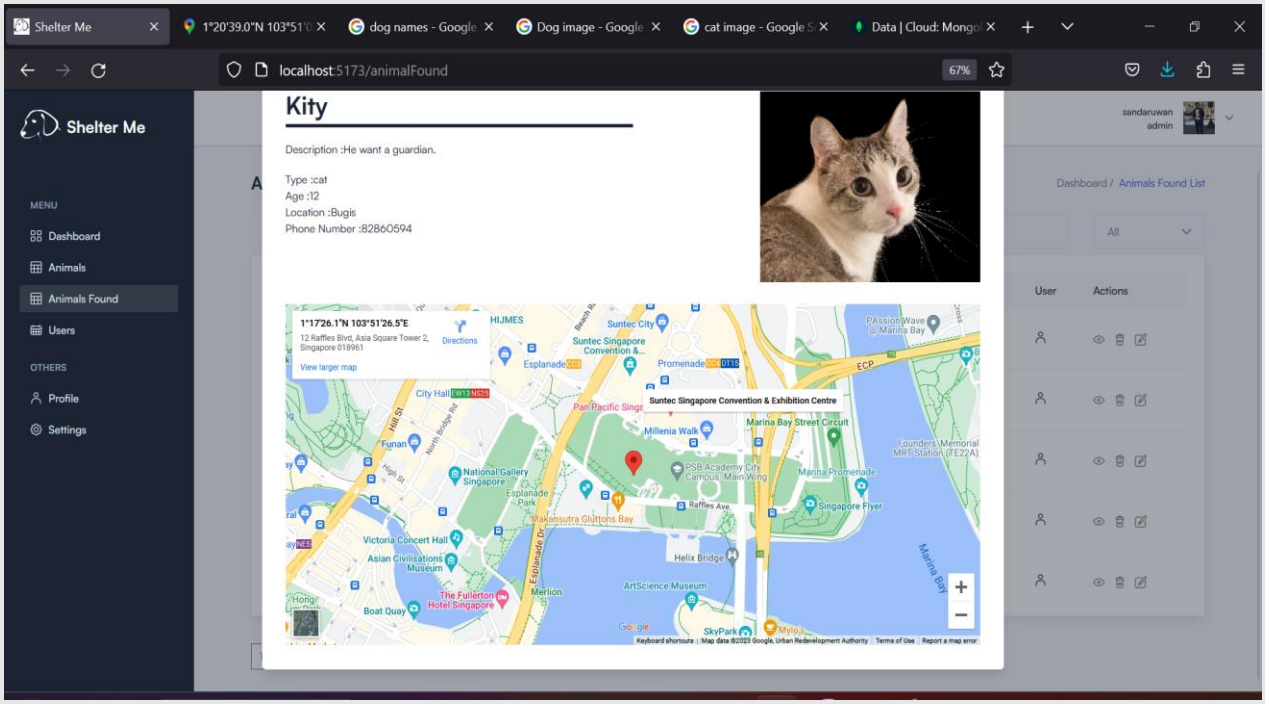


Figure 126: 2nd animal found location.

You can see the details of the animal and location of the animal in the map.

Delete icon

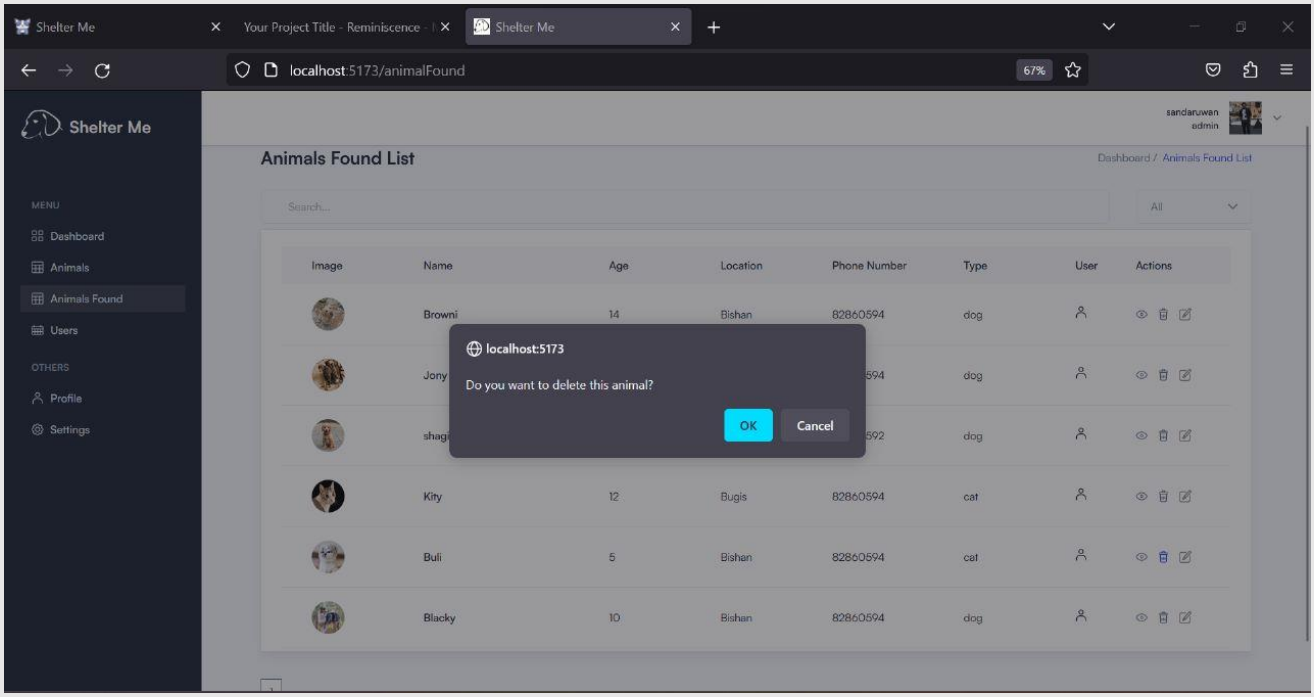


Figure 127: click on the delete button.

When you click on the delete button, this pop message was pop on the screen.

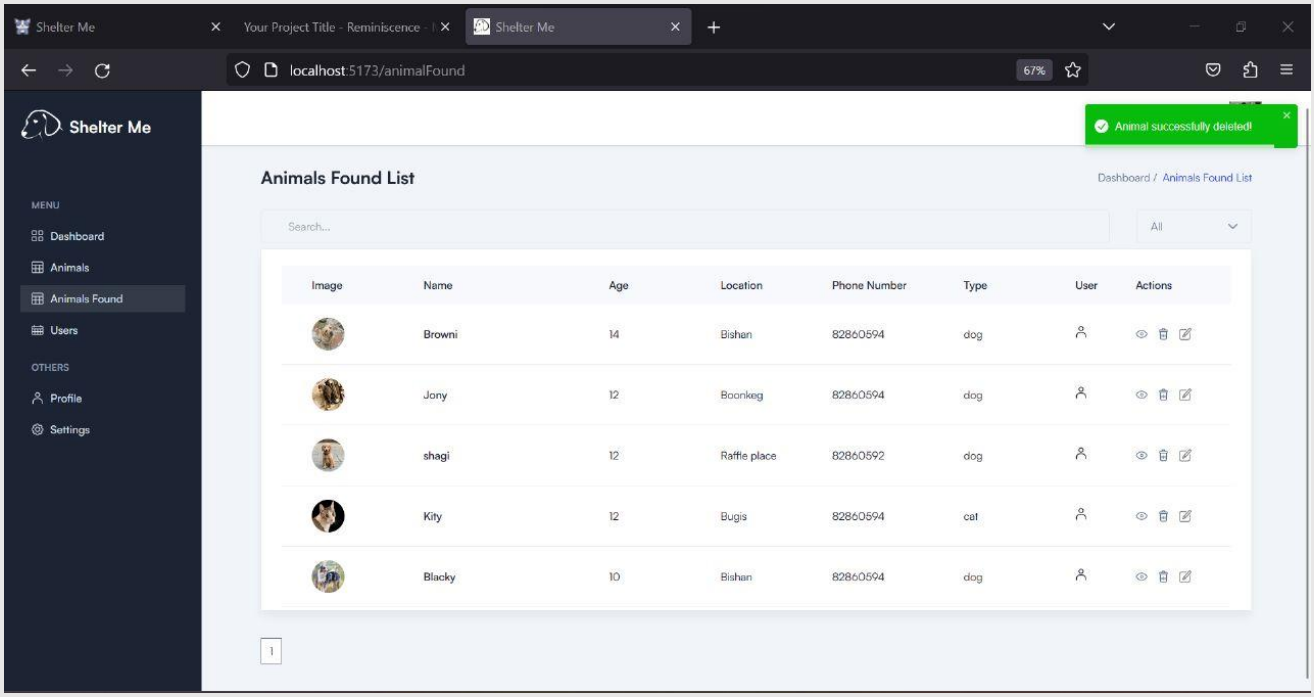


Figure 128: Successfully delete record.

When click the delete This is the pop message coming from the green message.

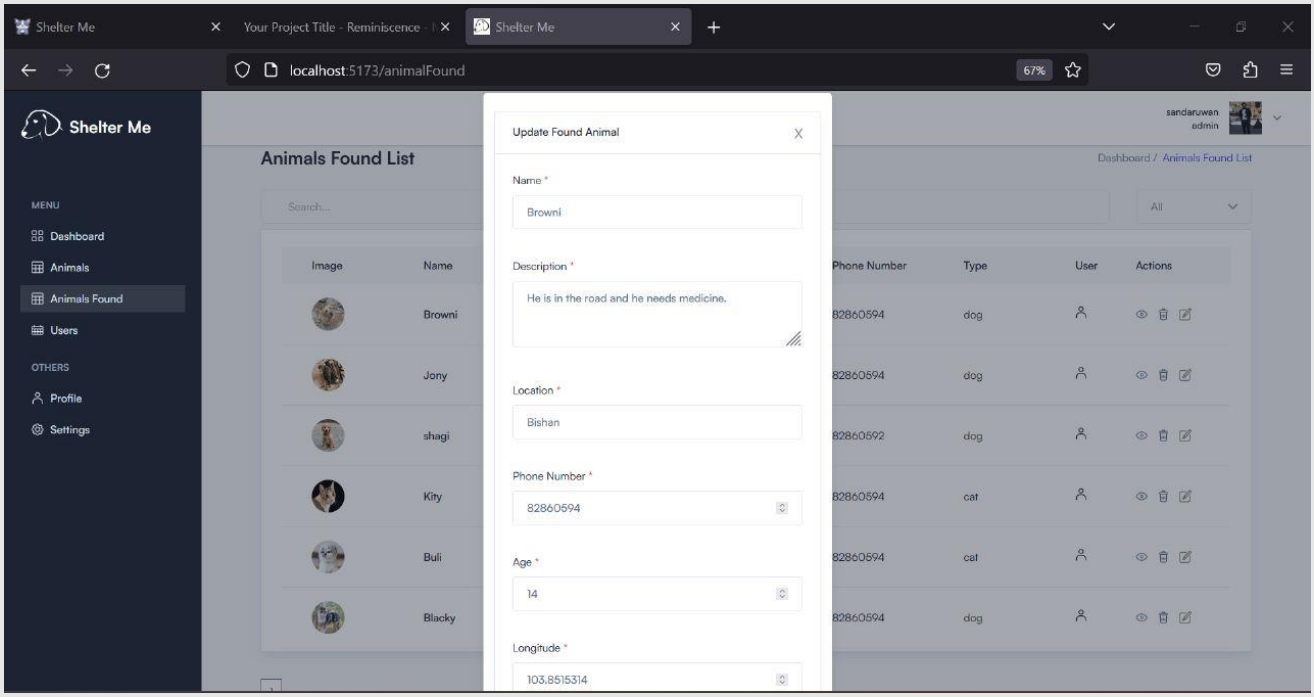


Figure 129: updated the details of the animal.

This is the updated details on the animal.

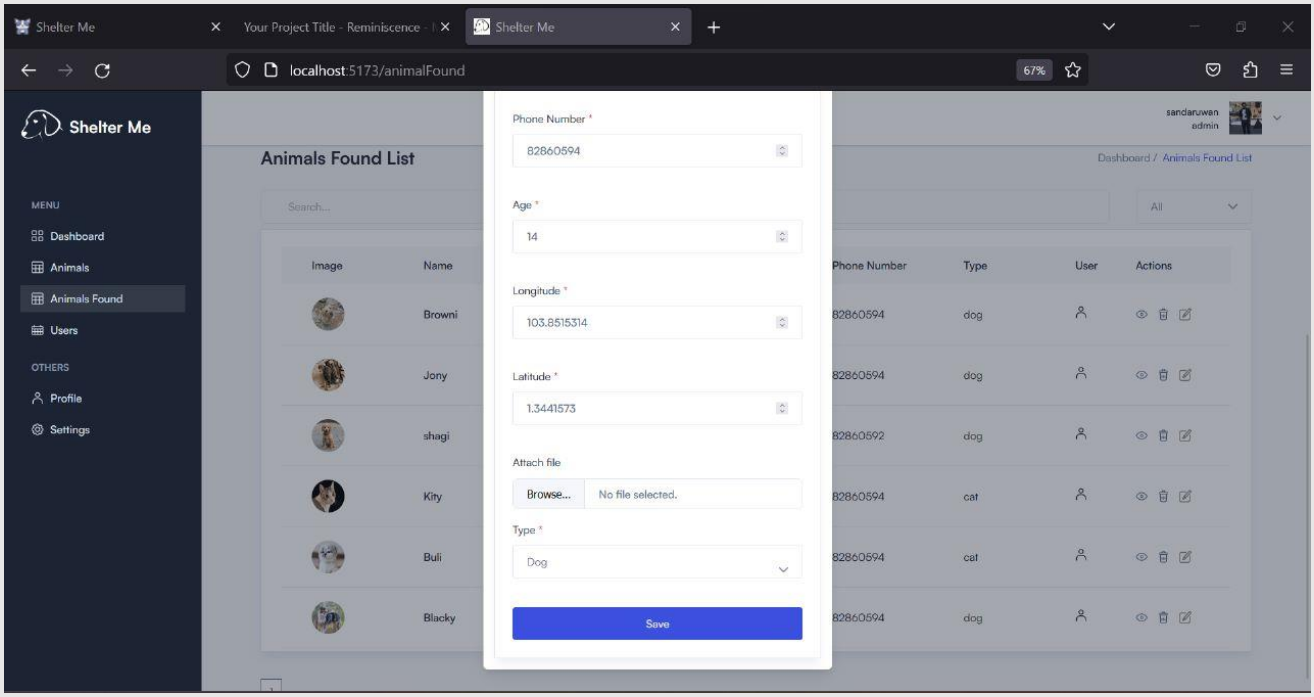


Figure 130: updated details form.

You can put your details and save it.

Users Interface page

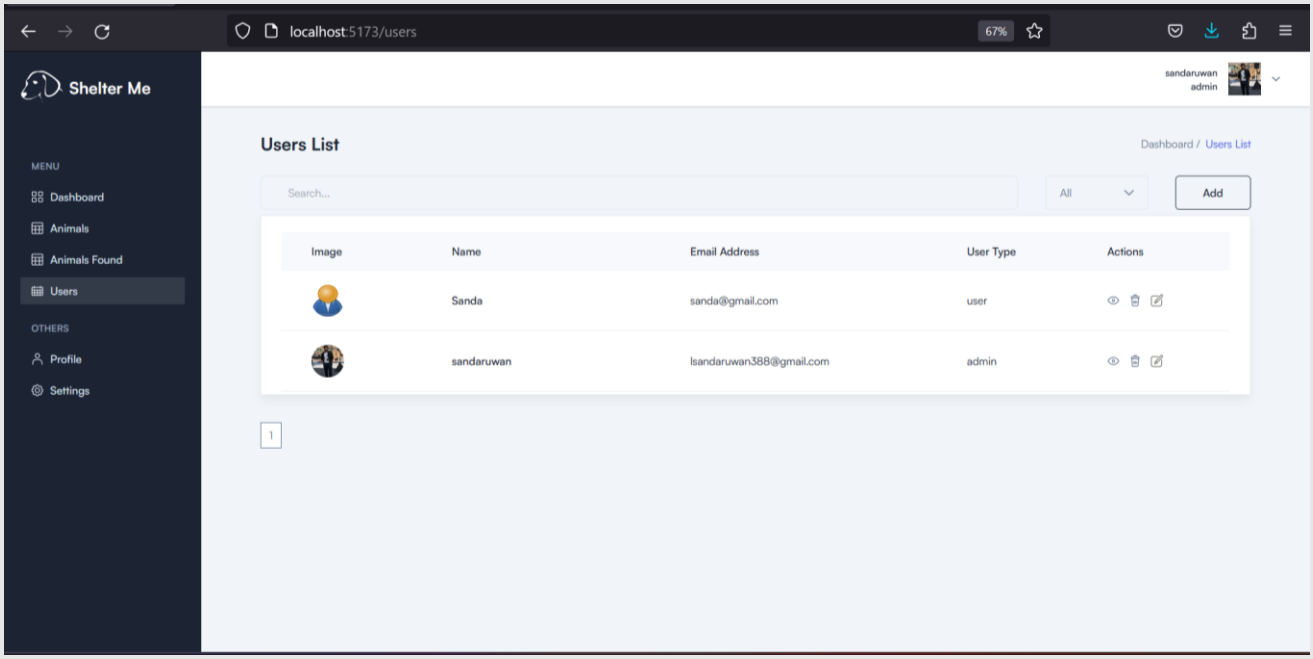


Figure 131: Users List.

You can add users in here. There are two types of users. One is user and second is admin user.

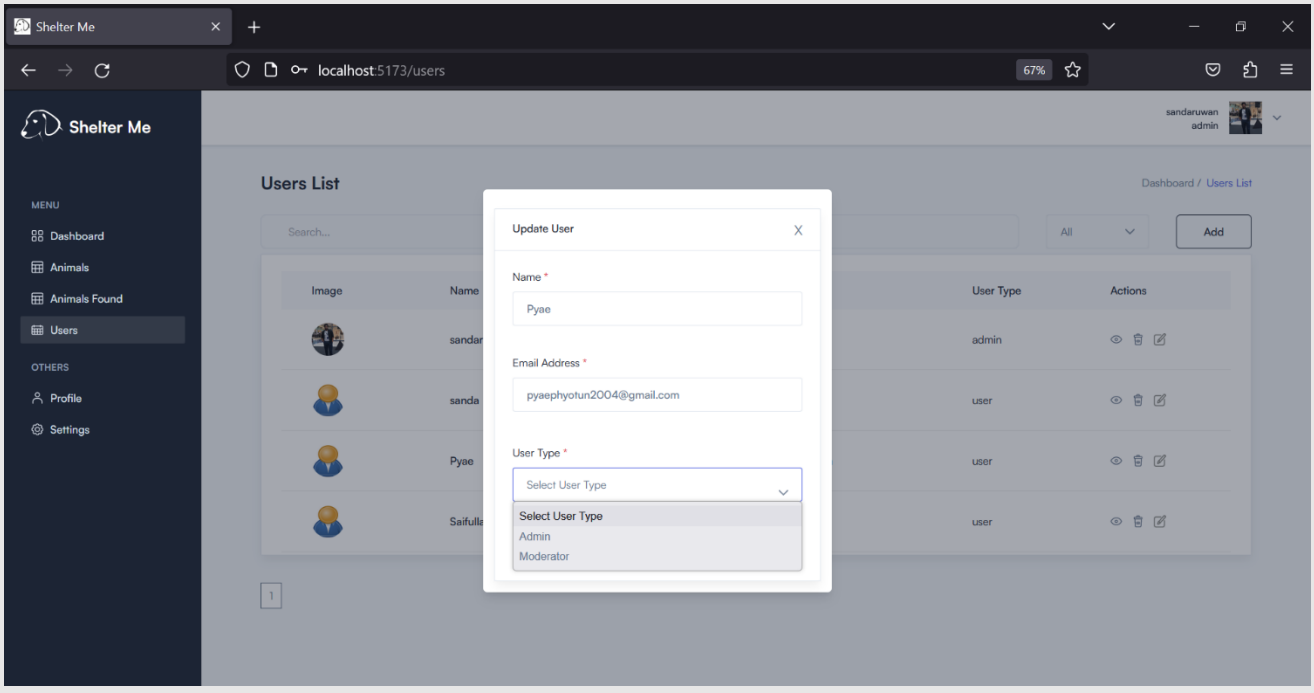


Figure 132: Updated user details.

You can update your user details. If you need to change user type, you can do it.

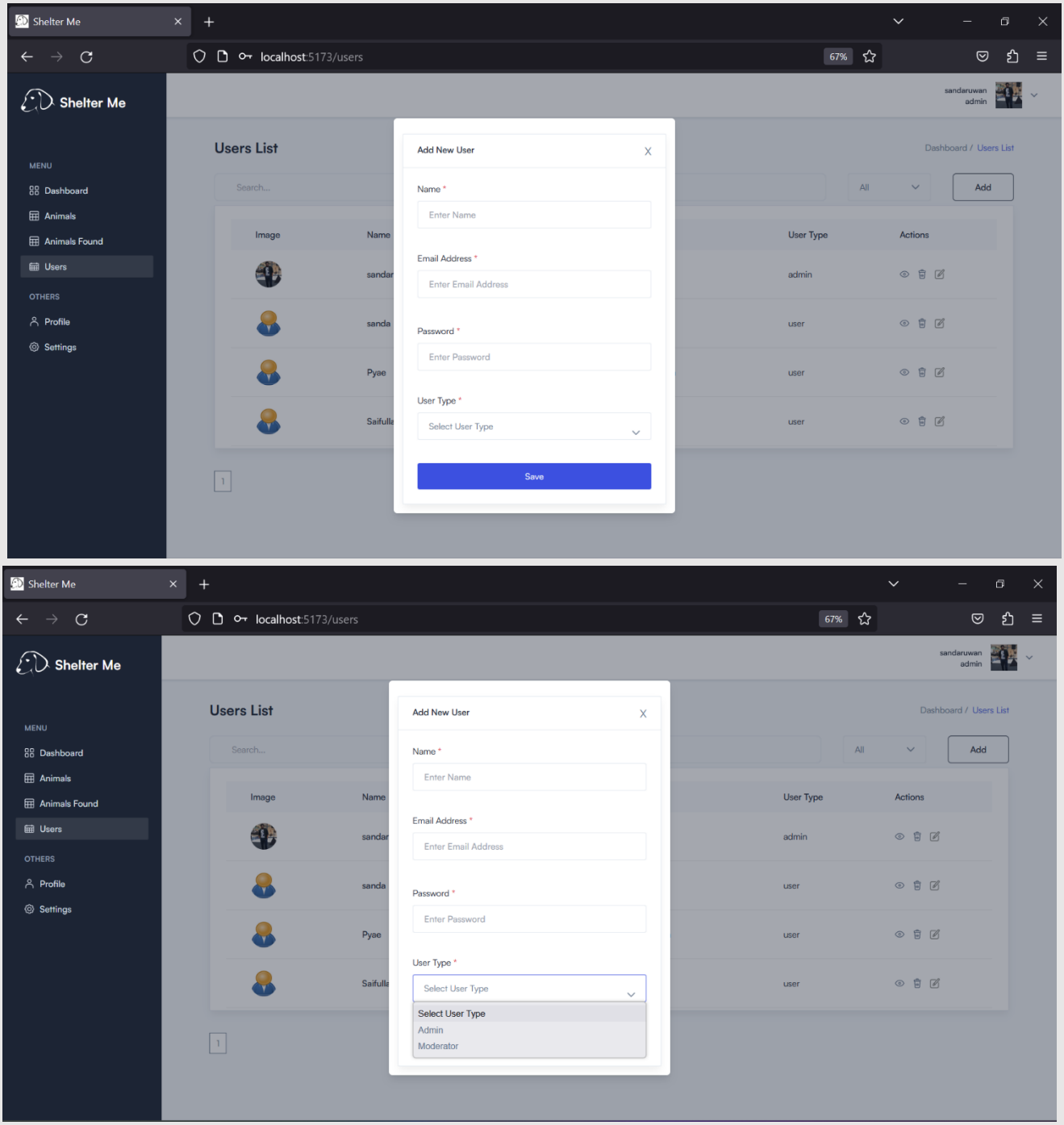


Figure 133: Add new user.

Profile Interface Page

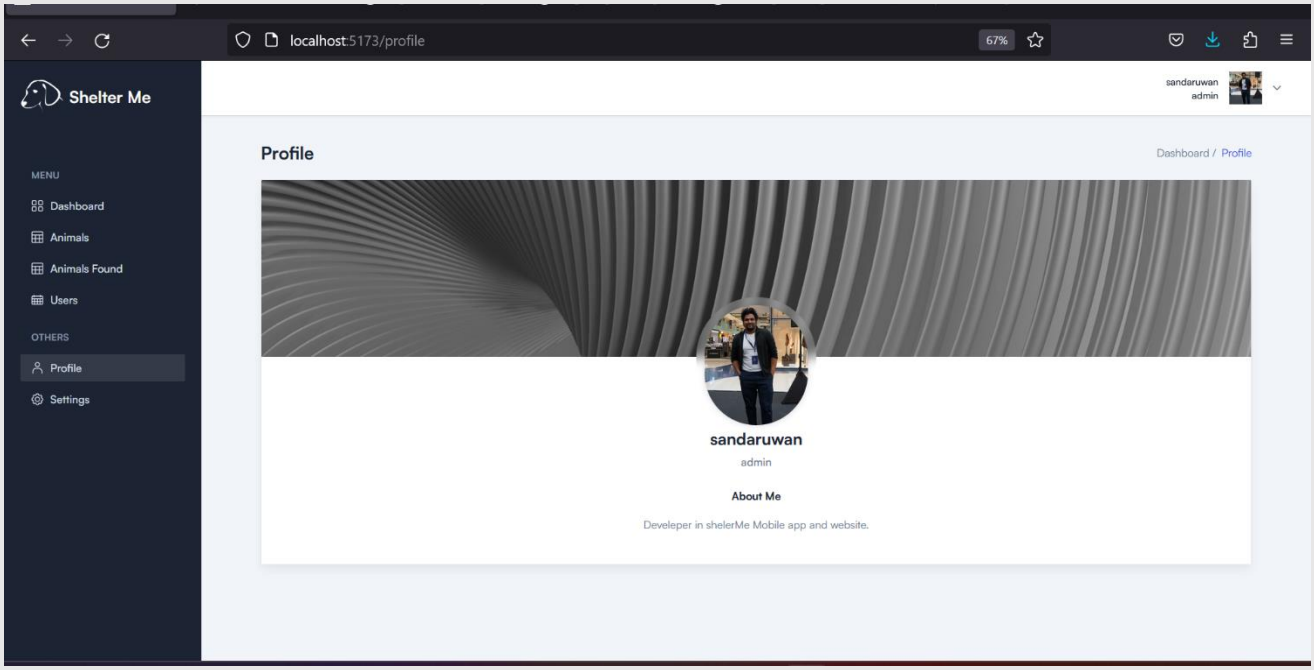


Figure 134: profile of admin user.

In this profile you can see the admin user credentials.

Setting interface page

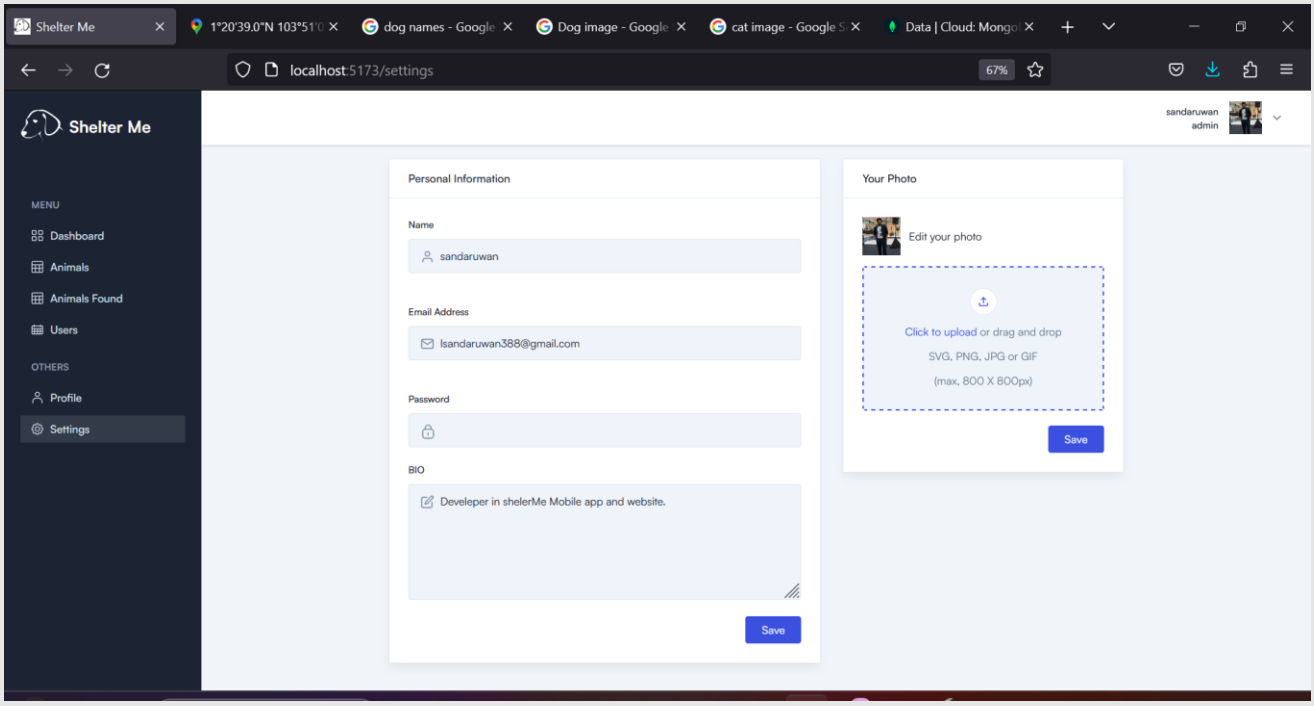


Figure 135: settings page.

This is the settings page. If you need to upload pictures. You can upload your own picture on this.

7.1.3 Mobile app Promotion: WEBSITE

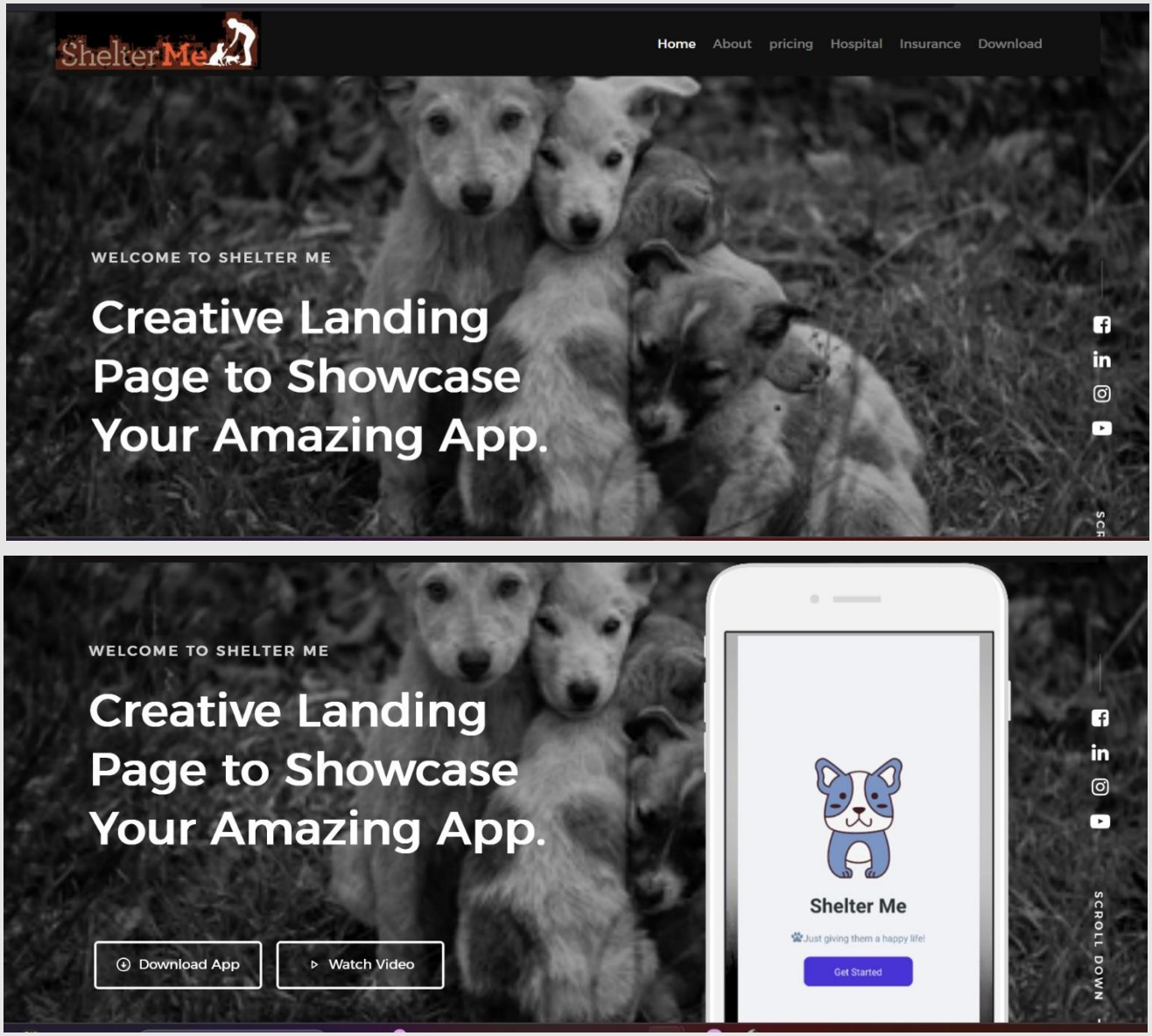
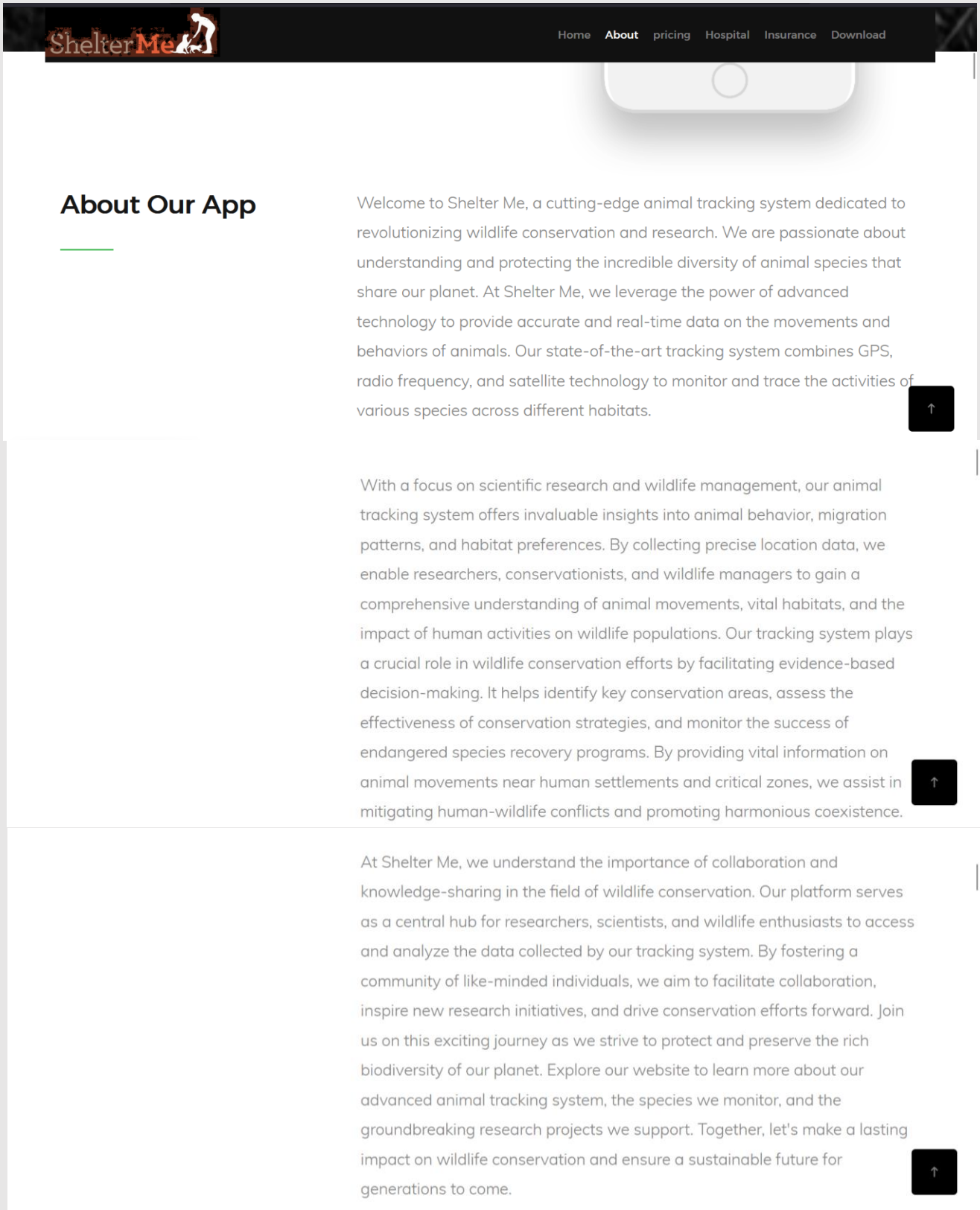


Figure 136: Home page.

On the right-hand side, you will notice four social media links. If you wish to explore more details about the page, you can click on those links, which will redirect you to the respective social media platforms.

About Page.


ShelterMe
Home
About
pricing
Hospital
Insurance
Download
About Our App
Welcome to Shelter Me, a cutting-edge animal tracking system dedicated to revolutionizing wildlife conservation and research. We are passionate about understanding and protecting the incredible diversity of animal species that share our planet. At Shelter Me, we leverage the power of advanced technology to provide accurate and real-time data on the movements and behaviors of animals. Our state-of-the-art tracking system combines GPS, radio frequency, and satellite technology to monitor and trace the activities of various species across different habitats.
With a focus on scientific research and wildlife management, our animal tracking system offers invaluable insights into animal behavior, migration patterns, and habitat preferences. By collecting precise location data, we enable researchers, conservationists, and wildlife managers to gain a comprehensive understanding of animal movements, vital habitats, and the impact of human activities on wildlife populations. Our tracking system plays a crucial role in wildlife conservation efforts by facilitating evidence-based decision-making. It helps identify key conservation areas, assess the effectiveness of conservation strategies, and monitor the success of endangered species recovery programs. By providing vital information on animal movements near human settlements and critical zones, we assist in mitigating human-wildlife conflicts and promoting harmonious coexistence.
At Shelter Me, we understand the importance of collaboration and knowledge-sharing in the field of wildlife conservation. Our platform serves as a central hub for researchers, scientists, and wildlife enthusiasts to access and analyze the data collected by our tracking system. By fostering a community of like-minded individuals, we aim to facilitate collaboration, inspire new research initiatives, and drive conservation efforts forward. Join us on this exciting journey as we strive to protect and preserve the rich biodiversity of our planet. Explore our website to learn more about our advanced animal tracking system, the species we monitor, and the groundbreaking research projects we support. Together, let's make a lasting impact on wildlife conservation and ensure a sustainable future for generations to come.

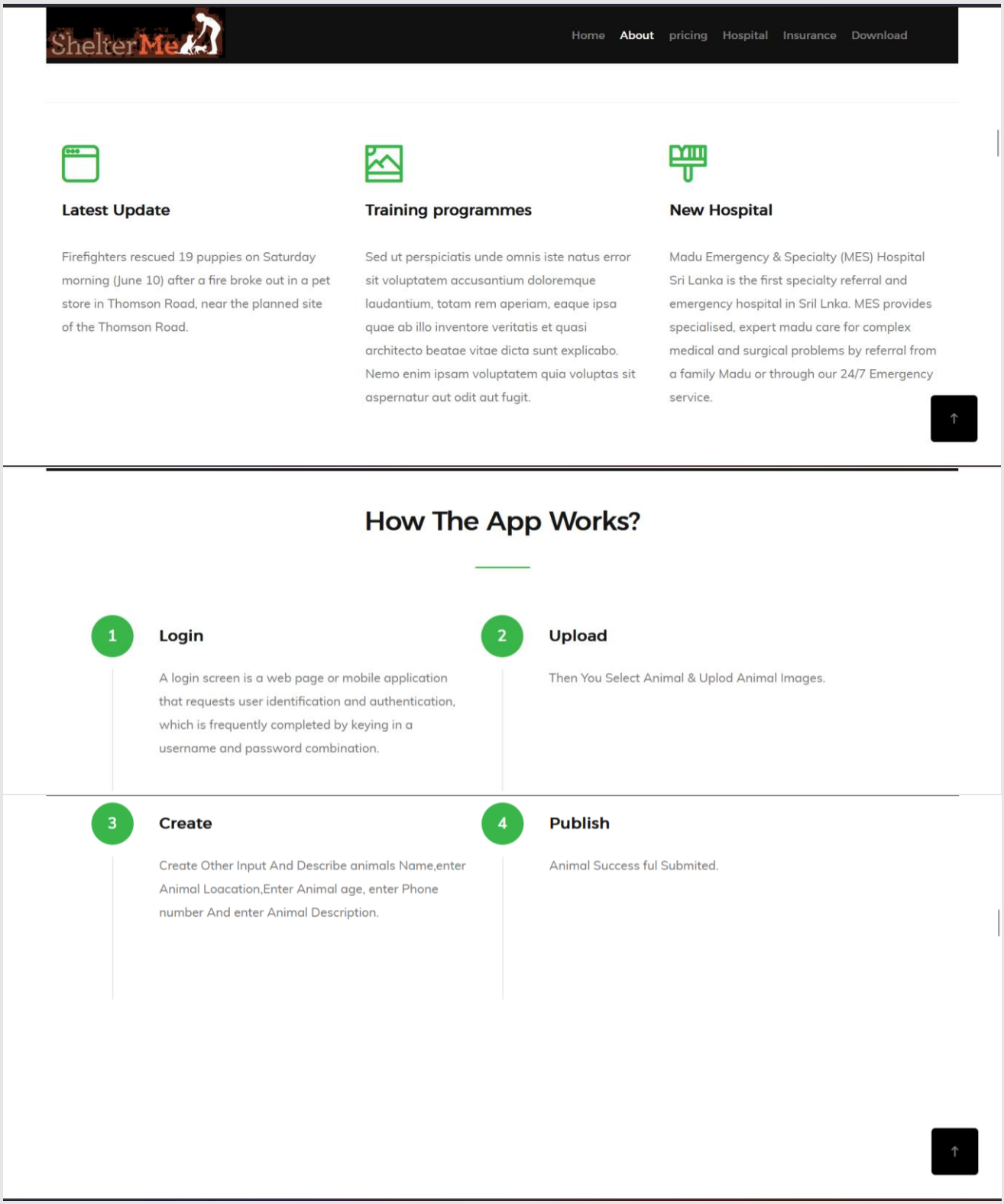


Figure 137: About page.

This Image In my android app all the interfaces

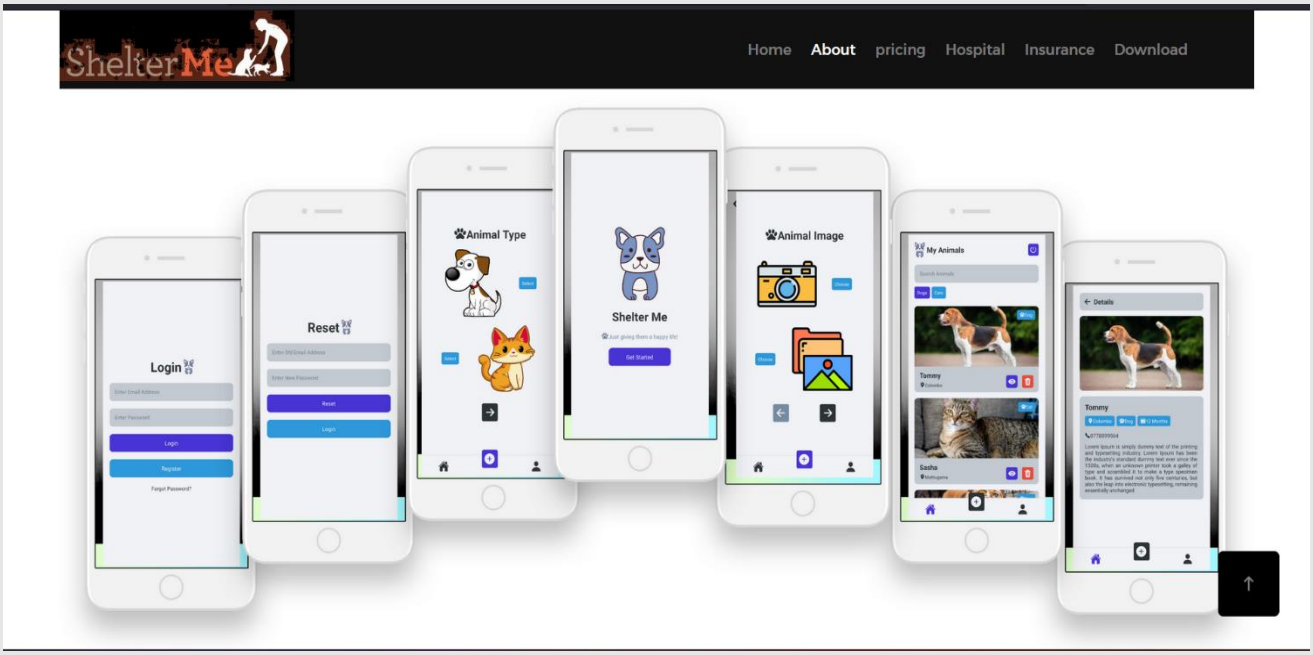


Figure 138: all the pages of android app.

Pricing Page

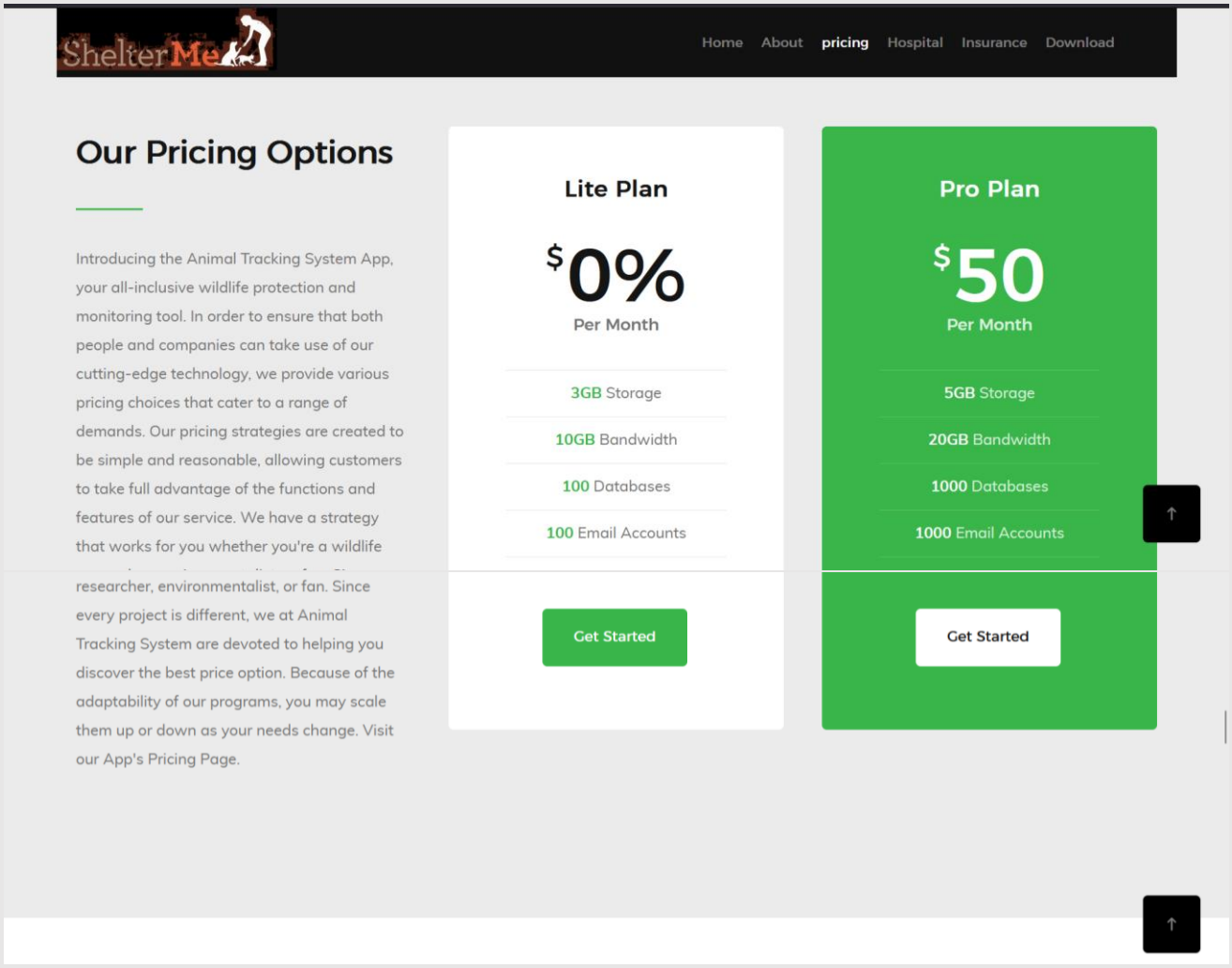


Figure 139: pricing list.

Within the Android application, you will encounter a pricing list containing two different plans. To evaluate both plans, you can navigate to the listing screen that displays four features. Once you have reviewed the features, you can proceed to select the desired plan. If you choose lite plan, then click on the get started. Then user can see the more information about the insurance.

Hospital Page

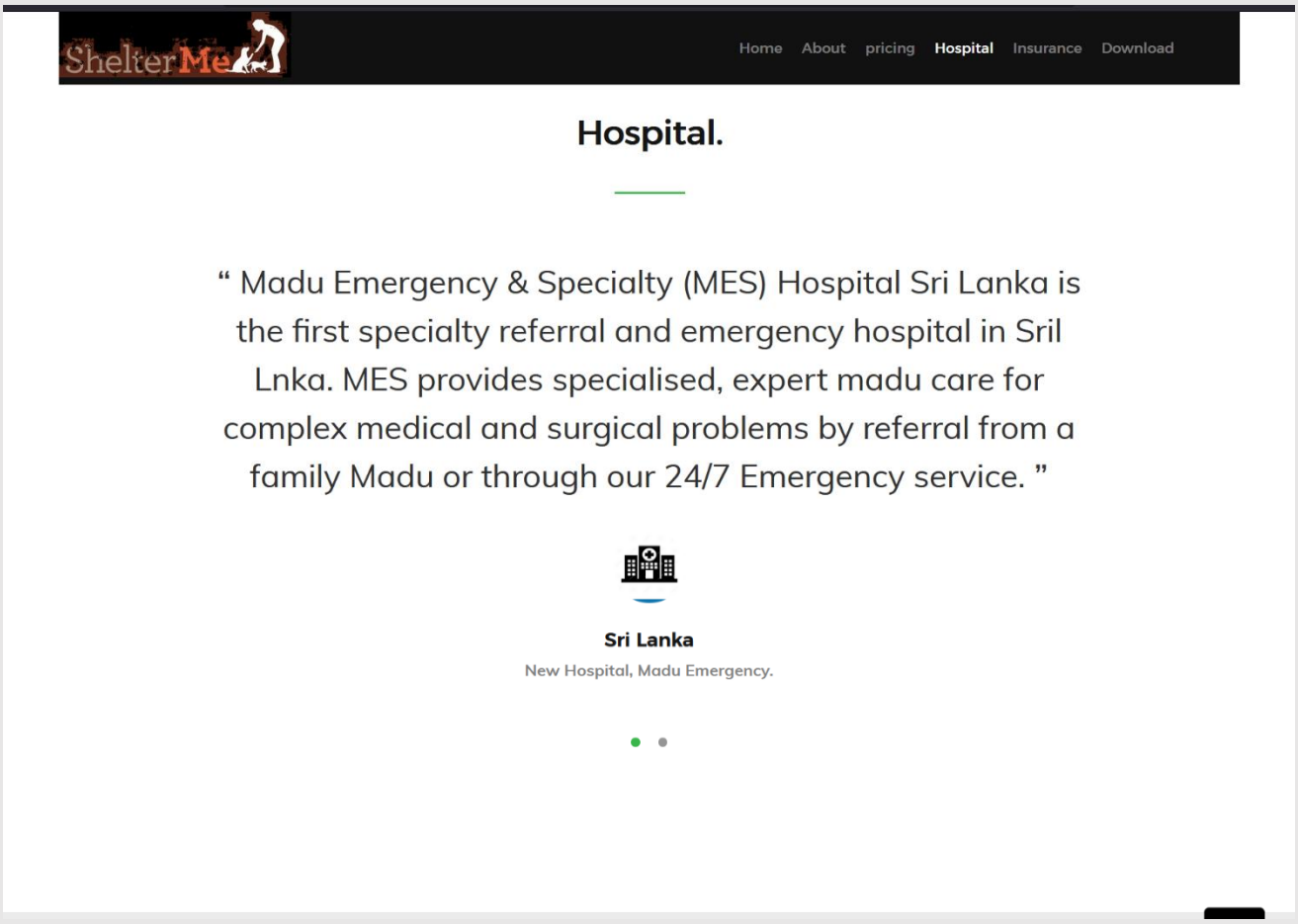


Figure 140: hospital page and description about hospital.

On the website, you will find information about two hospitals. This includes the names of the hospitals as well as their corresponding addresses. And here I attached a screenshot of the one the hospital.

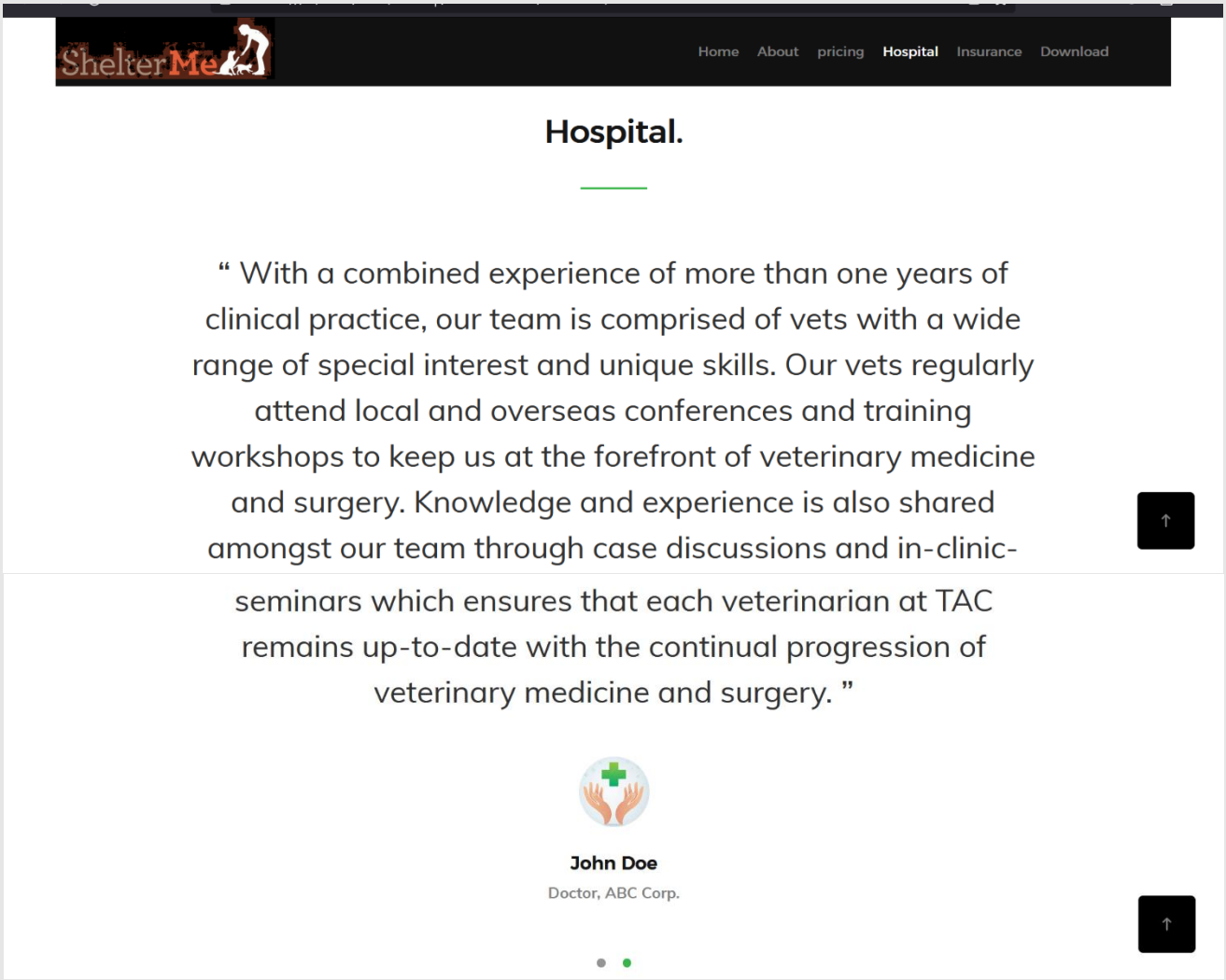


Figure 141: hospital page and description about hospital.

Here it is a hospital page and description of the hospital details. And name of the hospital and address.

Insurance Page.

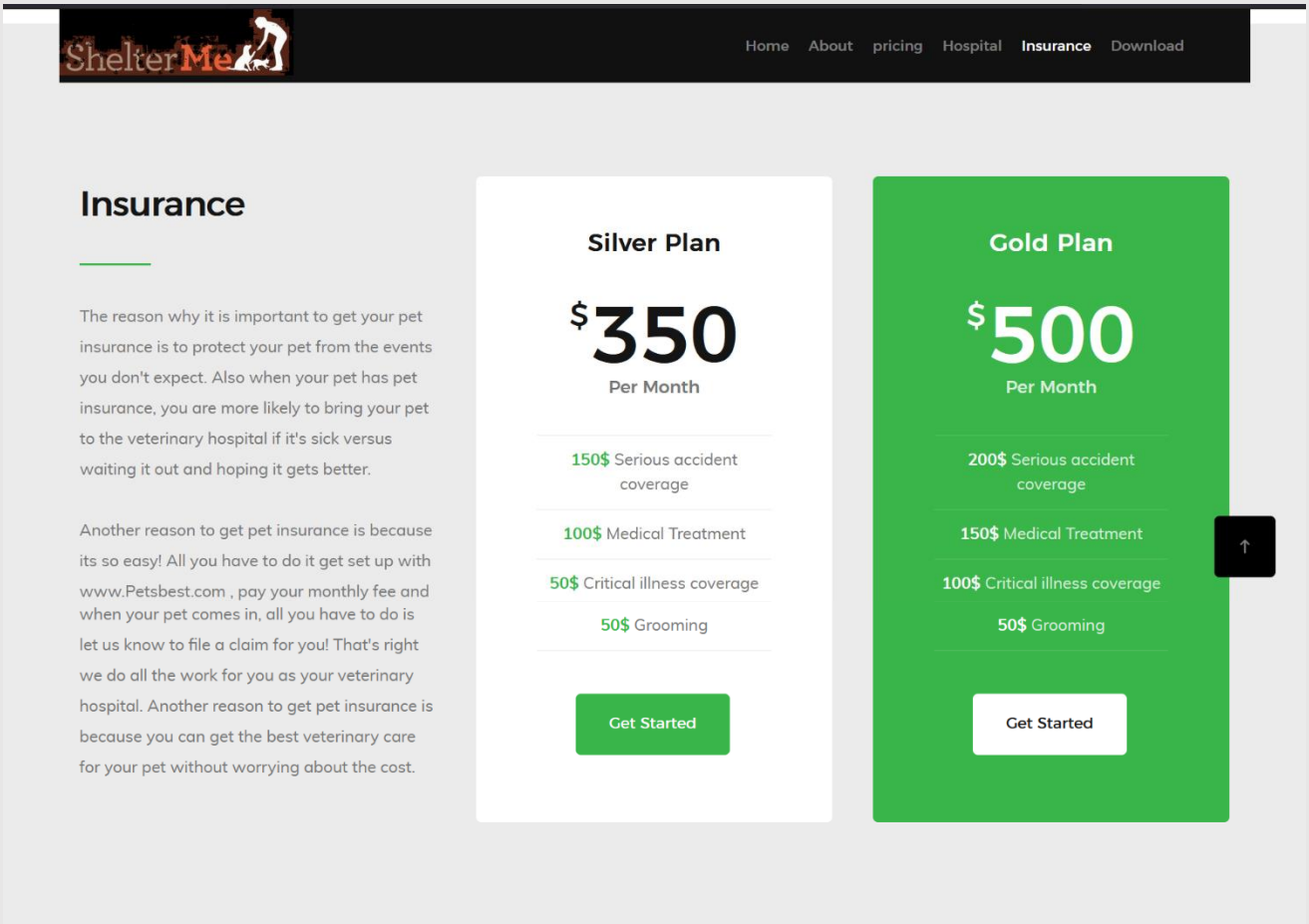


Figure 142: Insurance description and plans.

Within the application, you will come across two types of insurance plans. You have the freedom to choose any plan that suits your needs. Additionally, you can review the features associated with each plan before making a decision. If you need more information user can selected get started button and there is a lot of information.

Download Page

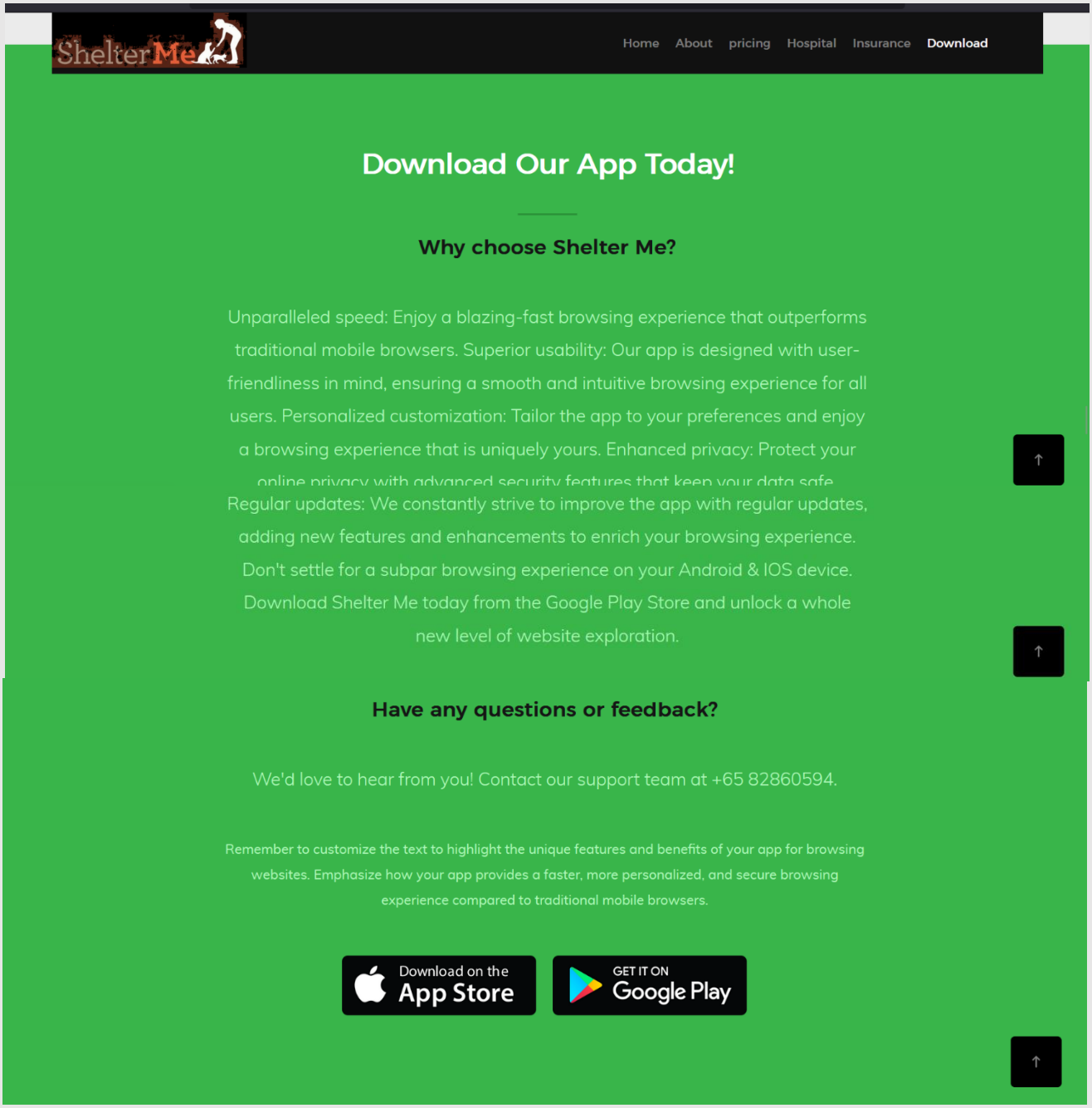


Figure 143: Download page.

This is the download page where you will find two questions. If you have any inquiries or need assistance, you can contact our team via phone or message.

Footer Page

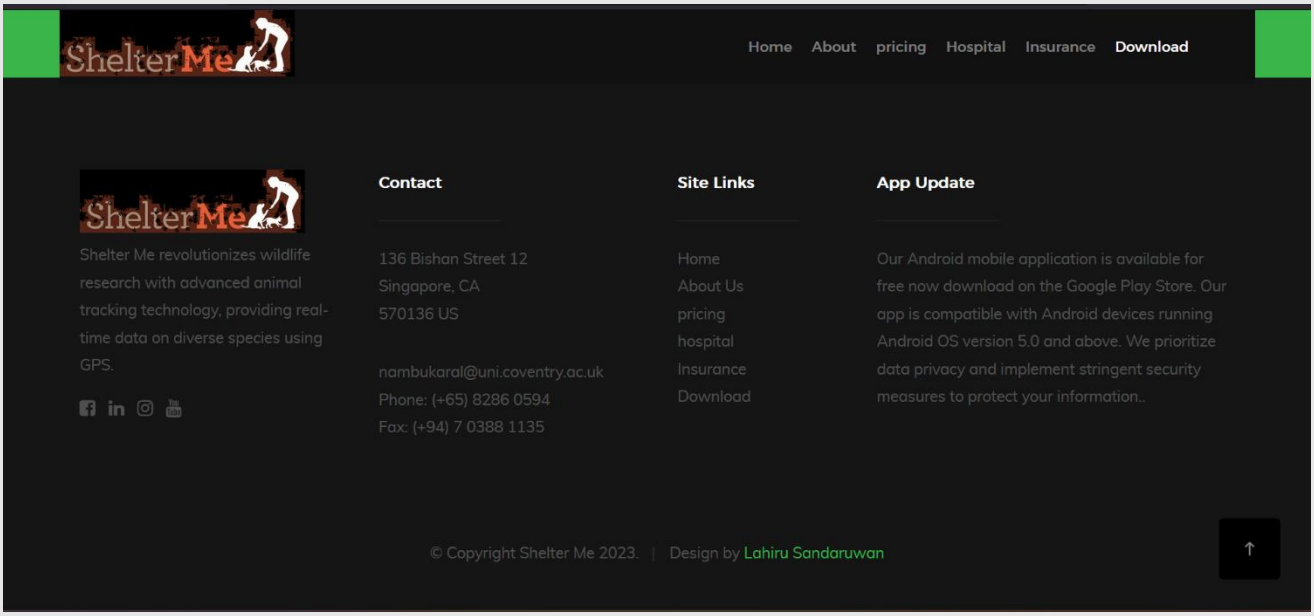


Figure 144: footer page.

This page serves as the footer, containing additional contact information for our team. Furthermore, if you wish to navigate to the main pages, you can click on the provided site links to access them. Additionally, you'll find a summary and social media links here as well.

Then you can select on the design by name. on the down page you can see the below page.

Then Click to Design by Lahiru Sandaruwan Going to Home page.

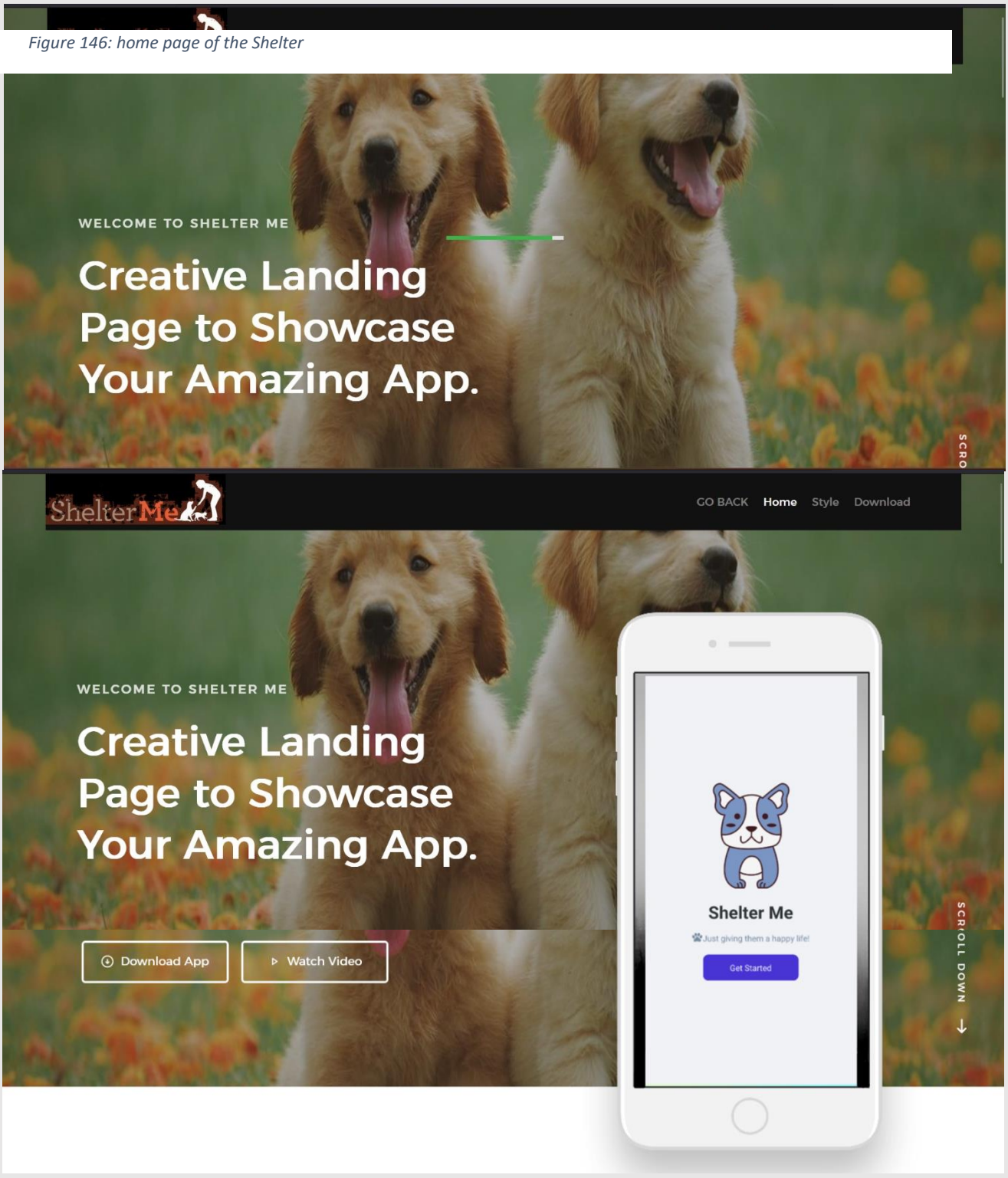


Figure 146: home page of the Shelter

Figure 145: home page of the Shelter.

Style Page

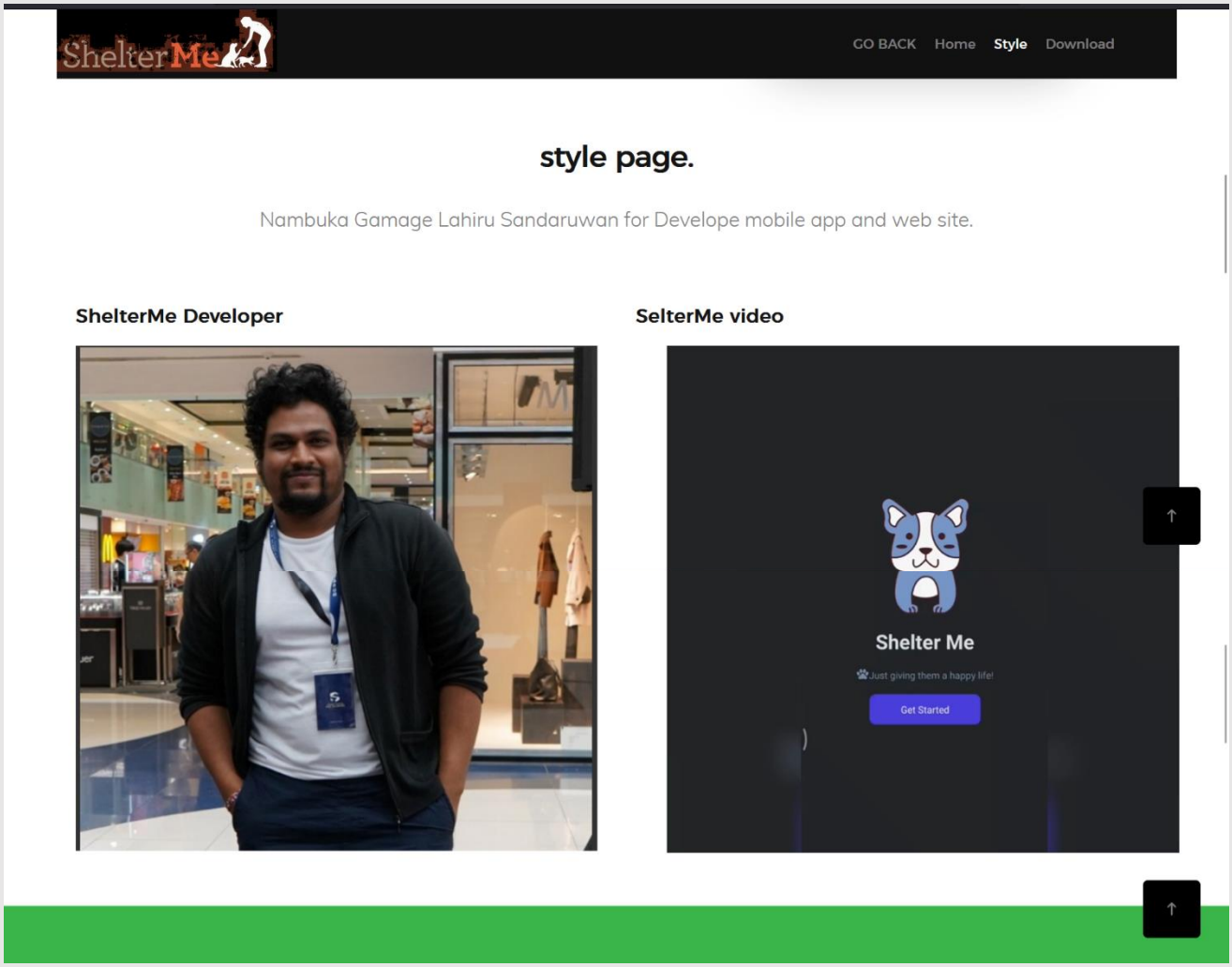


Figure 147: style page.

Here is a style page of the website.

Download Page

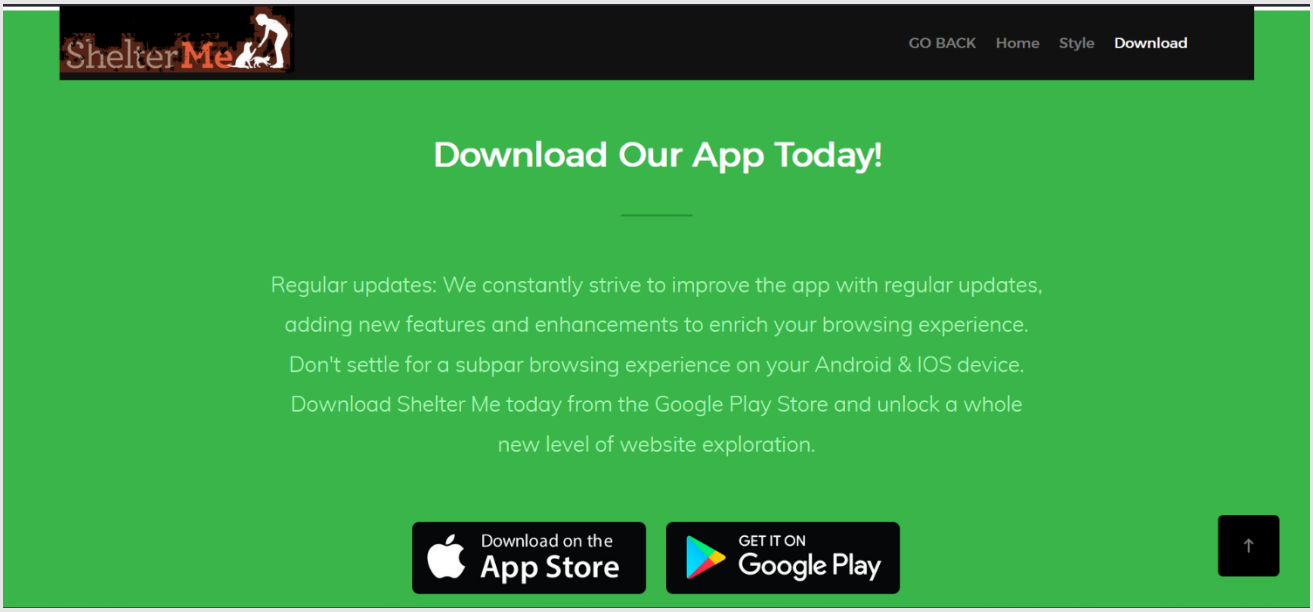


Figure 148: Download page of the website.

7.2 Testing

The Project QA/Test Plan serves as a comprehensive plan that covers all the testing activities necessary for a project. It acts as the top-level testing plan, outlining the testing strategy, approach, and overall structure for the project. It encompasses the entire testing process and ensures that the product, service, or system meets the specified requirements.

Depending on the project's size, complexity, and nature, additional test plans may be created and utilized throughout the testing phase. These subsequent test plans are designed to verify the proper functionality, coherence, and logical connectivity of the deliverable. They ensure that the final product works correctly, is easily understandable, and meets the desired objectives.

Test Type	Applicability	Remarks
Smoke testing	Yes	It aids in the early detection of integration and significant issues within the animal tracking system, enabling prompt resolution. The process can be executed either manually or with the assistance of automation tools/scripts, ensuring efficient and effective tracking operations.
Unit Testing	Yes	It is a testing approach that assesses the readiness of individual units of source code for utilization, ensuring their functionality and reliability.
Integration Testing	Yes	The integration of web services with the Android application has been successfully implemented, and its significance is duly acknowledged and accounted for.
Functional Testing	Yes	This testing process evaluates the accessibility of the system from the user's perspective, ensuring smooth navigation through the screens without encountering any obstacles or usability issues.
Performance Testing	Yes	The Animal tracking system undergoes rigorous testing to verify its speed, scalability, and stability, particularly in handling anticipated workloads as per the system's requirements.

Table 7: Test plan.

7.2.1 Test plan Functional Test

It is essential to ensure clarity in functional requirements for both the development team and stakeholders involved. Functional requirements typically specify the expected behaviour of a system in specific conditions or scenarios.

The table provided below lists the major functional requirements that will undergo testing. These requirements are ranked based on their criticality level.

No	Functional Requirement	Criticality
1	Identify diseased Animals through our application installed by the public.	Medium
2	Gather animal locations, enter animal details, and submit them.	Medium
3	Organization receives the message, provides admission to the hospital.	High
4	Request current treatment details for animals in need.	High
5	Access complete treatment details.	High
6	Provide information about animal adoptions.	Medium
7	Display details of sponsors.	Medium
8	Allow user registration and management of personal accounts.	Low

Table 8: Functional test plan.

These functional requirements will be thoroughly tested to ensure that the system operates as intended and fulfils the specified criteria. The criticality ranking helps prioritize testing efforts, with high-criticality requirements receiving greater attention during the testing process.

7.2.2 Testing Environment and Testers

Test coverage is a software testing metric that quantifies the extent of testing conducted by a specific set of tests. It involves collecting data on the portions of a program that are executed during the execution of the test suite. By doing so, it determines which branches of conditional statements have been taken and examined during the testing process.

- Within the scope of the Animal tracking project, the following types of testing are relevant and applicable:
- Unit testing: It is a testing approach that focuses on evaluating individual units of source code to ensure their readiness and correctness.
- Integration testing: Since the Animal tracking project involves integrating web services with the Android application, integration testing is vital to ensure seamless integration between the components.
- Functional testing: This type of testing verifies the system's accessibility and user-friendliness, ensuring that users can navigate through the screens and features without encountering difficulties.
- Performance testing: It examines the system's speed, scalability, and stability under expected workloads, ensuring it meets the performance requirements of the Animal tracking project.

7.2.3 Test Result Summary

Under the scope of the Animal tracking project, the following types of testing are applicable:

- Smoke testing: This type of testing, which can be performed manually or with automation tools/scripts, helps identify integration and major issues at an early stage of the development cycle.
- Integration Testing: Since web services need to be integrated with the Android application in the Animal tracking project, this type of testing is crucial and will be covered to ensure seamless integration.
- Functional Testing: This type of testing checks the system's accessibility for users, ensuring that users can navigate through screens without encountering difficulties.
- Performance Testing: Performance testing is important for Animal tracking systems to assess speed, scalability, and stability requirements under expected workloads. It verifies if the system performs optimally under various scenarios.

8. Chapter 8: Conclusion

In conclusion, the animal tracking system project proposal presents a comprehensive plan to develop a system that will aid in the conservation and management of specific animal species. By tracking and studying animal behaviour and movement patterns, this system aims to provide valuable insights and data to support wildlife research and conservation efforts.

The literature review conducted as part of this proposal emphasizes the significance of animal tracking systems in the field of wildlife research and conservation. It highlights the diverse research methodologies available for collecting data on animal behaviour and movement patterns, which will be incorporated into the project's research methodology.

The project is fully committed to adhering to the guidelines outlined in this proposal, including the chosen system development methodology and research methodology. These guidelines will ensure a systematic and efficient approach to designing and developing the tracking system, as well as collecting and analysing research data.

The final year project report will serve as a comprehensive documentation of the project's progress and outcomes. It will include details on the system design, development process, and research findings. This report will be a valuable resource for the scientific community and contribute to the broader understanding of the target animal species.

Overall, this project holds great potential to advance our understanding of animal behaviour and contribute to the conservation of endangered species. The project team is enthusiastic about embarking on this endeavour and is confident in delivering a high-quality system and research findings that will have a positive impact on both the scientific community and the conservation efforts for animal species.

8.1 Achievements, Challenges, and Failure

This report focuses on the achievements, challenges, and failures encountered during the development of an Android animal tracking system. The aim of this report is to provide a comprehensive overview of the project's progress, highlighting the accomplishments, obstacles faced, and lessons learned.

8.1.1 Achievements:

8.1.1.1 User-Friendly Mobile App:

The development team successfully created a mobile application with a user-friendly interface, allowing users to track animal movements, view real-time data, and receive notifications. The app incorporated intuitive features and provided a seamless experience for both novice and experienced users.

8.1.1.2 Robust Backend Web App:

The backend web application was designed to handle large volumes of data, ensuring efficient storage, retrieval, and analysis. The team implemented robust APIs and utilized scalable technologies, resulting in a highly responsive and reliable backend system.

8.1.1.3. Effective Animal Tracking:

The Android animal tracking system achieved accurate and real-time tracking of animals through the integration of GPS technology. The app allowed users to monitor animal movements, record sightings, and contribute to conservation efforts.

8.1.1.4. Promotional Website:

A dedicated website was developed to showcase the Android application, providing information about its features, benefits, and contributions to wildlife conservation. The website effectively promoted the app and attracted potential users and stakeholders.

8.1.2 Challenges:

8.1.2.1. Data Privacy and Security:

The development team had to implement robust security measures, including data encryption, authentication protocols, and secure storage practices to safeguard sensitive information.

8.1.2.2. Connectivity and Network Stability:

The reliable transmission of tracking data required a stable network connection. However, the team faced challenges in areas with limited network coverage, hindering the system's ability to track animals in remote regions.

8.1.2.3. Data Accuracy and Battery Life:

Balancing data accuracy and battery life presented a challenge. The team had to optimize the tracking algorithm to minimize battery drain while maintaining precise location tracking, striking a balance between user experience and device performance.

8.1.2.4. Stakeholder Engagement:

Engaging with various stakeholders, such as wildlife organizations, researchers, and users, was crucial for the success of the project. However, building partnerships, gaining trust, and eliciting collaboration proved challenging and required dedicated efforts.

8.1.3 Failure:

8.1.3.1. Limited User Adoption:

Despite the project's merits, the Android animal tracking system faced limited user adoption. The team failed to effectively communicate the benefits and value of the application to the target audience, resulting in lower-than-expected user engagement.

8.1.3.2. Lack of Continuous Funding:

Securing continuous funding for the project became a significant setback. The failure to secure long-term financial support restricted the scope for enhancements, marketing efforts, and overall sustainability of the system.

8.1.3.3. Insufficient Testing:

Inadequate testing prior to the launch of the Android application led to unforeseen issues and user dissatisfaction. They failed to thoroughly test the system's compatibility across different devices, resulting in performance issues and bugs.

8.1.4 Future Enhancement

The purpose of this report is to identify potential areas of improvement and suggest future developments to enhance the functionality, user experience, and overall effectiveness of the system.

Integration with IoT Devices: Expanding the system's capabilities by integrating with Internet of Things (IoT) devices, such as smart collars or tags, that can provide additional data about the animal's behaviour, health, and environment. This integration would enable more holistic tracking and monitoring of the animals.

8.2 Enhanced User Experience:

8.2.1 Intuitive Interface:

Streamlining the navigation, simplifying data input processes, and incorporating user feedback mechanisms will make the app more intuitive and user-friendly.

8.2.2 Offline Functionality:

Integrating offline functionality into the mobile app will allow users to track animal sightings and record data in areas with limited or no network connectivity. Offline data synchronization can be implemented to ensure seamless data transmission once the network connection is restored.

8.3 Advanced Tracking and Analysis:

8.3.1. Advanced Tracking Algorithms:

Researching and implementing advanced tracking algorithms, such as machine learning and artificial intelligence techniques, can enhance the accuracy and efficiency of animal tracking. This could include predictive modelling to anticipate animal movements based on historical data and environmental factors.

8.3.2 Data Visualization and Analytics:

Enhancing the web app's analytics capabilities will enable users to visualize tracking data through interactive maps, graphs, and charts. This will facilitate better understanding and interpretation of animal behaviour patterns, aiding conservation efforts and research analysis.

8.3.3 Collaborative Data Sharing:

Enabling users to share tracking data and sightings with wildlife organizations, researchers, and other users can foster collaborative efforts in wildlife conservation. Developing secure data-sharing mechanisms and promoting data contribution will enhance the system's overall impact.

8.4 Integration and Interoperability:

8.4.1 Integration with Wildlife Databases:

Integrating the Android animal tracking system with existing wildlife databases, such as those managed by conservation organizations, can provide a comprehensive repository of animal data. This integration will support cross-referencing, data validation, and further research initiatives.

8.4.2 Interoperability with External Devices:

Exploring integration possibilities with external devices, such as wildlife cameras or sensor networks, can enhance data collection capabilities. This integration can enable the system to gather additional data points, including images, sound recordings, and environmental parameters, enriching the tracking experience.

8.5 Continuous Improvement and Support:

8.5.1 Regular Updates and Bug Fixes:

Establishing a systematic approach to regular updates and bug fixes will ensure that the Android application remains compatible with the latest operating systems, resolves issues promptly, and maintains a high level of user satisfaction.

8.5.2 Collaboration with Conservation Organizations:

Forging partnerships with wildlife conservation organizations and researchers can bring domain expertise, access to resources, and valuable insights. Collaborative efforts can help tailor the system's features and functionality to meet the specific needs of conservation initiatives.

The future enhancements outlined in this report offer a roadmap for improving the Android animal tracking system. By focusing on enhancing the user experience, implementing advanced tracking and analysis techniques, fostering integration and interoperability, and providing continuous improvement and support, the system can evolve into a more powerful tool for wildlife conservation. Embracing these enhancements will ensure the long-term viability, effectiveness, and positive impact of the Android animal.

8.6 Lesson Learned

This report highlights the lessons learned during the development of an Android animal tracking system, which encompassed the frontend, a the backend, and a website promoting the Android application. The purpose of this report is to reflect on the challenges faced, identify key takeaways, and provide insights for future projects in similar domains.

8.6.1 Importance of User-Centric Approach:

8.6.1.1 Understanding User Needs:

Gaining a deep understanding of user needs and expectations is critical for developing successful applications. Conducting user research, gathering feedback, and incorporating user-centric design principles early in the development process helps create intuitive and user-friendly experiences.

8.6.1.2 Iterative Design and Usability Testing:

Iterative design and usability testing ensure that the applications meet user requirements effectively. Regularly soliciting user feedback, conducting usability tests, and iterating based on user insights enhance the usability and overall satisfaction of the system.

8.6.2 Data Privacy and Security Considerations:

8.6.2.1 Prioritizing Data Protection:

Addressing data privacy and security concerns is essential to gain user trust. Incorporating robust security measures, such as encryption, authentication protocols, and secure storage practices, helps safeguard user data and build credibility.

8.6.2.2 Compliance with Regulatory Standards:

Adhering to relevant data protection regulations, such as GDPR or local privacy laws, is crucial. Proactively considering legal and ethical implications ensures compliance, mitigates risks, and protects user privacy.

8.6.3 Importance of Scalability and Performance:

8.6.3.1 Scalable Architecture Design:

Designing a scalable architecture for both the backend and frontend applications is vital for accommodating growing user bases and increasing data volumes. Modular and scalable designs allow for easy expansion and ensure consistent performance.

8.6.3.2 Performance Optimization:

Optimizing the performance of the applications, such as minimizing response times and reducing resource usage, enhances user satisfaction. Regular performance monitoring and optimization efforts are essential to provide a smooth and seamless user experience.

8.6.4 Effective Communication and Collaboration:

8.6.4.1. Clear Communication Channels:

Establishing clear communication channels within the development team, as well as with stakeholders, ensures effective coordination and collaboration. Regular meetings, documentation, and transparent communication foster a shared understanding and facilitate project progress.

8.6.4.2. Stakeholder Engagement:

Engaging with stakeholders, including wildlife organizations, researchers, and users, is crucial for project success. Building strong relationships, actively involving stakeholders in decision-making, and eliciting feedback throughout the development process enhance the system's relevance and adoption.

8.6.5 Testing and Quality Assurance:

8.6.5.1. Comprehensive Testing Strategies:

Implementing comprehensive testing strategies, including functional, compatibility, and performance testing, is essential to identify and resolve issues before deployment. Investing time and resources in thorough testing prevents unexpected failures and enhances the overall quality of the applications.

8.6.5.2. Device Compatibility:

Ensuring compatibility across a wide range of devices and operating systems is paramount. Testing on various platforms and devices helps identify and address compatibility issues, providing a seamless experience for all users.

8.6.6 Continuous Improvement and Adaptability:

8.6.6.1. Feedback-Driven Enhancements:

Encouraging user feedback and actively seeking opportunities for improvement helps drive innovation and prioritize future enhancements. Regularly analysing user feedback and incorporating valuable insights enhance the application's relevance and meet evolving user needs.

The lessons learned from developing an Android animal tracking system encompass the importance of a user-centric approach, data privacy, and security considerations, scalability and performance optimization, effective communication, and collaboration,

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Appendixes

This link for website for Shelter Me.

https://sandashelterme.000webhostapp.com/Lite_Plan.html

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This is a google survey form.

https://docs.google.com/spreadsheets/d/1slJNhvQdAVMkoqKHJLuNXkV9_MzAXAGgMOfBvPW8KEg/edit?resourcekey#gid=2061748420

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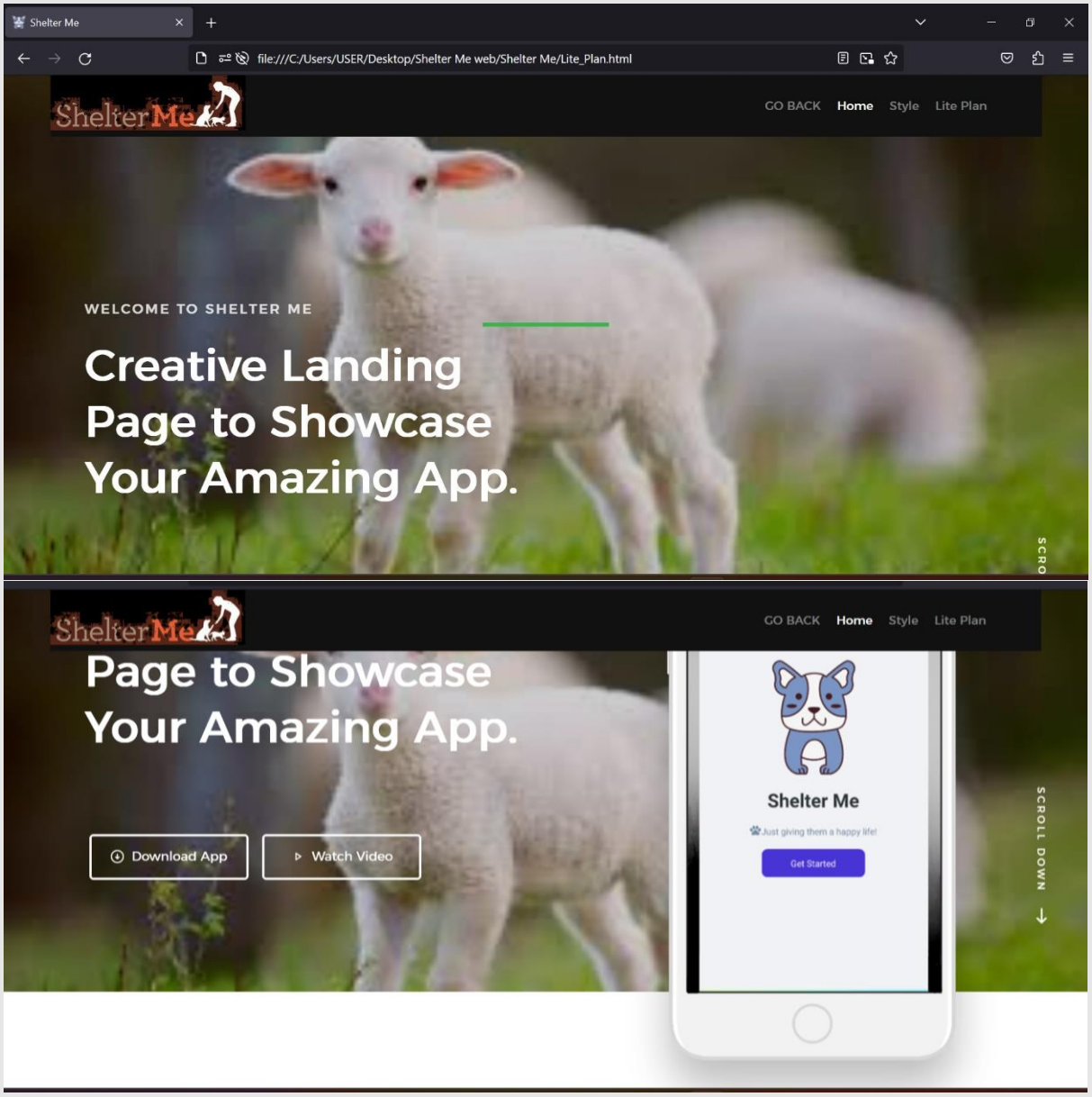
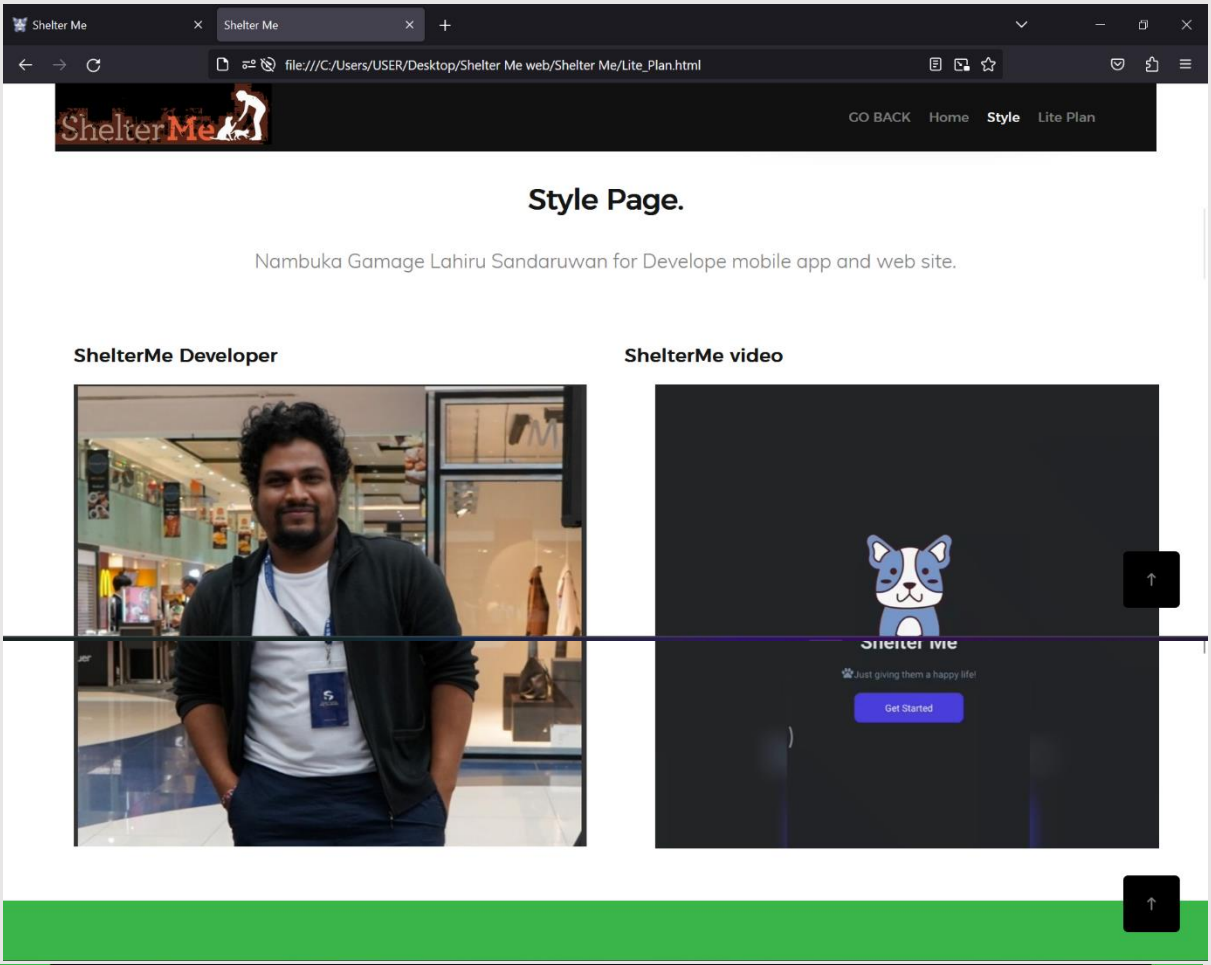


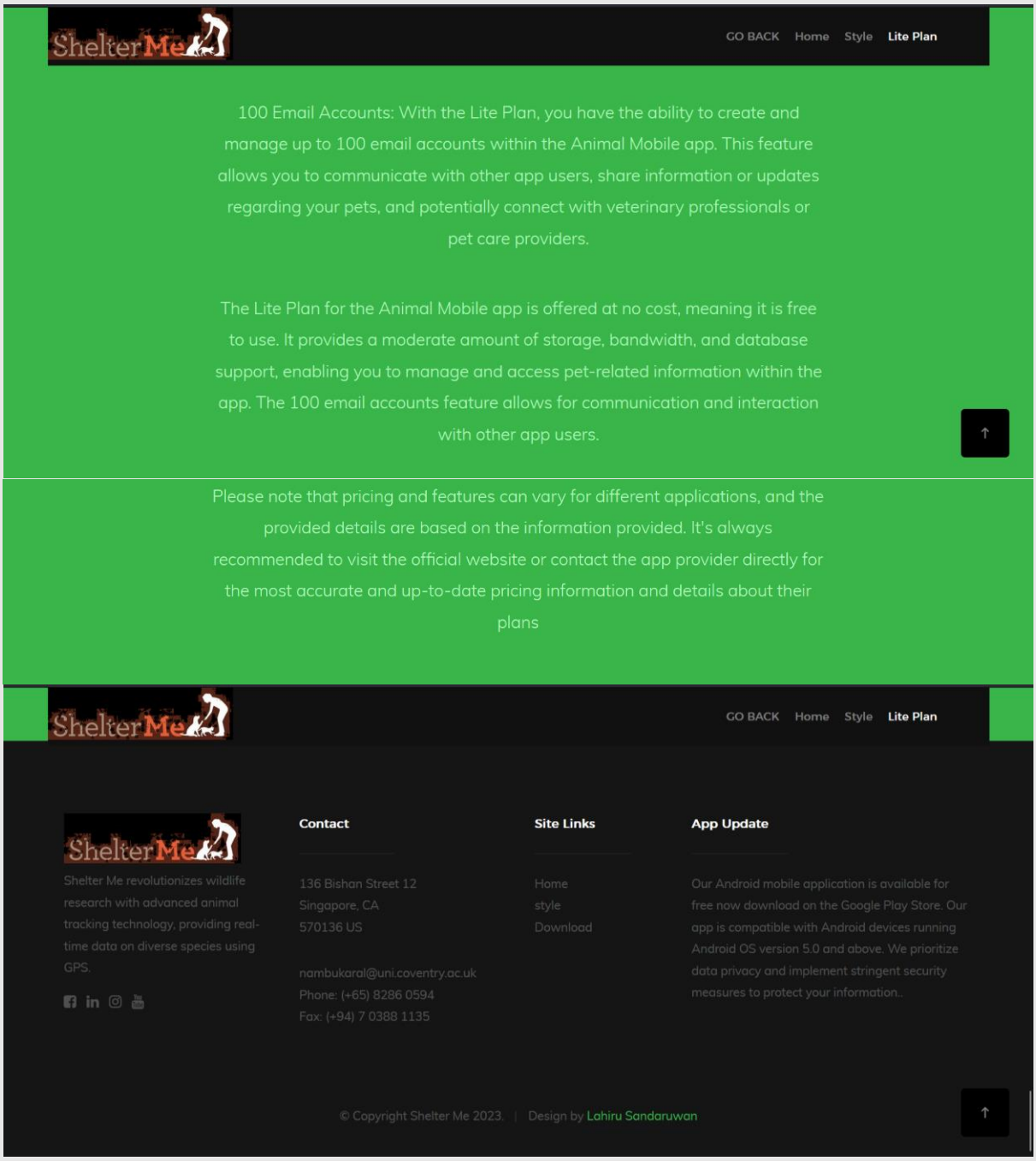


Lite Plan

3GB Storage: The Lite Plan provides you with 3GB of storage space within the Animal Mobile app. This allows you to store a moderate amount of data related

10GB Bandwidth: With the Lite Plan, you have a monthly bandwidth limit of 10GB. Bandwidth refers to the amount of data that can be transferred between your device and the Animal Mobile app. This allows you to access and interact with the app, view information, and make use of its features within the specified limit.

100 Databases: The Lite Plan includes support for up to 100 databases. These databases can be used to store various types of pet-related information, such as profiles, medical records, appointment schedules, and more. The 100-database limit enables you to manage data for multiple pets or keep track of various aspects of your pets' lives.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100 Email Accounts: With the Lite Plan, you have the ability to create and manage up to 100 email accounts within the Animal Mobile app. This feature allows you to communicate with other app users, share information or updates regarding your pets, and potentially connect with veterinary professionals or pet care providers.
The Lite Plan for the Animal Mobile app is offered at no cost, meaning it is free to use. It provides a moderate amount of storage, bandwidth, and database support, enabling you to manage and access pet-related information within the app. The 100 email accounts feature allows for communication and interaction with other app users.
Please note that pricing and features can vary for different applications, and the provided details are based on the information provided. It's always recommended to visit the official website or contact the app provider directly for the most accurate and up-to-date pricing information and details about their plans
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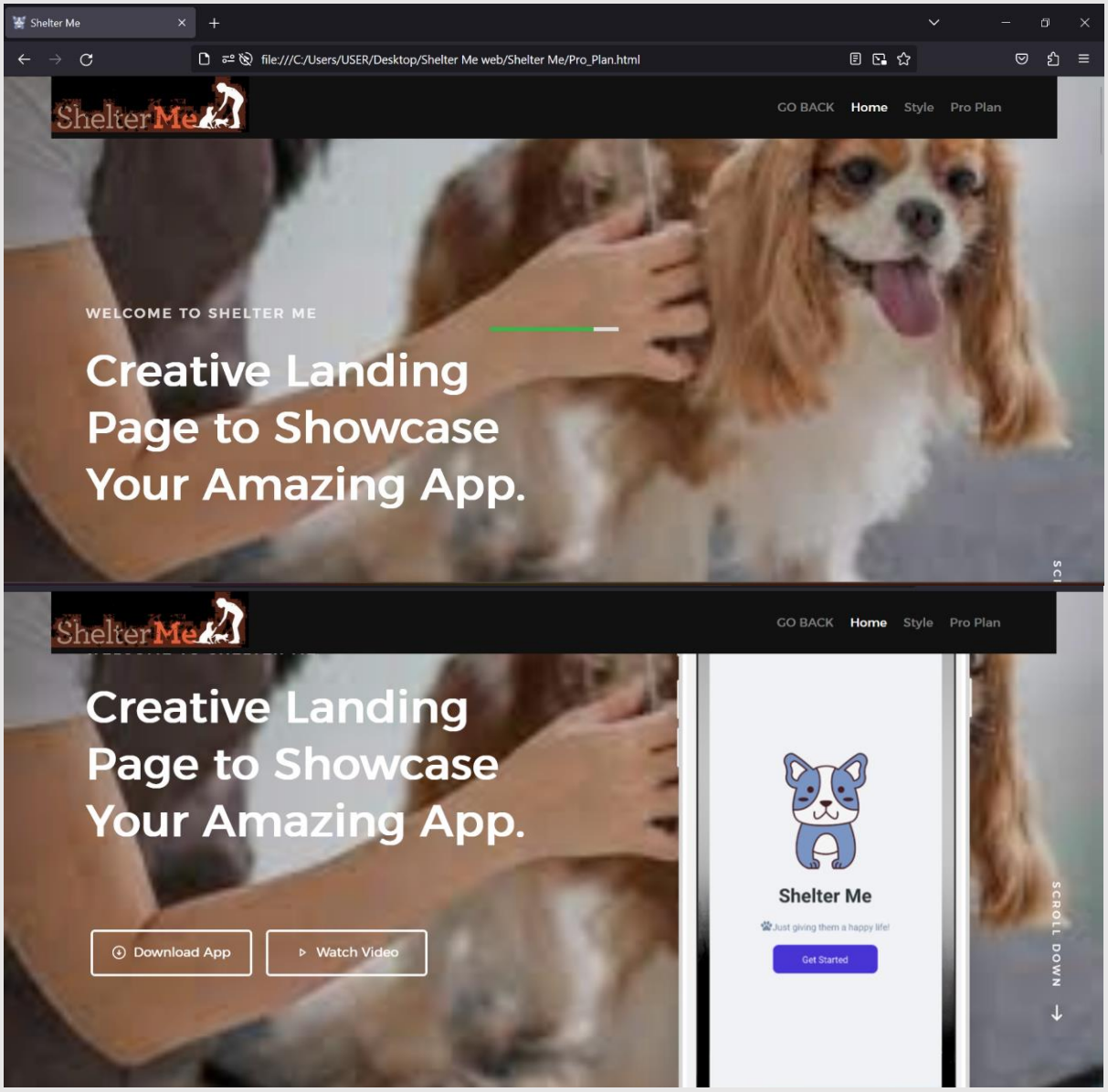

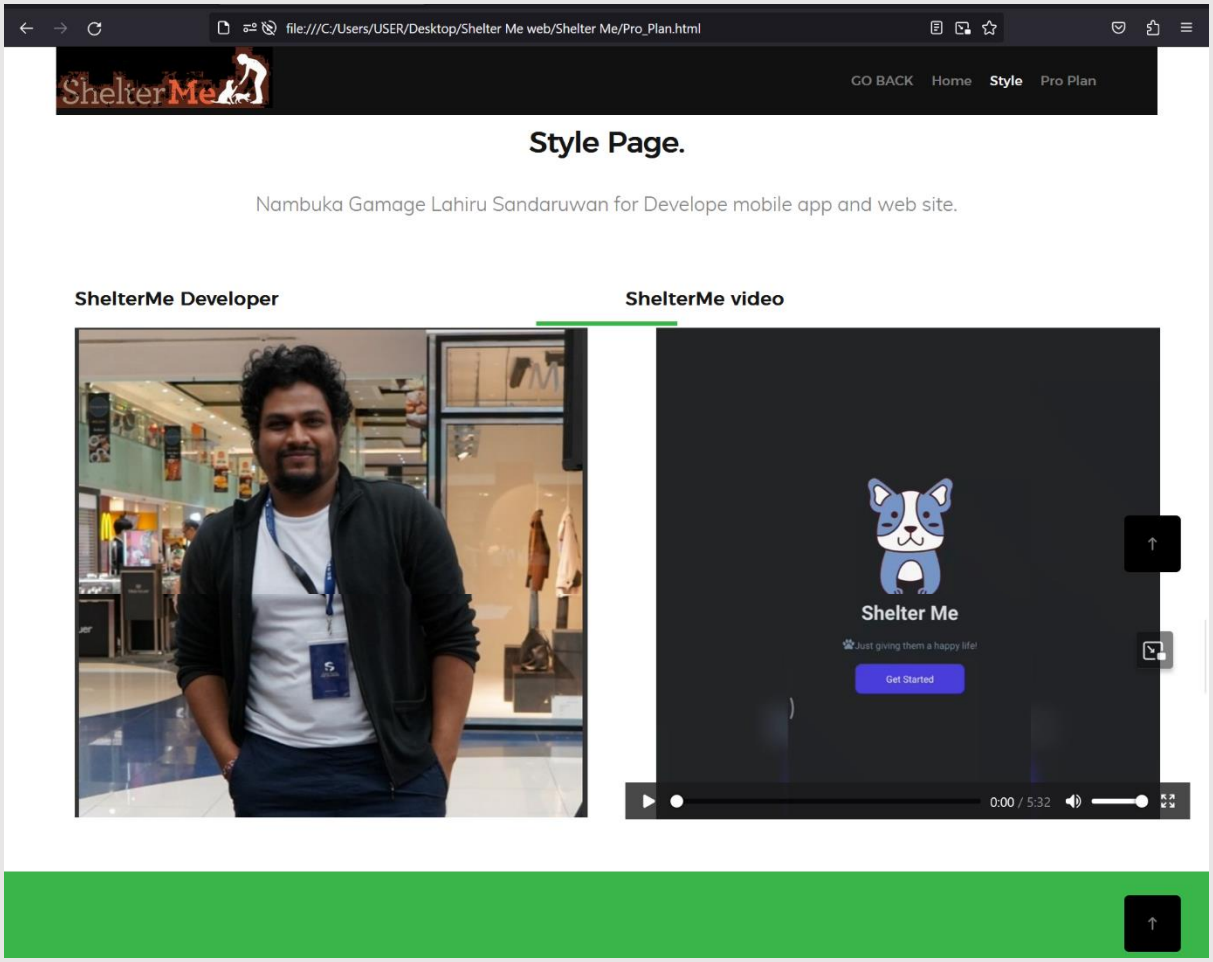
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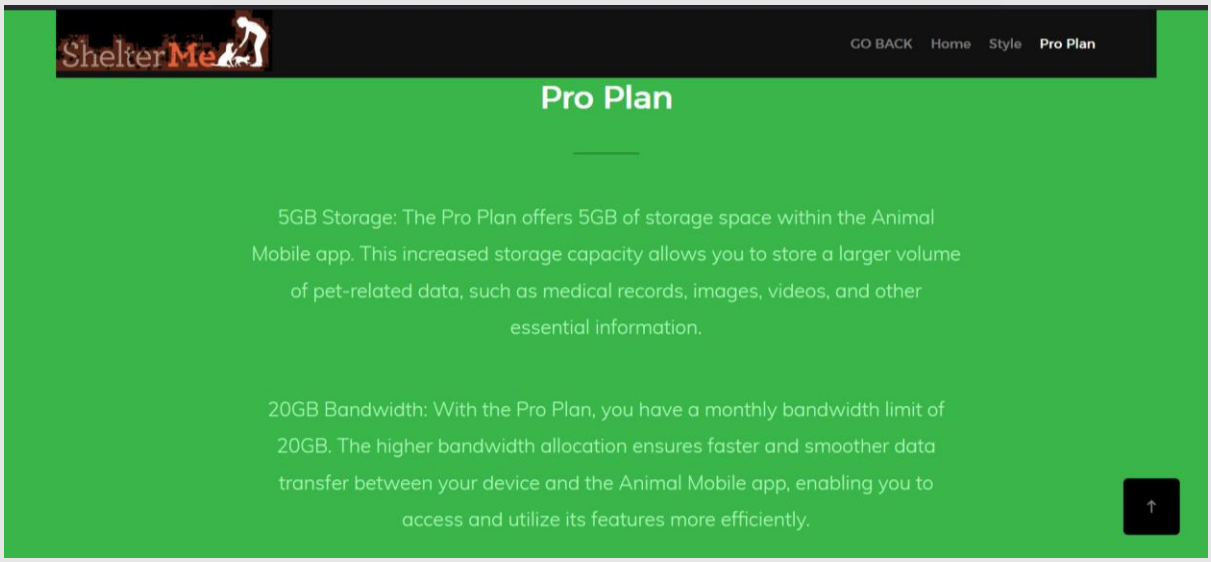
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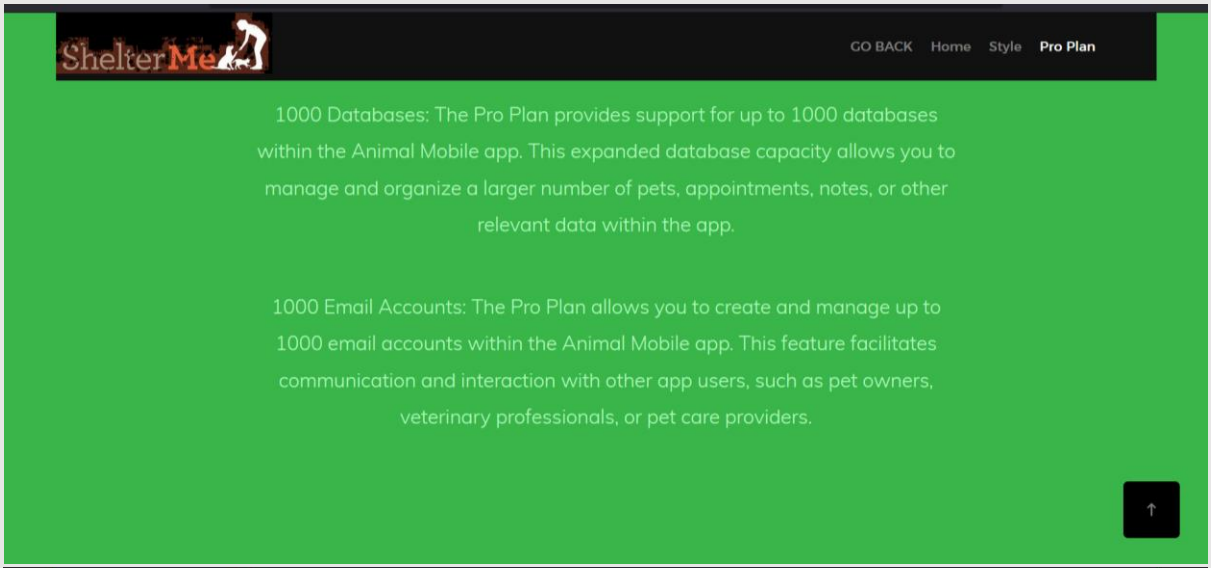
Pro Plan
5GB Storage: The Pro Plan offers 5GB of storage space within the Animal Mobile app. This increased storage capacity allows you to store a larger volume of pet-related data, such as medical records, images, videos, and other essential information.
20GB Bandwidth: With the Pro Plan, you have a monthly bandwidth limit of 20GB. The higher bandwidth allocation ensures faster and smoother data transfer between your device and the Animal Mobile app, enabling you to access and utilize its features more efficiently.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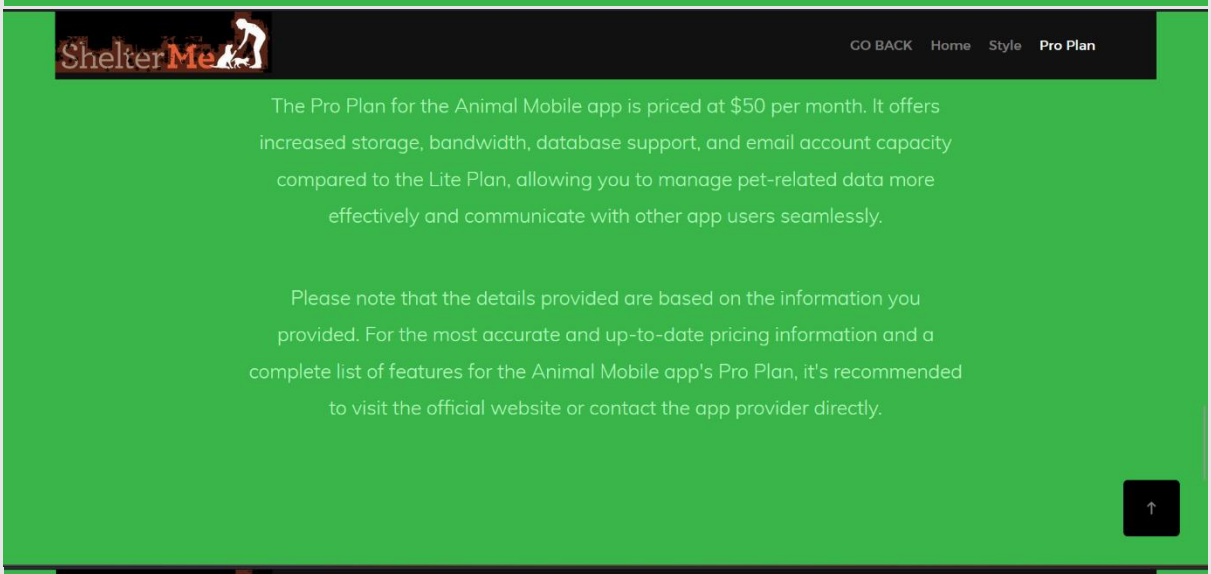
1000 Databases: The Pro Plan provides support for up to 1000 databases within the Animal Mobile app. This expanded database capacity allows you to manage and organize a larger number of pets, appointments, notes, or other relevant data within the app.
1000 Email Accounts: The Pro Plan allows you to create and manage up to 1000 email accounts within the Animal Mobile app. This feature facilitates communication and interaction with other app users, such as pet owners, veterinary professionals, or pet care providers.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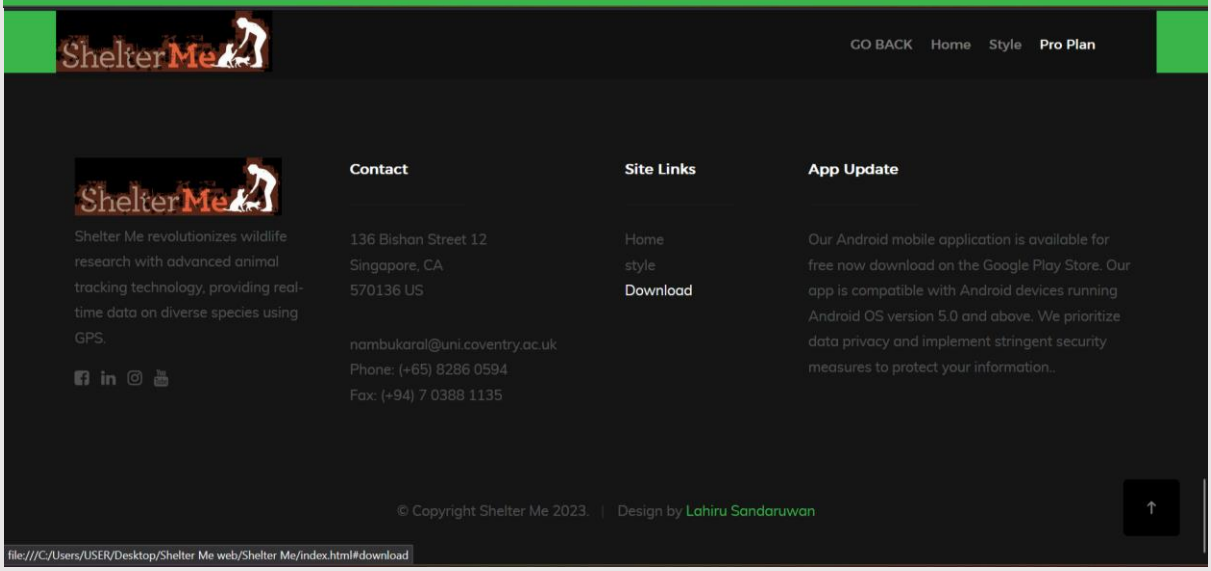
The Pro Plan for the Animal Mobile app is priced at $50 per month. It offers increased storage, bandwidth, database support, and email account capacity compared to the Lite Plan, allowing you to manage pet-related data more effectively and communicate with other app users seamlessly.
Please note that the details provided are based on the information you provided. For the most accurate and up-to-date pricing information and a complete list of features for the Animal Mobile app's Pro Plan, it's recommended to visit the official website or contact the app provider directly.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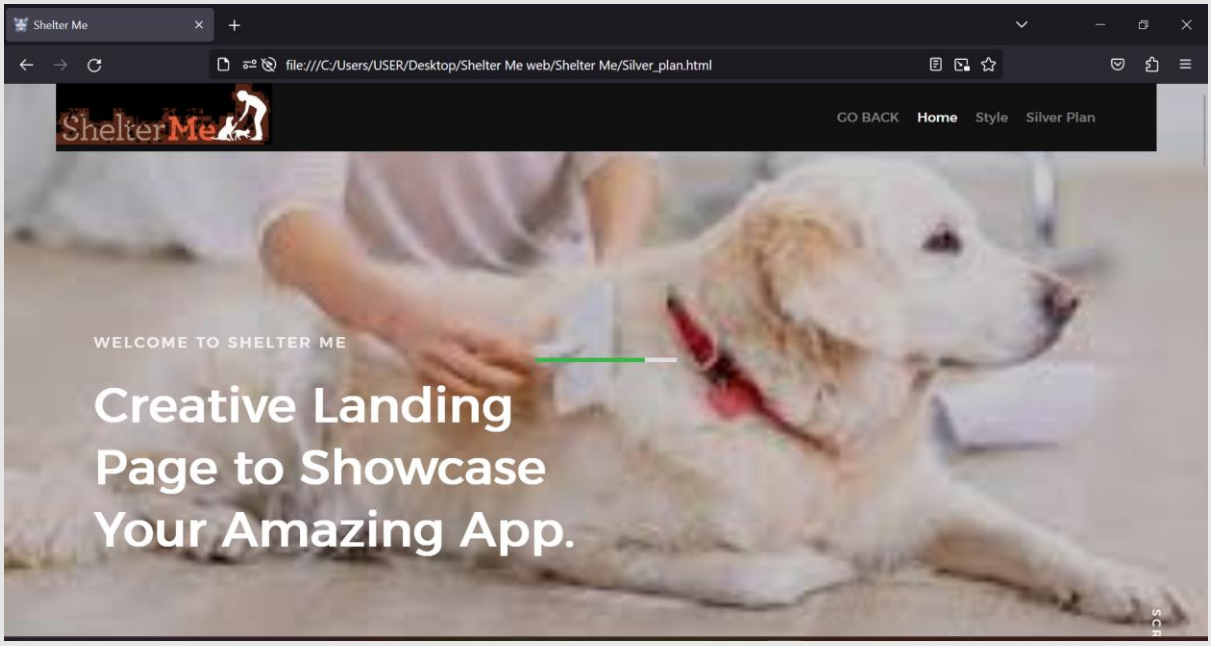

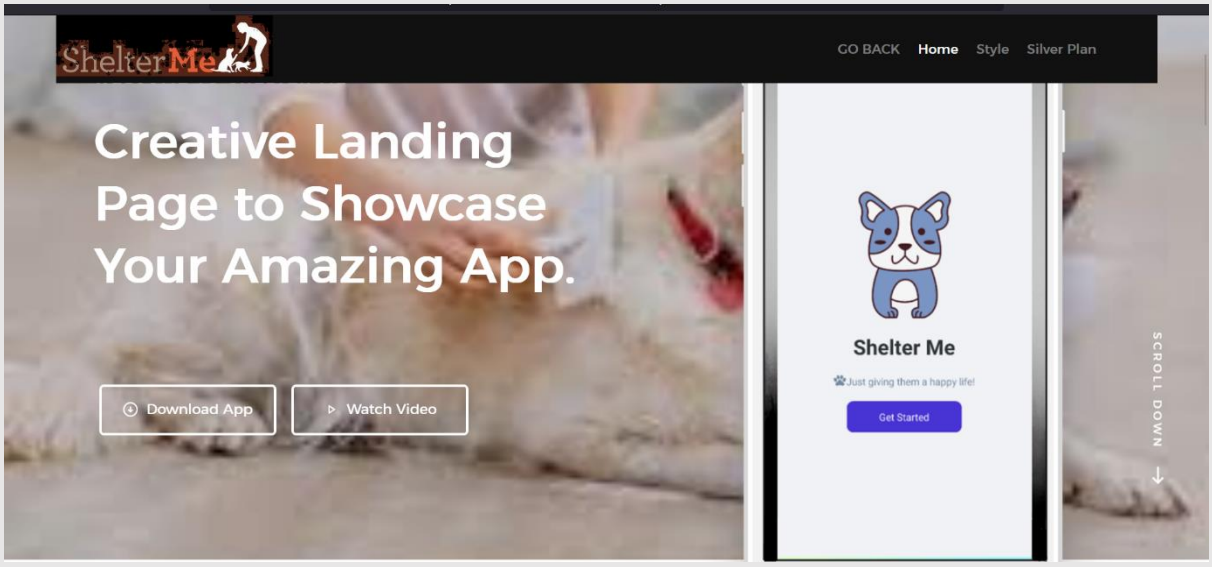

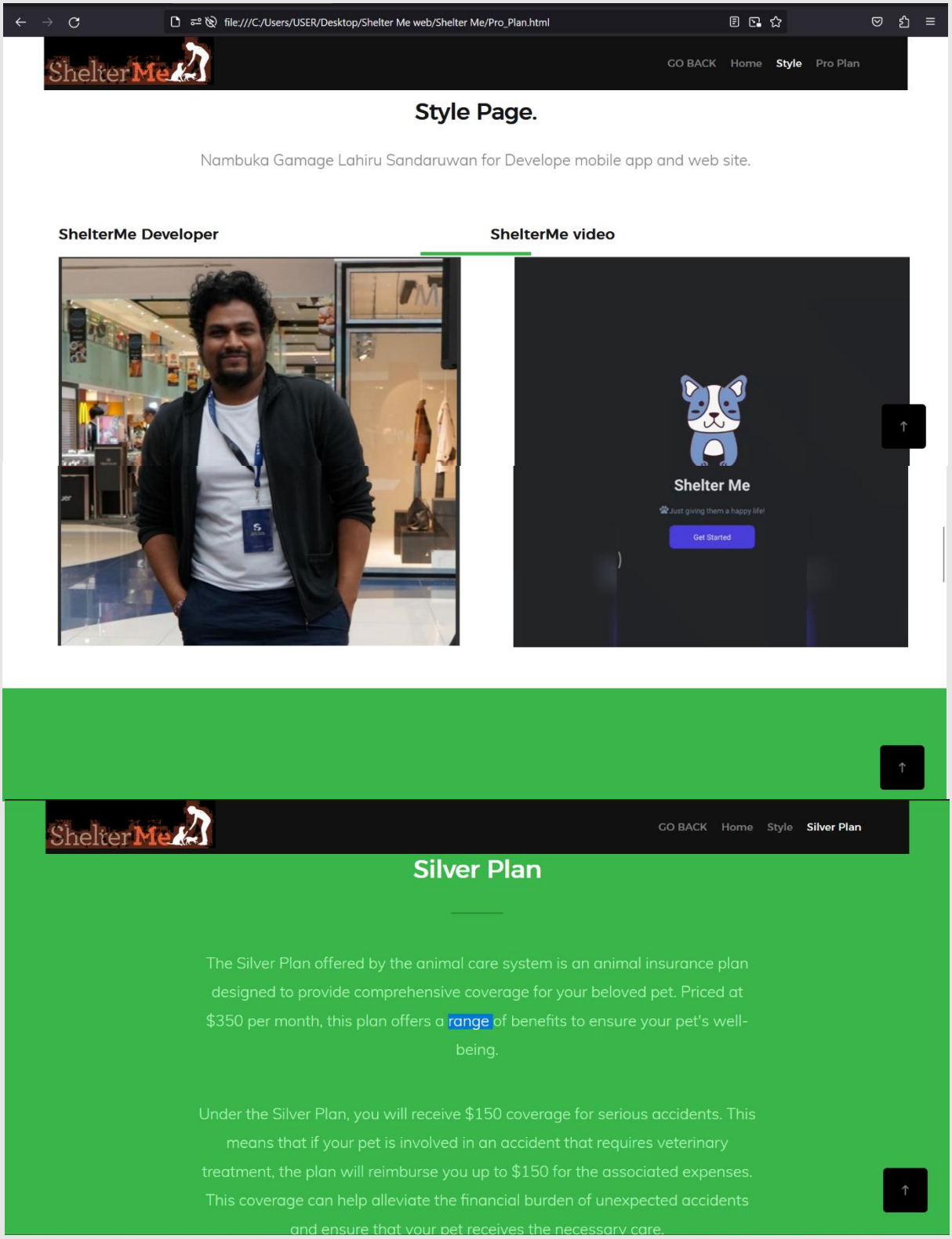
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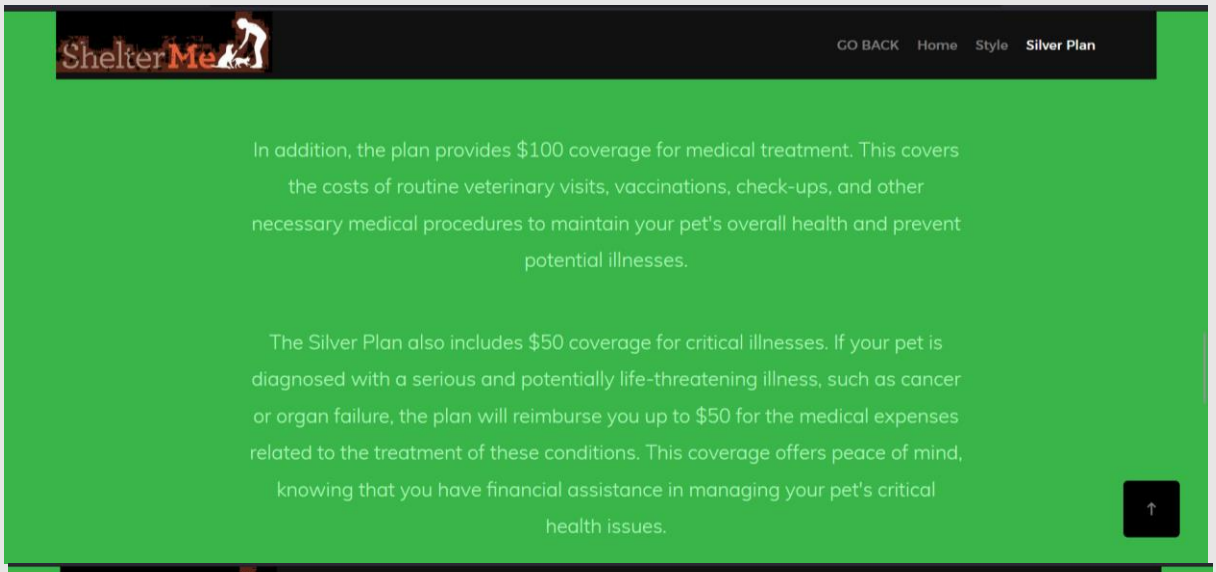
Silver Plan
The Silver Plan offered by the animal care system is an animal insurance plan designed to provide comprehensive coverage for your beloved pet. Priced at $350 per month, this plan offers a range of benefits to ensure your pet's well-being.
Under the Silver Plan, you will receive $150 coverage for serious accidents. This means that if your pet is involved in an accident that requires veterinary treatment, the plan will reimburse you up to $150 for the associated expenses. This coverage can help alleviate the financial burden of unexpected accidents and ensure that your pet receives the necessary care.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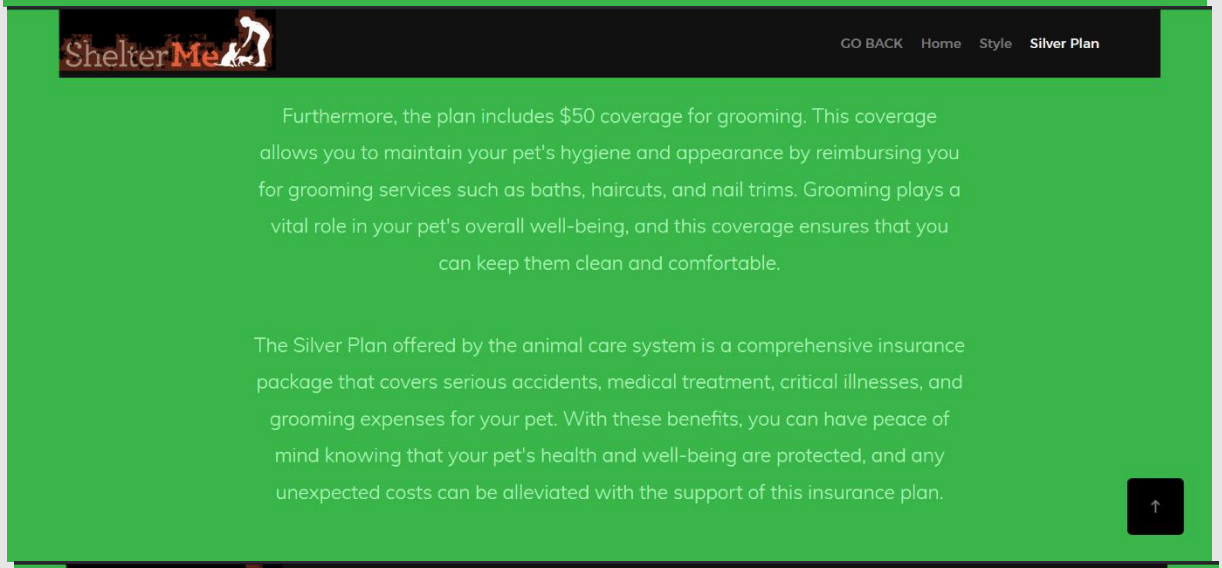
In addition, the plan provides $100 coverage for medical treatment. This covers the costs of routine veterinary visits, vaccinations, check-ups, and other necessary medical procedures to maintain your pet's overall health and prevent potential illnesses.
The Silver Plan also includes $50 coverage for critical illnesses. If your pet is diagnosed with a serious and potentially life-threatening illness, such as cancer or organ failure, the plan will reimburse you up to $50 for the medical expenses related to the treatment of these conditions. This coverage offers peace of mind, knowing that you have financial assistance in managing your pet's critical health issues.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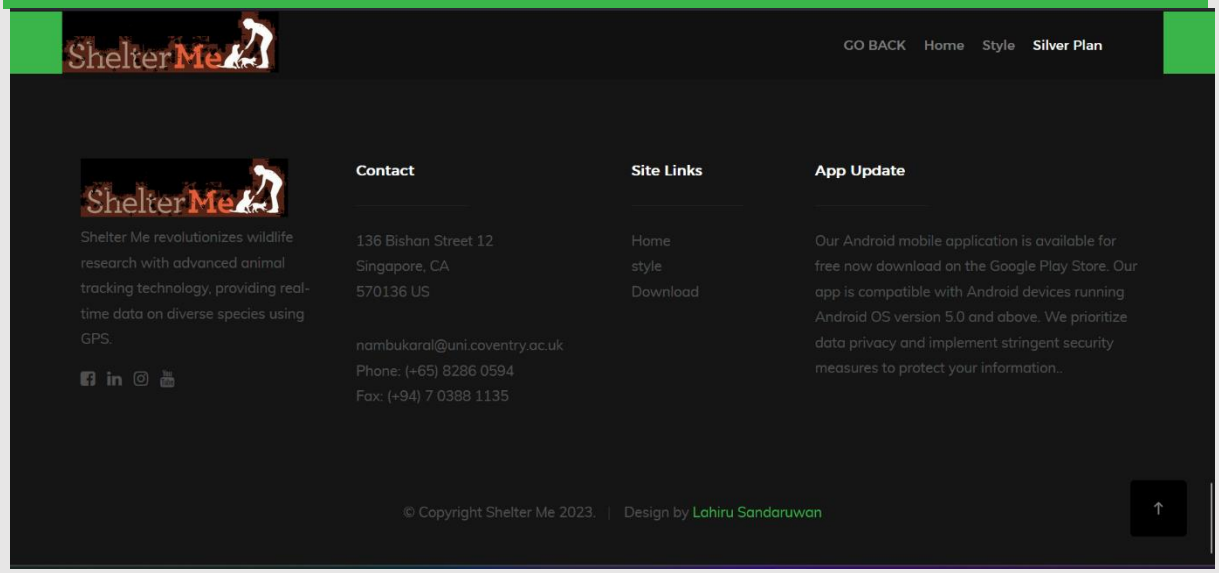
Furthermore, the plan includes $50 coverage for grooming. This coverage allows you to maintain your pet's hygiene and appearance by reimbursing you for grooming services such as baths, haircuts, and nail trims. Grooming plays a vital role in your pet's overall well-being, and this coverage ensures that you can keep them clean and comfortable.
The Silver Plan offered by the animal care system is a comprehensive insurance package that covers serious accidents, medical treatment, critical illnesses, and grooming expenses for your pet. With these benefits, you can have peace of mind knowing that your pet's health and well-being are protected, and any unexpected costs can be alleviated with the support of this insurance plan.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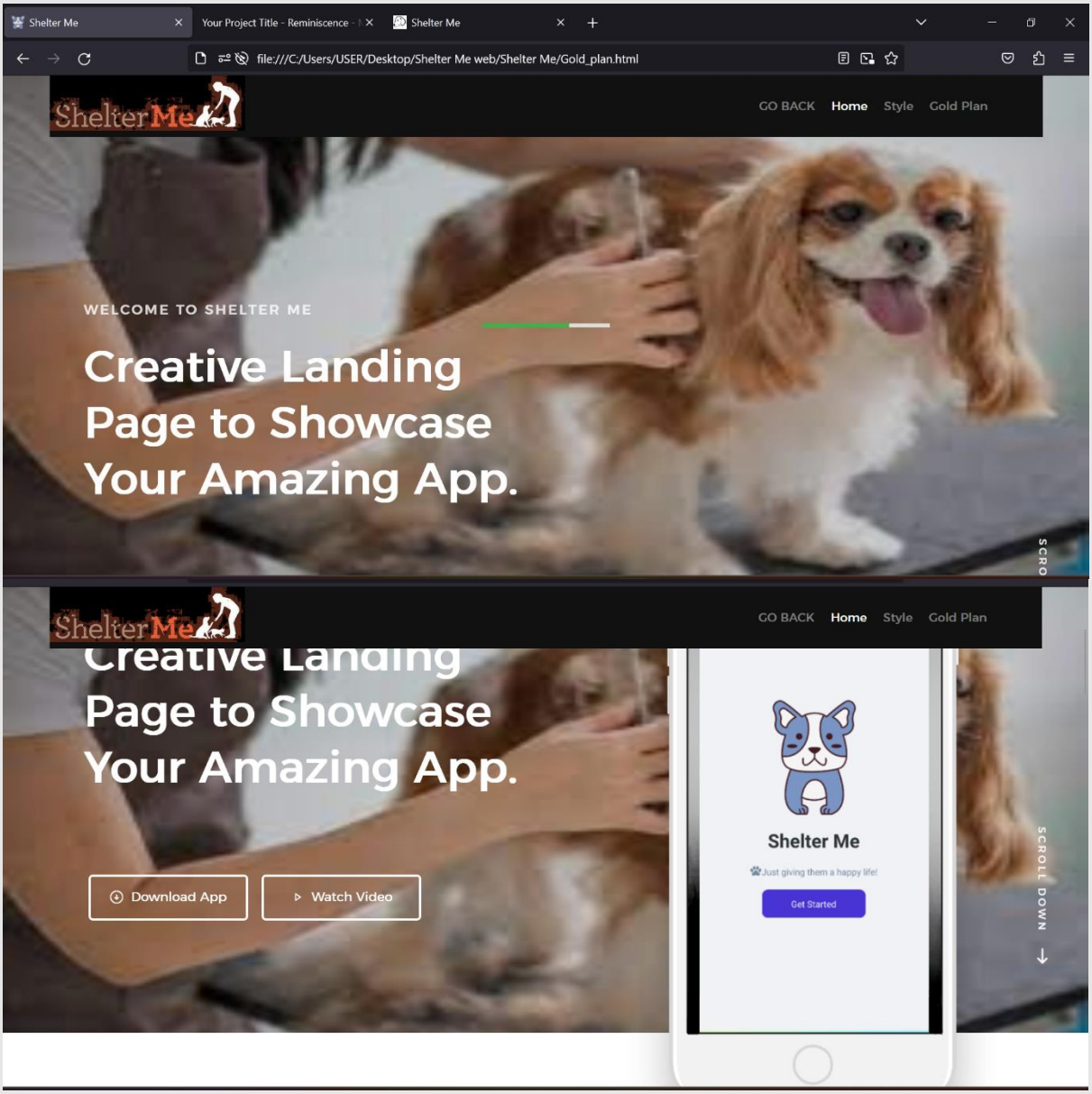

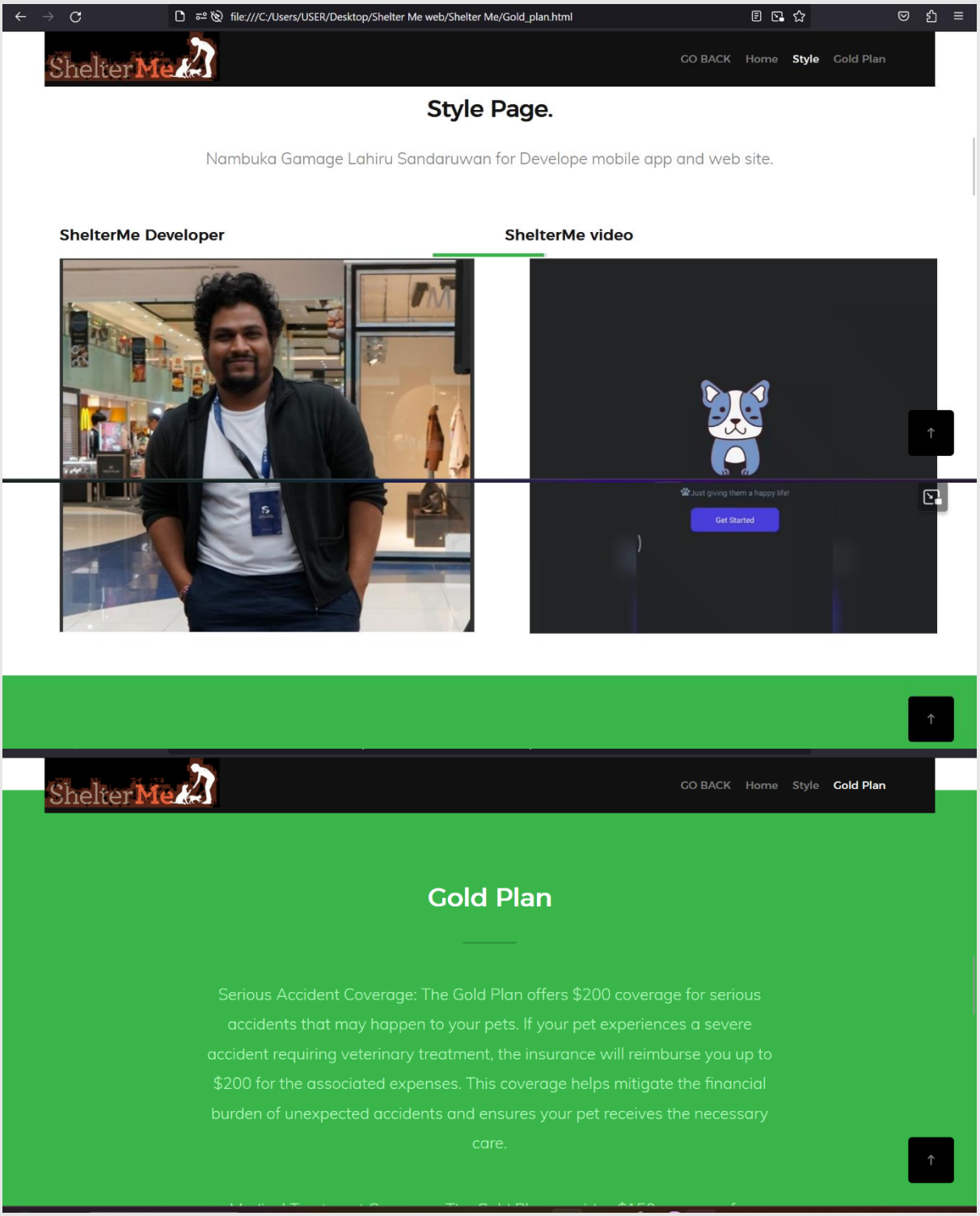
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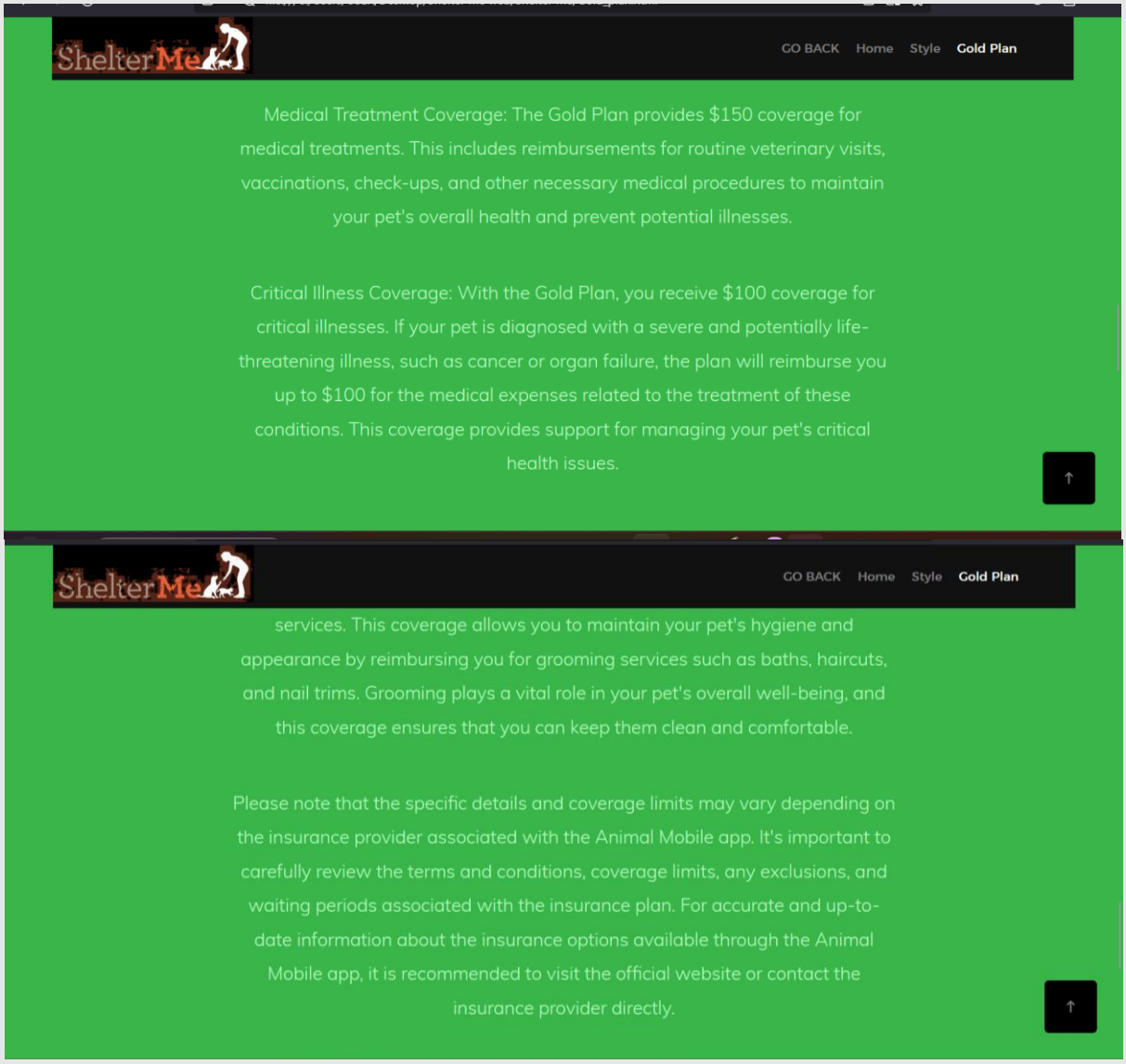
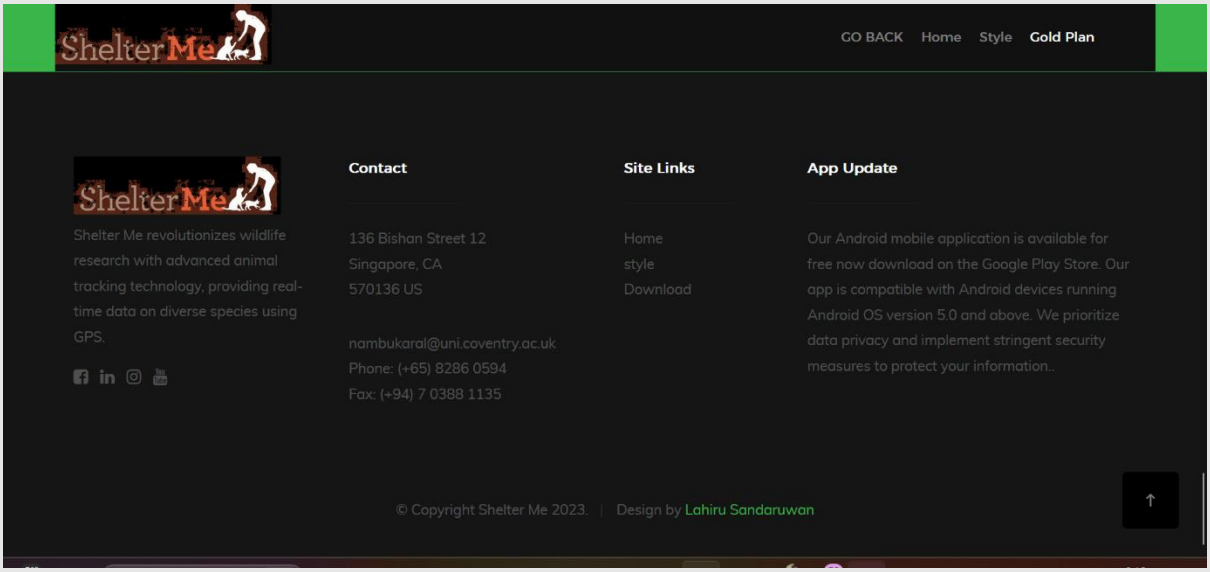
Just giving them a happy life!
Get Started
ShelterMe
GO BACK Home Style Gold Plan
Gold Plan
Serious Accident Coverage: The Gold Plan offers $200 coverage for serious accidents that may happen to your pets. If your pet experiences a severe accident requiring veterinary treatment, the insurance will reimburse you up to $200 for the associated expenses. This coverage helps mitigate the financial burden of unexpected accidents and ensures your pet receives the necessary care.


ShelterMe
GO BACK Home Style Gold Plan
Medical Treatment Coverage: The Gold Plan provides $150 coverage for medical treatments. This includes reimbursements for routine veterinary visits, vaccinations, check-ups, and other necessary medical procedures to maintain your pet's overall health and prevent potential illnesses.
Critical Illness Coverage: With the Gold Plan, you receive $100 coverage for critical illnesses. If your pet is diagnosed with a severe and potentially life-threatening illness, such as cancer or organ failure, the plan will reimburse you up to $100 for the medical expenses related to the treatment of these conditions. This coverage provides support for managing your pet's critical health issues.
ShelterMe
GO BACK Home Style Gold Plan
services. This coverage allows you to maintain your pet's hygiene and appearance by reimbursing you for grooming services such as baths, haircuts, and nail trims. Grooming plays a vital role in your pet's overall well-being, and this coverage ensures that you can keep them clean and comfortable.
Please note that the specific details and coverage limits may vary depending on the insurance provider associated with the Animal Mobile app. It's important to carefully review the terms and conditions, coverage limits, any exclusions, and waiting periods associated with the insurance plan. For accurate and up-to-date information about the insurance options available through the Animal Mobile app, it is recommended to visit the official website or contact the insurance provider directly.


ShelterMe
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Gold Plan
ShelterMe
Shelter Me revolutionizes wildlife research with advanced animal tracking technology, providing real-time data on diverse species using GPS.
Contact
136 Bishan Street 12
Singapore, CA
570136 US
nambukaral@uni.coventry.ac.uk
Phone: (+65) 8286 0594
Fax: (+94) 7 0388 1135
Site Links
Home
style
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App Update
Our Android mobile application is available for free now download on the Google Play Store. Our app is compatible with Android devices running Android OS version 5.0 and above. We prioritize data privacy and implement stringent security measures to protect your information..
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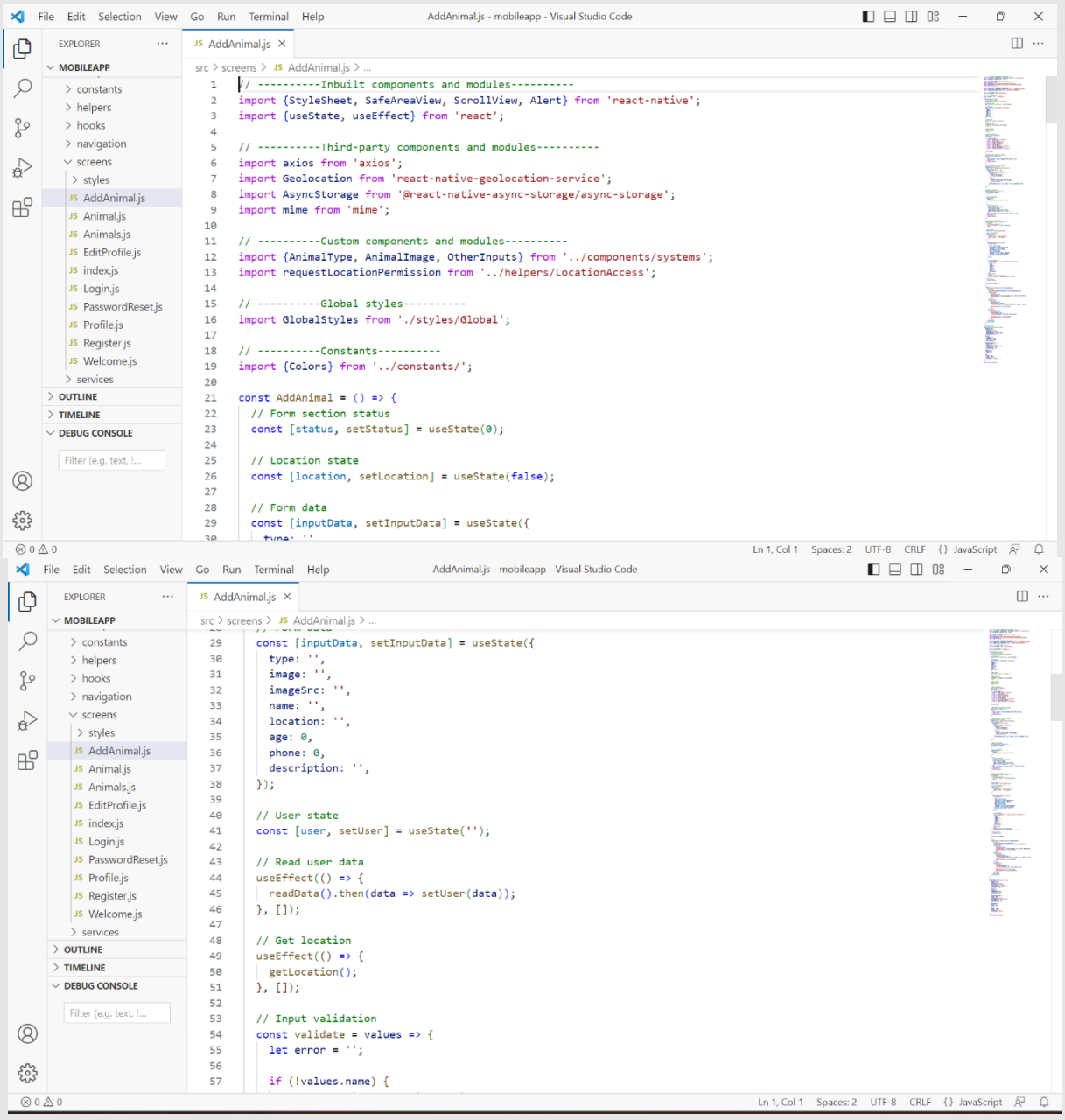
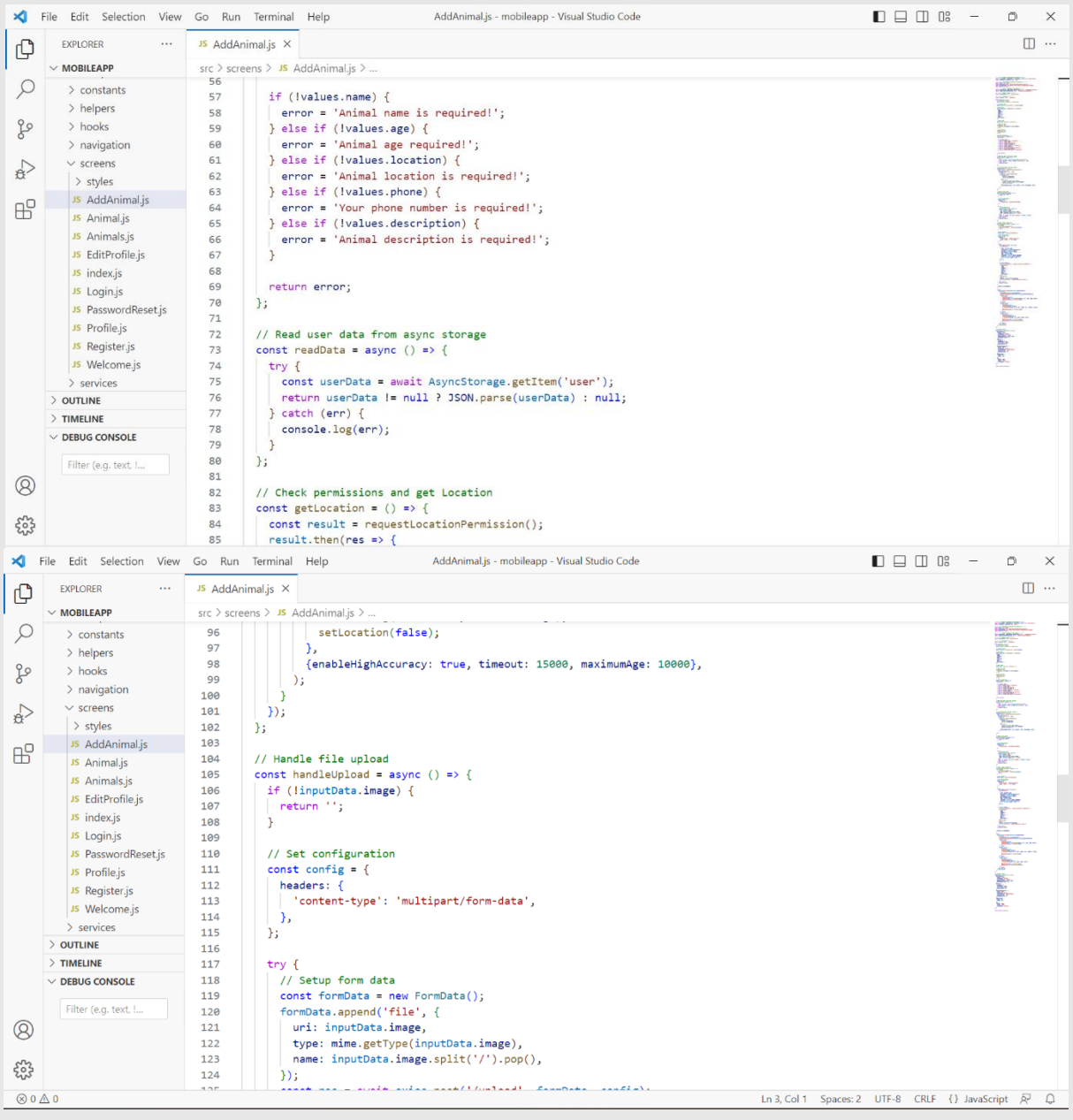
Android Mobile Application

1. Source

1.1 screens

Add animal.

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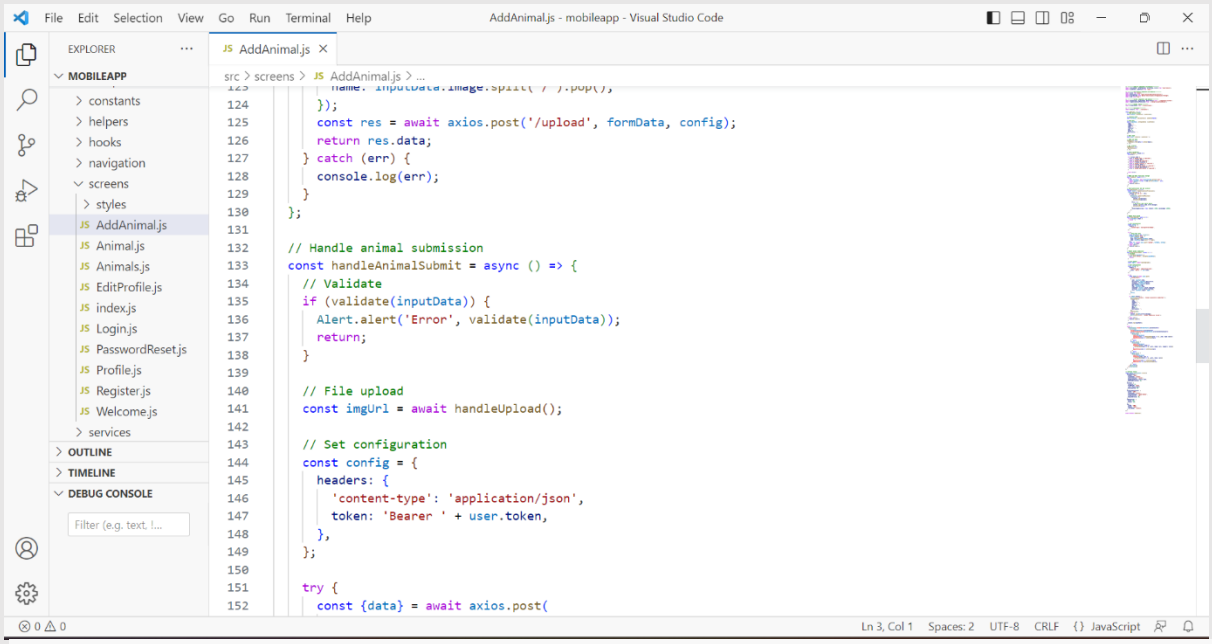
TIMELINE
DEBUG CONSOLE
Filter (e.g. text, !...
src > screens > AddAnimal.js > ...
if (!values.name) {
error = 'Animal name is required!';
} else if (!values.age) {
error = 'Animal age required!';
} else if (!values.location) {
error = 'Animal location is required!';
} else if (!values.phone) {
error = 'Your phone number is required!';
} else if (!values.description) {
error = 'Animal description is required!';
}
return error;
};
// Read user data from async storage
const readData = async () => {
try {
const userData = await AsyncStorage.getItem('user');
return userData != null ? JSON.parse(userData) : null;
} catch (err) {
console.log(err);
}
};
// Check permissions and get Location
const getLocation = () => {
const result = requestLocationPermission();
result.then(res => {
setLocation(false);
},
{enableHighAccuracy: true, timeout: 15000, maximumAge: 10000},
);
}
});
};
// Handle file upload
const handleUpload = async () => {
if (!inputData.image) {
return '';
}
// Set configuration
const config = {
headers: {
'content-type': 'multipart/form-data',
},
};
try {
// Setup form data
const formData = new FormData();
formData.append('file', {
uri: inputData.image,
type: mime.getType(inputData.image),
name: inputData.image.split('/').pop(),
});
Ln 3, Col 1 Spaces: 2 UTF-8 CRLF {} JavaScript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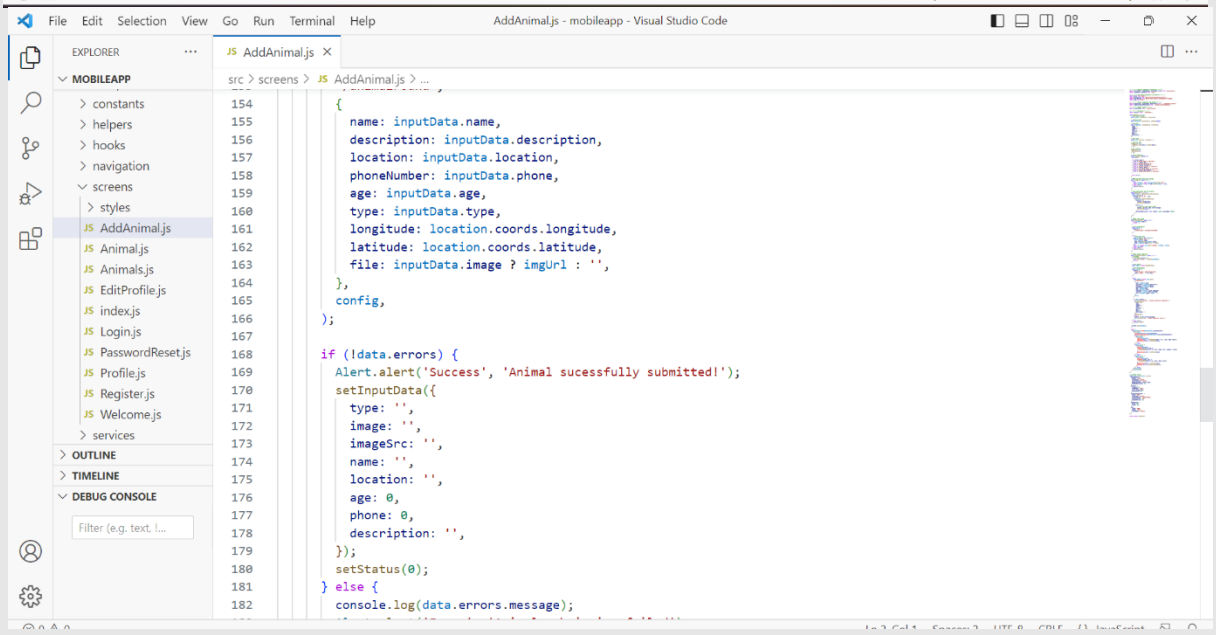
Filter (e.g. text, !...
src > screens > AddAnimal.js > ...
124 });
125 const res = await axios.post('/upload', formData, config);
126 return res.data;
127 } catch (err) {
128 console.log(err);
129 }
130 };
131
132 // Handle animal submission
133 const handleAnimalSubmit = async () => {
134 // Validate
135 if (validate(inputData)) {
136 Alert.alert('Error', validate(inputData));
137 return;
138 }
139
140 // File upload
141 const imgUrl = await handleUpload();
142
143 // Set configuration
144 const config = {
145 headers: {
146 'content-type': 'application/json',
147 token: 'Bearer ' + user.token,
148 },
149 };
150
151 try {
152 const {data} = await axios.post(
Ln 3, Col 1 Spaces: 2 UTF-8 CRLF {} JavaScript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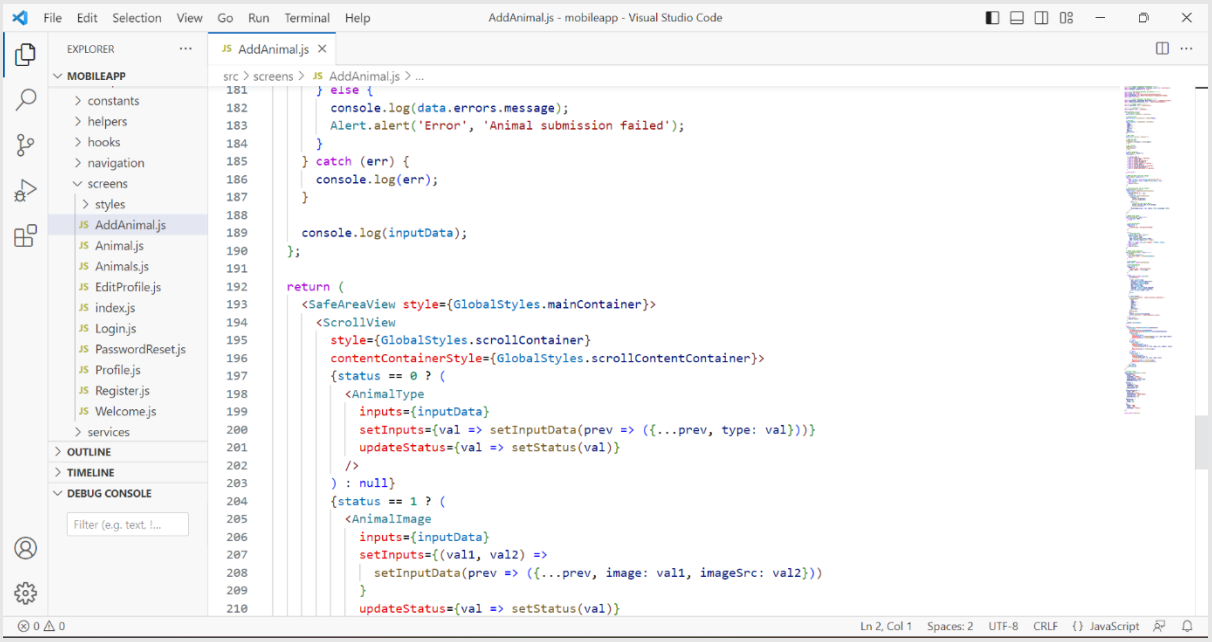
Filter (e.g. text, !...
src > screens > AddAnimal.js > ...
154 {
155 name: inputData.name,
156 description: inputData.description,
157 location: inputData.location,
158 phoneNumber: inputData.phone,
159 age: inputData.age,
160 type: inputData.type,
161 longitude: location.coords.longitude,
162 latitude: location.coords.latitude,
163 file: inputData.image ? imgUrl : '',
164 },
165 config,
166);
167
168 if (!data.errors) {
169 Alert.alert('Success', 'Animal sucessfully submitted!');
170 setInputData({
171 type: '',
172 image: '',
173 imageSrc: '',
174 name: '',
175 location: '',
176 age: 0,
177 phone: 0,
178 description: '',
179 });
180 setStatus(0);
181 } else {
182 console.log(data.errors.message);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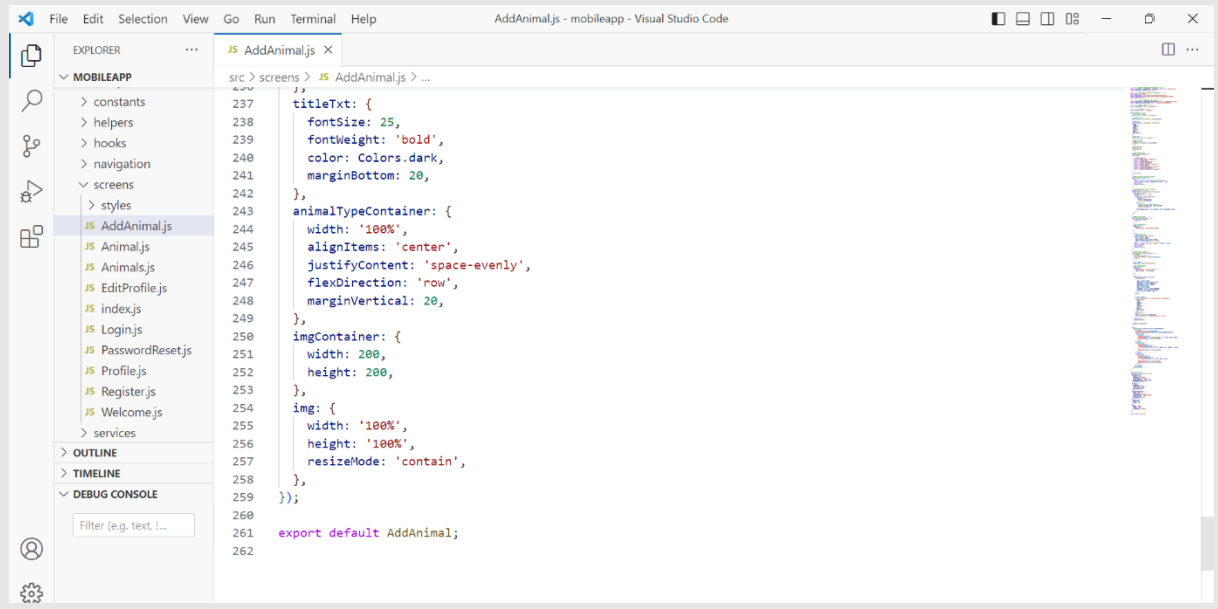
Filter (e.g. text, !...
AddAnimal.js
src > screens > AddAnimal.js > ...
} else {
console.log(data.errors.message);
Alert.alert('Error', 'Animal submission failed');
}
} catch (err) {
console.log(err);
}
console.log(inputData);
};
return (
<SafeAreaView style={GlobalStyles.mainContainer}>
<ScrollView
style={GlobalStyles.scrollContainer}
contentContainerStyle={GlobalStyles.scrollContentContainer}>
{status == 0 ? (
<AnimalType
inputs={inputData}
setInputs={val => setInputData(prev => ({...prev, type: val}))}
updateStatus={val => setStatus(val)}
/>
) : null}
{status == 1 ? (
<AnimalImage
inputs={inputData}
setInputs={(val1, val2) =>
setInputData(prev => ({...prev, image: val1, imageSrc: val2}))
}
updateStatus={val => setStatus(val)}
Ln 2, Col 1 Spaces: 2 UTF-8 CRLF {} JavaScript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Filter (e.g. text, !...
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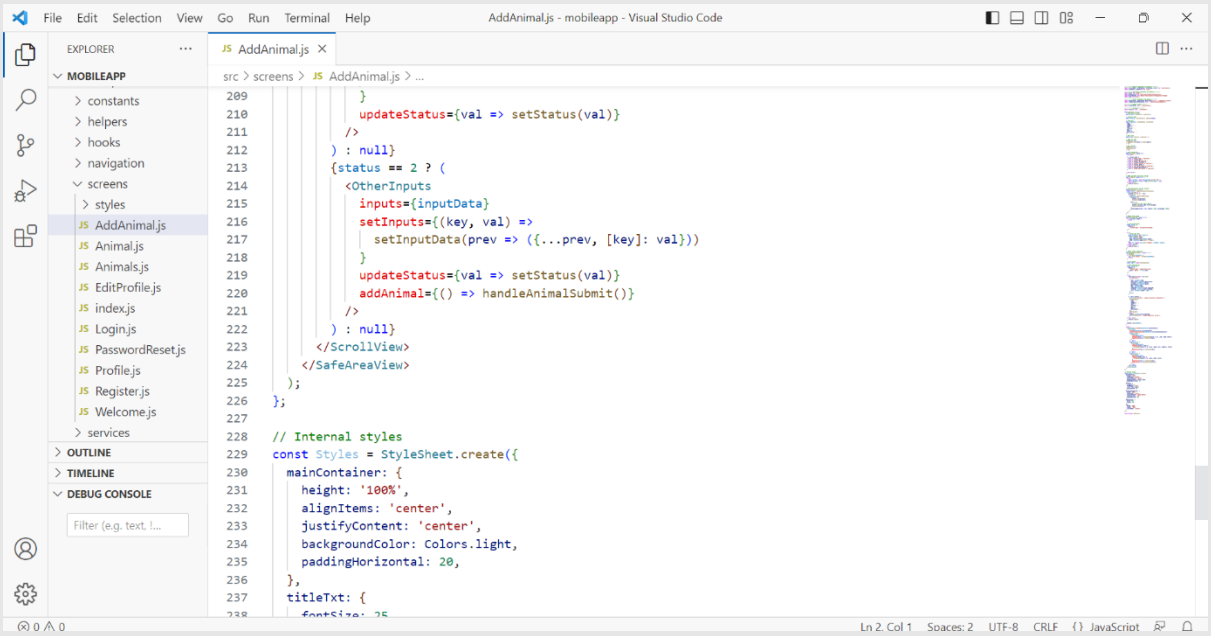
src > screens > AddAnimal.js > ...
titleTxt: {
fontSize: 25,
fontWeight: 'bold',
color: Colors.dark,
marginBottom: 20,
},
animalTypeContainer: {
width: '100%',
alignItems: 'center',
justifyContent: 'space-evenly',
flexDirection: 'row',
marginVertical: 20,
},
imgContainer: {
width: 200,
height: 200,
},
img: {
width: '100%',
height: '100%',
resizeMode: 'contain',
},
});
export default AddAnimal;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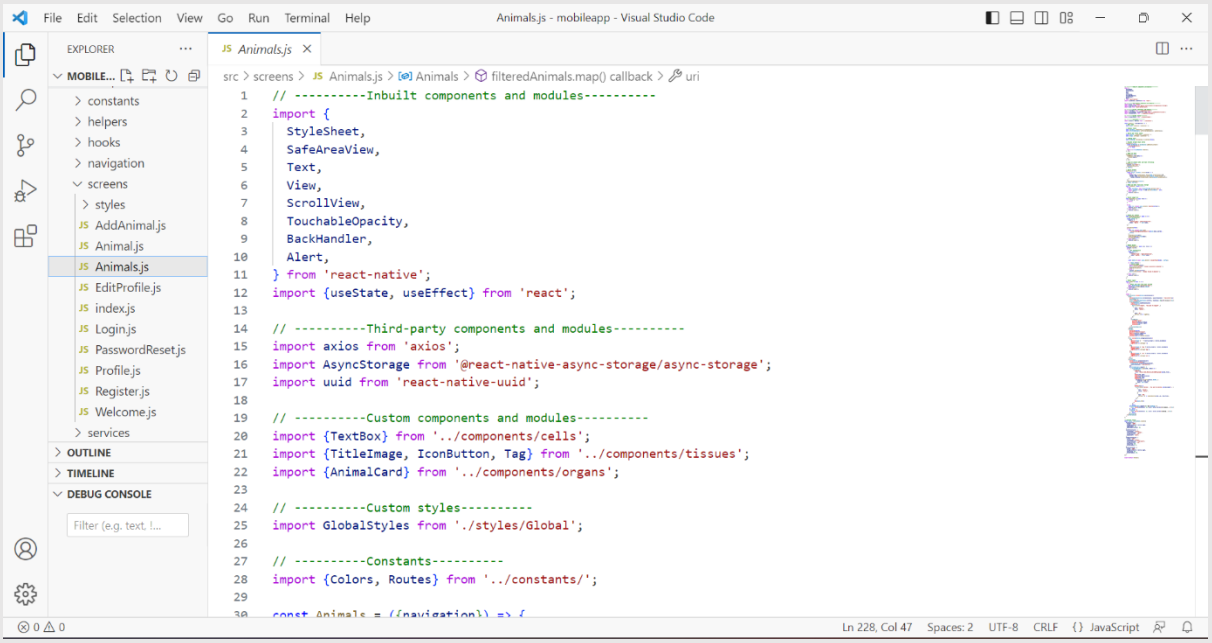
Filter (e.g. text, !...
src > screens > AddAnimal.js > ...
updateStatus={val => setStatus(val)}
/>
) : null}
{status == 2 ? (
<OtherInputs
inputs={inputData}
setInputs={(key, val) =>
setInputData(prev => ({...prev, [key]: val}))
}
updateStatus={val => setStatus(val)}
addAnimal={() => handleAnimalSubmit()}
/>
) : null}
</ScrollView>
</SafeAreaView>
);
};
// Internal styles
const Styles = StyleSheet.create({
mainContainer: {
height: '100%',
alignItems: 'center',
justifyContent: 'center',
backgroundColor: Colors.light,
paddingHorizontal: 20,
},
titleTxt: {
Ln 2, Col 1 Spaces: 2 UTF-8 CRLF {} JavaScript

Animals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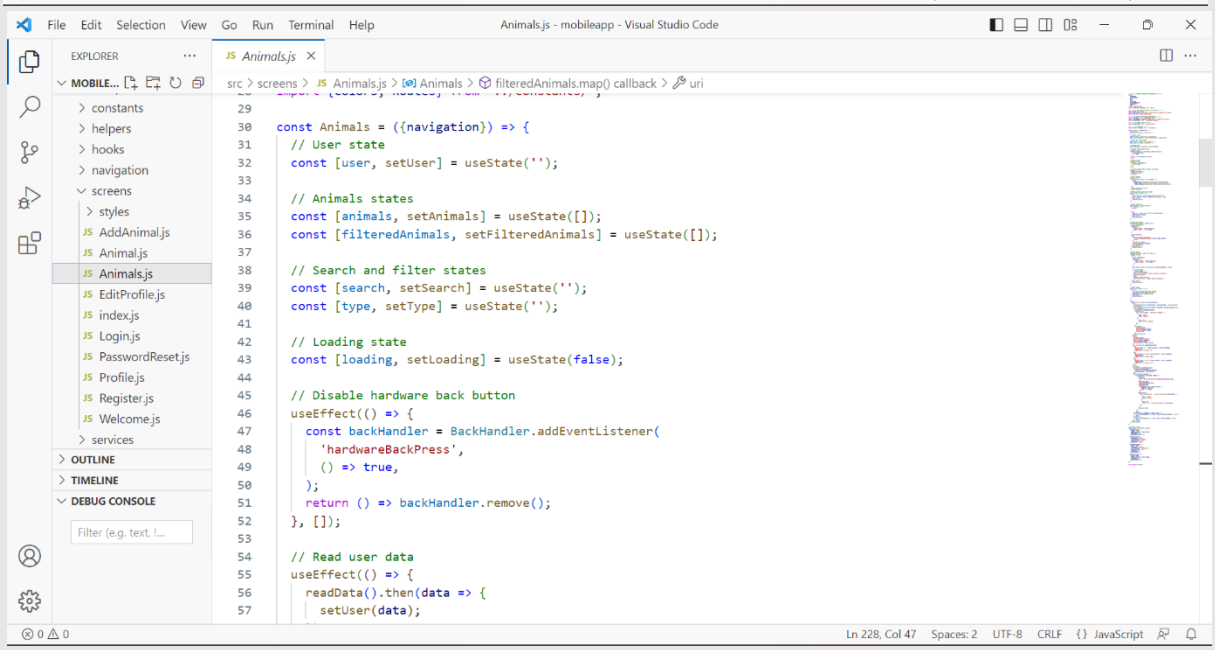
DEBUG CONSOLE
Filter (e.g. text, !...
Animals.js
src > screens > Animals.js > Animals > filteredAnimals.map() callback > uri
1 // ----------Inbuilt components and modules----------
2 import {
3 StyleSheet,
4 SafeAreaView,
5 Text,
6 View,
7 ScrollView,
8 TouchableOpacity,
9 BackHandler,
10 Alert,
11 } from 'react-native';
12 import {useState, useEffect} from 'react';
13
14 // ----------Third-party components and modules----------
15 import axios from 'axios';
16 import AsyncStorage from '@react-native-async-storage/async-storage';
17 import uuid from 'react-native-uuid';
18
19 // ----------Custom components and modules----------
20 import {TextBox} from '../components/cells';
21 import {TitleImage, IconButton, Tag} from '../components/tissues';
22 import {AnimalCard} from '../components/organs';
23
24 // ----------Custom styles----------
25 import GlobalStyles from './styles/Global';
26
27 // ----------Constants----------
28 import {Colors, Routes} from '../constants/';
29
30 const Animals = ({navigation}) => {
Ln 228, Col 47 Spaces: 2 UTF-8 CRLF {} JavaScript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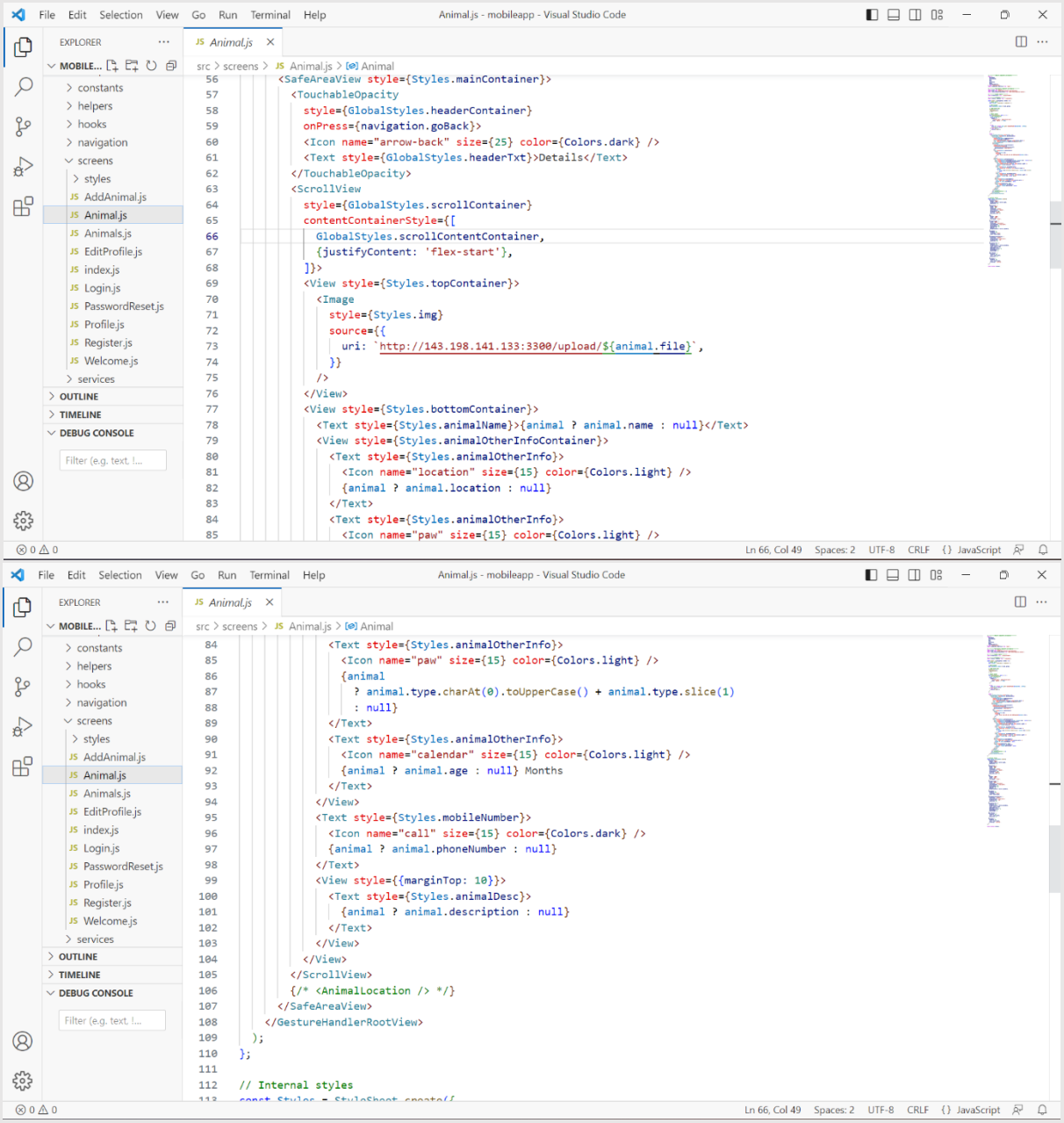
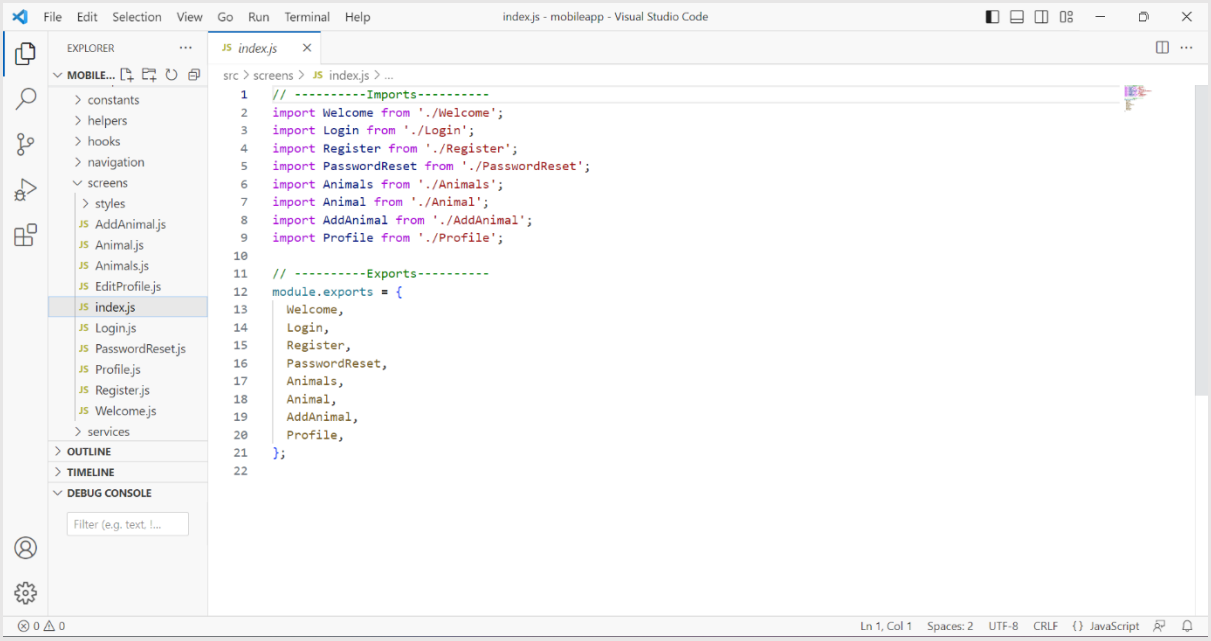
DEBUG CONSOLE
Filter (e.g. text, !...
Animals.js
src > screens > Animals.js > Animals > filteredAnimals.map() callback > uri
29
30 const Animals = ({navigation}) => {
31 // User state
32 const [user, setUser] = useState('');
33
34 // Animals states
35 const [animals, setAnimals] = useState([]);
36 const [filteredAnimals, setFilteredAnimals] = useState([]);
37
38 // Search and filter states
39 const [search, setSearch] = useState('');
40 const [type, setType] = useState('');
41
42 // Loading state
43 const [loading, setLoading] = useState(false);
44
45 // Disable hardware back button
46 useEffect(() => {
47 const backHandler = BackHandler.addEventListener(
48 'hardwareBackPress',
49 () => true,
50);
51 return () => backHandler.remove();
52 }, []);
53
54 // Read user data
55 useEffect(() => {
56 readData().then(data => {
57 setUser(data);
Ln 228, Col 47 Spaces: 2 UTF-8 CRLF {} JavaScript



```
<SafeAreaView style={Styles.mainContainer}>
  <TouchableOpacity
    style={GlobalStyles.headerContainer}
    onPress={navigation.goBack}>
    <Icon name="arrow-back" size={25} color={Colors.dark} />
    <Text style={GlobalStyles.headerTxt}>Details</Text>
  </TouchableOpacity>
  <ScrollView
    style={GlobalStyles.scrollContainer}
    contentContainerStyle={[
      GlobalStyles.scrollContentContainer,
      {justifyContent: 'flex-start'},
    ]}>
    <View style={Styles.topContainer}>
      <Image
        style={Styles.img}
        source={{
          uri: `http://143.198.141.133:3300/upload/${animal.file}`,
        }}
      />
    </View>
    <View style={Styles.bottomContainer}>
      <Text style={Styles.animalName}>{animal ? animal.name : null}</Text>
      <View style={Styles.animalOtherInfoContainer}>
        <Text style={Styles.animalOtherInfo}>
          <Icon name="location" size={15} color={Colors.light} />
          {animal ? animal.location : null}
        </Text>
        <Text style={Styles.animalOtherInfo}>
          <Icon name="paw" size={15} color={Colors.light} />
          {animal
            ? animal.type.charAt(0).toUpperCase() + animal.type.slice(1)
            : null}
        </Text>
        <Text style={Styles.animalOtherInfo}>
          <Icon name="calendar" size={15} color={Colors.light} />
          {animal ? animal.age : null} Months
        </Text>
      </View>
      <Text style={Styles.mobileNumber}>
        <Icon name="call" size={15} color={Colors.dark} />
        {animal ? animal.phoneNumber : null}
      </Text>
      <View style={{marginTop: 10}}>
        <Text style={Styles.animalDesc}>
          {animal ? animal.description : null}
        </Text>
      </View>
    </View>
  </ScrollView>
  {/* <AnimalLocation /> */}
</SafeAreaView>
</GestureHandlerRootView>
);
};

// Internal styles
```

Index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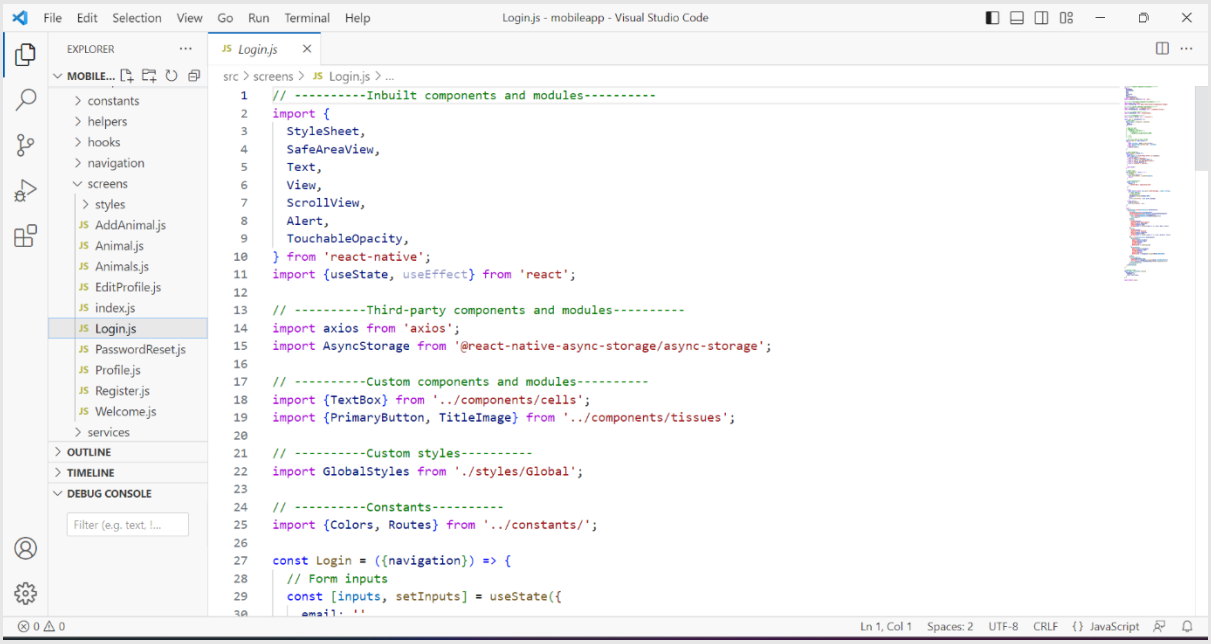
Filter (e.g. text, !...
index.js
src > screens > index.js > ...
1 // ----------Imports----------
2 import Welcome from './Welcome';
3 import Login from './Login';
4 import Register from './Register';
5 import PasswordReset from './PasswordReset';
6 import Animals from './Animals';
7 import Animal from './Animal';
8 import AddAnimal from './AddAnimal';
9 import Profile from './Profile';
10
11 // ----------Exports----------
12 module.exports = {
13 Welcome,
14 Login,
15 Register,
16 PasswordReset,
17 Animals,
18 Animal,
19 AddAnimal,
20 Profile,
21 };
22
Ln 1, Col 1 Spaces: 2 UTF-8 CRLF {} JavaScript

Login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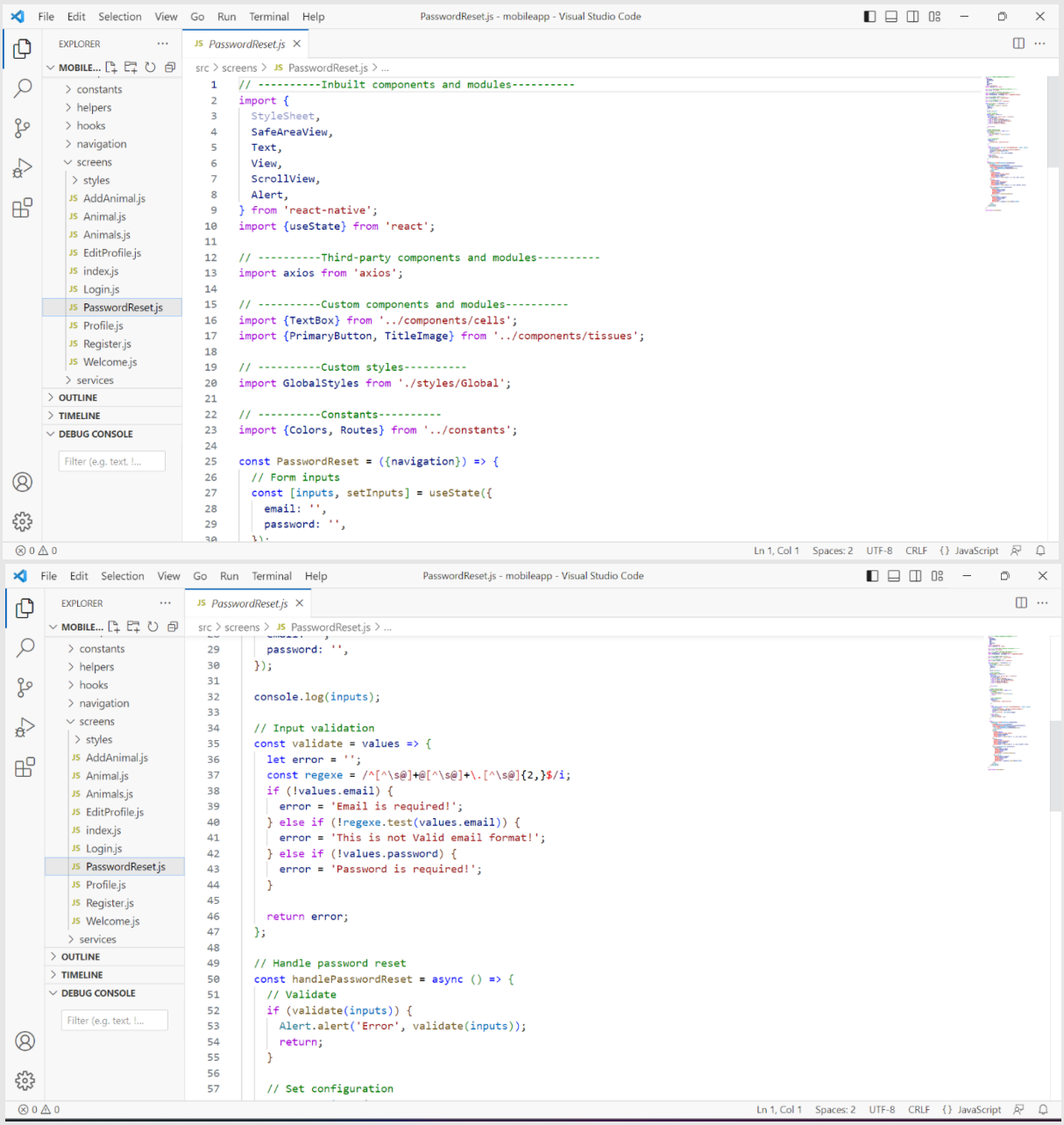
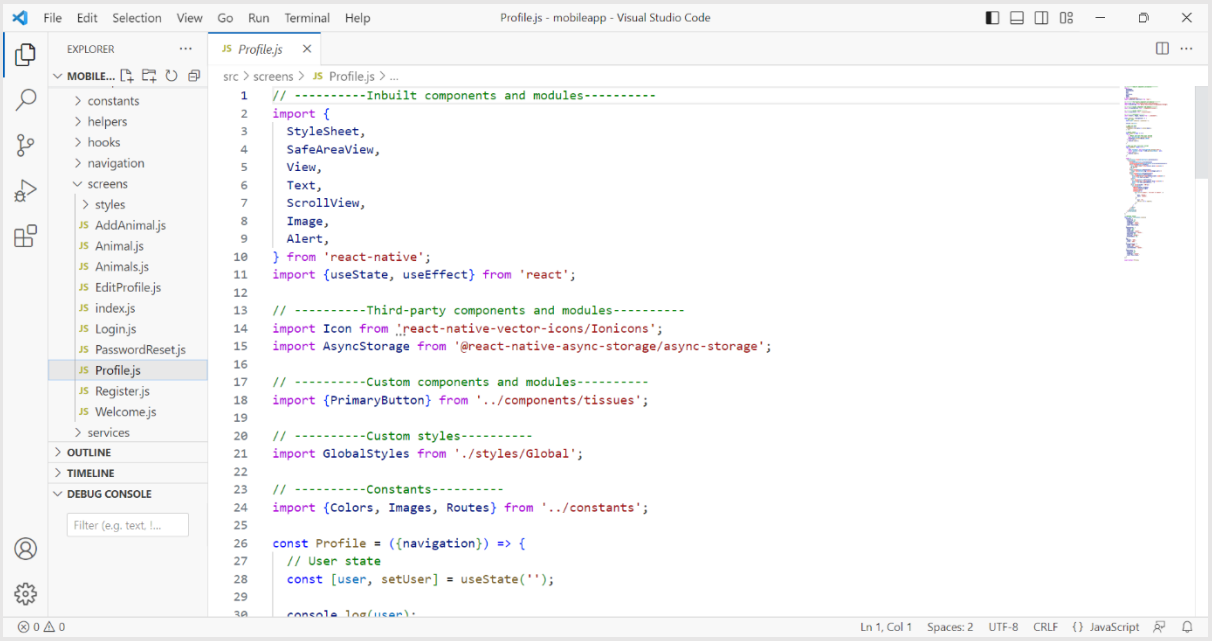
Filter (e.g. text, !...
Login.js
src > screens > Login.js > ...
1 // ----------Inbuilt components and modules----------
2 import {
3 StyleSheet,
4 SafeAreaView,
5 Text,
6 View,
7 ScrollView,
8 Alert,
9 TouchableOpacity,
10 } from 'react-native';
11 import {useState, useEffect} from 'react';
12
13 // ----------Third-party components and modules----------
14 import axios from 'axios';
15 import AsyncStorage from '@react-native-async-storage/async-storage';
16
17 // ----------Custom components and modules----------
18 import {TextBox} from '../components/cells';
19 import {PrimaryButton, TitleImage} from '../components/tissues';
20
21 // ----------Custom styles----------
22 import GlobalStyles from './styles/Global';
23
24 // ----------Constants----------
25 import {Colors, Routes} from '../constants/';
26
27 const Login = ({navigation}) => {
28 // Form inputs
29 const [inputs, setInputs] = useState({
Ln 1, Col 1 Spaces: 2 UTF-8 CRLF {} JavaScript

Password Reset



```
// ----------Inbuilt components and modules----------
import {
  StyleSheet,
  SafeAreaView,
  Text,
  View,
  ScrollView,
  Alert,
} from 'react-native';
import {useState} from 'react';

// ----------Third-party components and modules----------
import axios from 'axios';

// ----------Custom components and modules----------
import {TextBox} from '../components/cells';
import {PrimaryButton, TitleImage} from '../components/tissues';

// ----------Custom styles----------
import GlobalStyles from './styles/Global';

// ----------Constants----------
import {Colors, Routes} from '../constants';

const PasswordReset = ({navigation}) => {
  // Form inputs
  const [inputs, setInputs] = useState({
    email: '',
    password: '',
  });

  console.log(inputs);

  // Input validation
  const validate = values => {
    let error = '';
    const regexe = /^[^\s@]+@[^\s@]+\.[^\s@]{2,}$/i;
    if (!values.email) {
      error = 'Email is required!';
    } else if (!regexe.test(values.email)) {
      error = 'This is not Valid email format!';
    } else if (!values.password) {
      error = 'Password is required!';
    }

    return error;
  };

  // Handle password reset
  const handlePasswordReset = async () => {
    // Validate
    if (validate(inputs)) {
      Alert.alert('Error', validate(inputs));
      return;
    }

    // Set configuration
```

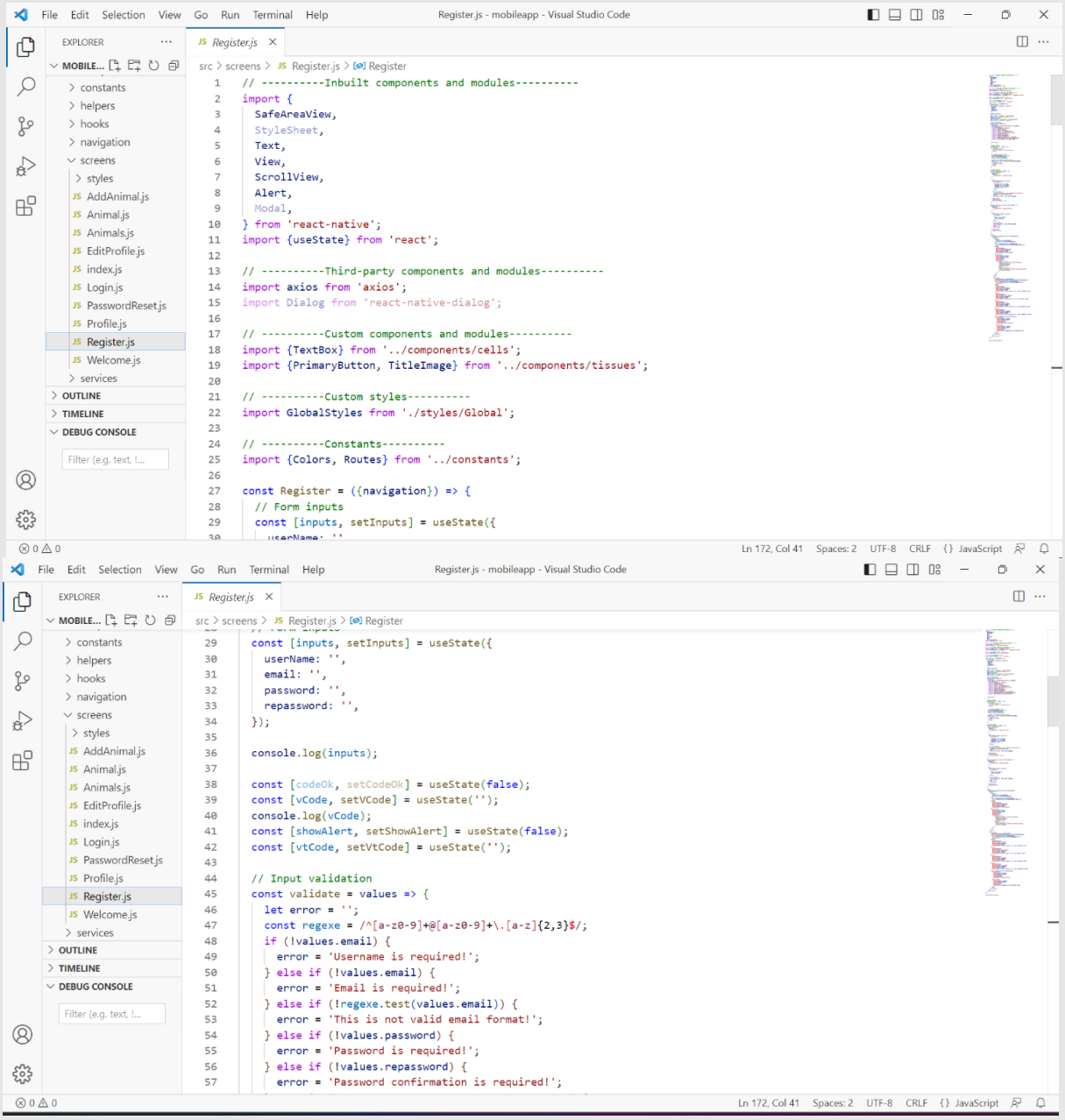
Profile



```
// ----------Inbuilt components and modules----------
import {
  StyleSheet,
  SafeAreaView,
  View,
  Text,
  ScrollView,
  Image,
  Alert,
} from 'react-native';
import {useState, useEffect} from 'react';

// ----------Third-party components and modules----------
import Icon from 'react-native-vector-icons/Ionicons';
import AsyncStorage from '@react-native-async-storage/async-storage';

// ----------Custom components and modules----------
import {PrimaryButton} from '../components/tissues';

// ----------Custom styles----------
import GlobalStyles from './styles/Global';

// ----------Constants----------
import {Colors, Images, Routes} from '../constants';

const Profile = ({navigation}) => {
  // User state
  const [user, setUser] = useState('');
```

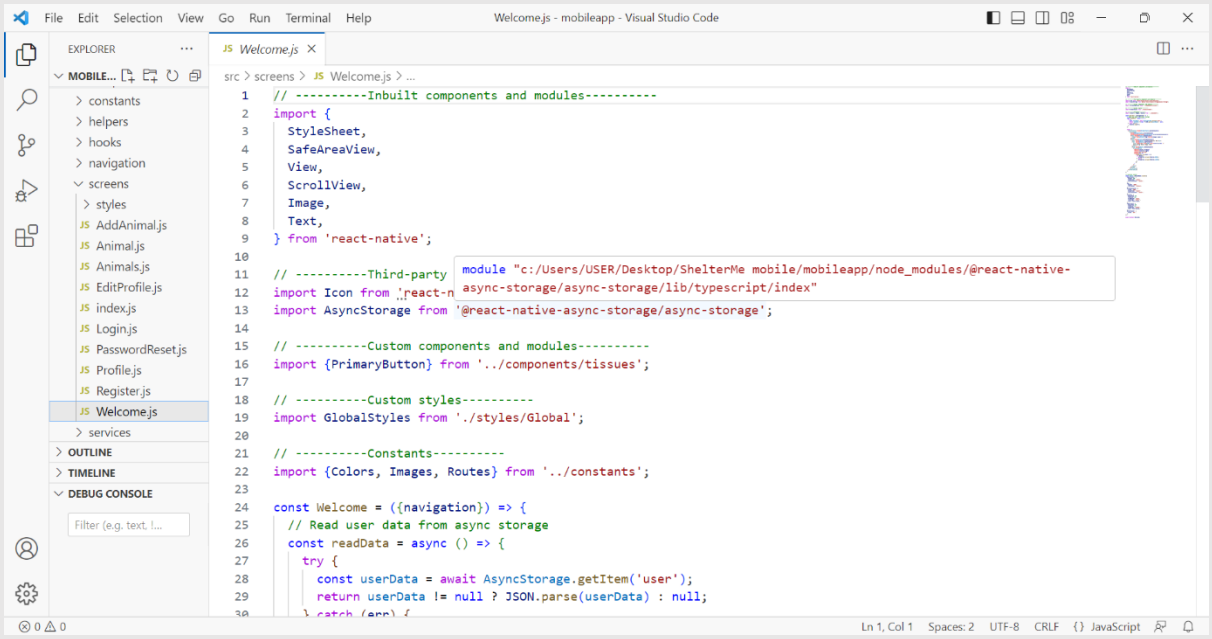
```
  useEffect(() => {
    readData().then(data => setUser(data));
  }, []);

  // Handle logout
  const logOut = async () => {
    try {
      // Remove user data from async storage
      await AsyncStorage.removeItem('user');
      navigation.navigate(Routes.LOGIN);
    } catch (err) {
      console.log(err);
    }
  };

  // Read user data from async storage
  const readData = async () => {
    try {
      const userData = await AsyncStorage.getItem('user');
      return userData != null ? JSON.parse(userData) : null;
    } catch (err) {
      console.log(err);
    }
  };

  return (
    <SafeAreaView style={GlobalStyles.mainContainer}>
      <ScrollView
        style={GlobalStyles.scrollContainer}
```

Register



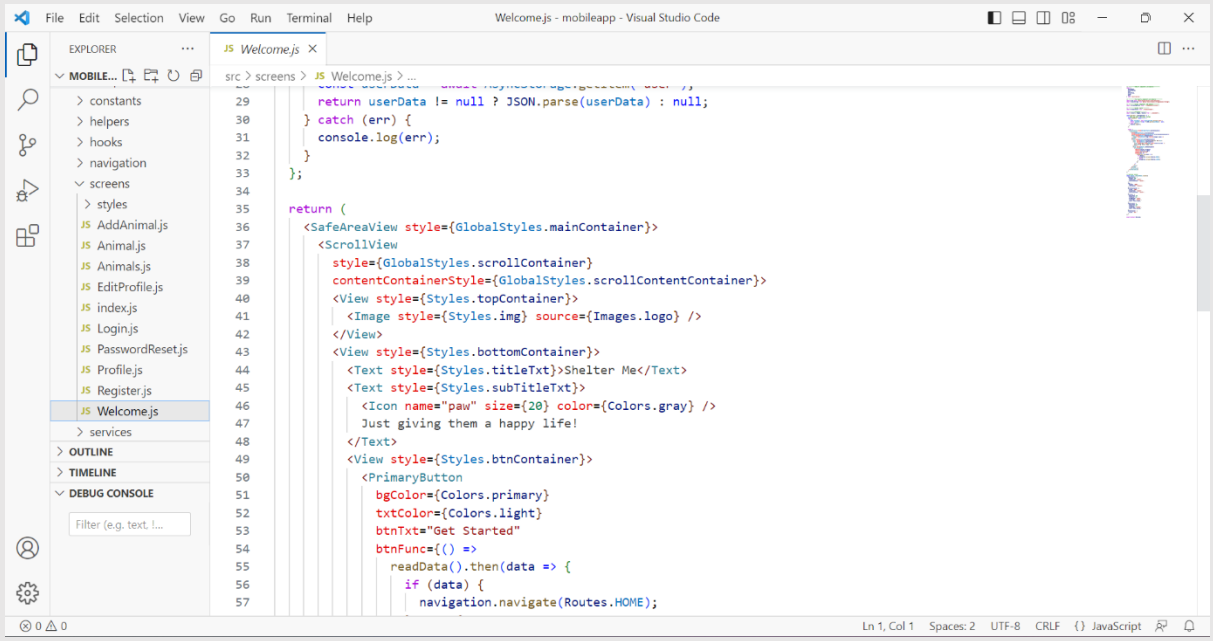
```
// ----------Inbuilt components and modules----------
import {
  SafeAreaView,
  StyleSheet,
  Text,
  View,
  ScrollView,
  Alert,
  Modal,
} from 'react-native';
import {useState} from 'react';

// ----------Third-party components and modules----------
import axios from 'axios';
import Dialog from 'react-native-dialog';

// ----------Custom components and modules----------
import {TextBox} from '../components/cells';
import {PrimaryButton, TitleImage} from '../components/tissues';

// ----------Custom styles----------
import GlobalStyles from './styles/Global';

// ----------Constants----------
import {Colors, Routes} from '../constants';

const Register = ({navigation}) => {
  // Form inputs
  const [inputs, setInputs] = useState({
    userName: '',
    email: '',
    password: '',
    repassword: '',
  });

  console.log(inputs);

  const [codeOk, setCodeOk] = useState(false);
  const [vCode, setVCode] = useState('');
  console.log(vCode);
  const [showAlert, setShowAlert] = useState(false);
  const [vtCode, setVtCode] = useState('');

  // Input validation
  const validate = values => {
    let error = '';
    const regexe = /^[a-z0-9]+@[a-z0-9]+\.[a-z]{2,3}$/;
    if (!values.email) {
      error = 'Username is required!';
    } else if (!values.email) {
      error = 'Email is required!';
    } else if (!regexe.test(values.email)) {
      error = 'This is not valid email format!';
    } else if (!values.password) {
      error = 'Password is required!';
    } else if (!values.repassword) {
      error = 'Password confirmation is required!';
```

Welcome

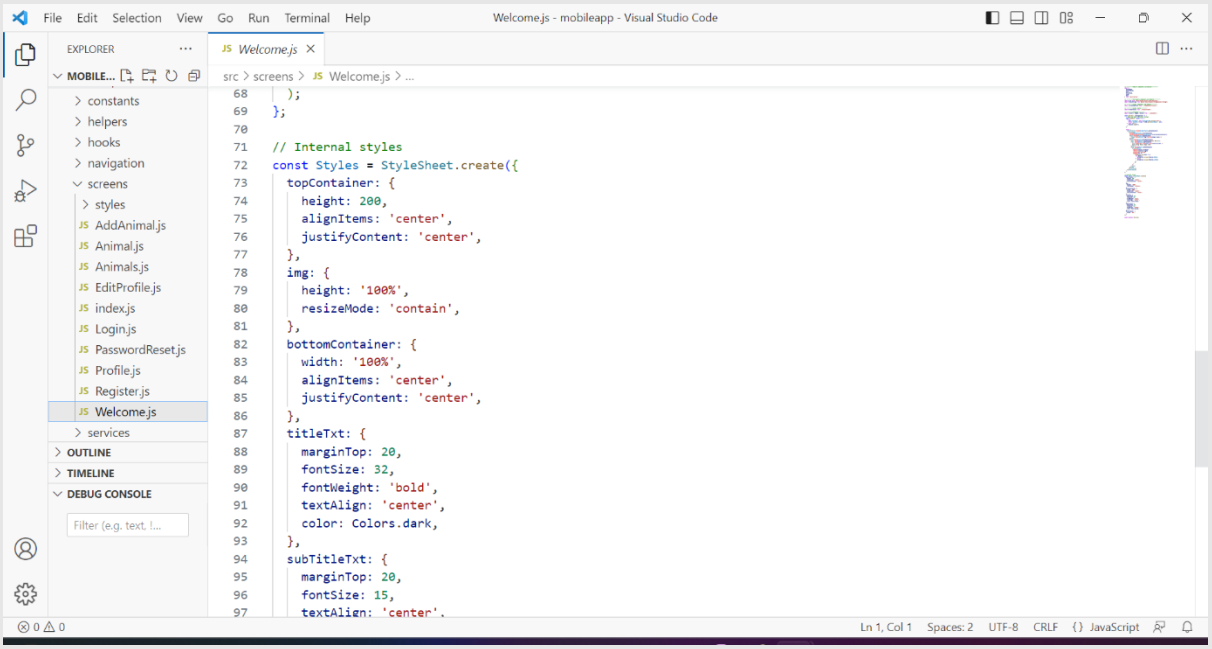


```
// ----------Inbuilt components and modules----------
import {
  StyleSheet,
  SafeAreaView,
  View,
  ScrollView,
  Image,
  Text,
} from 'react-native';

// ----------Third-party
import Icon from 'react-n
import AsyncStorage from '@react-native-async-storage/async-storage';

// ----------Custom components and modules----------
import {PrimaryButton} from '../components/tissues';

// ----------Custom styles----------
import GlobalStyles from './styles/Global';

// ----------Constants----------
import {Colors, Images, Routes} from '../constants';

const Welcome = ({navigation}) => {
  // Read user data from async storage
  const readData = async () => {
    try {
      const userData = await AsyncStorage.getItem('user');
      return userData != null ? JSON.parse(userData) : null;
```

module "c:/Users/USER/Desktop/ShelterMe mobile/mobileapp/node_modules/@react-native-async-storage/async-storage/lib/typescript/index"

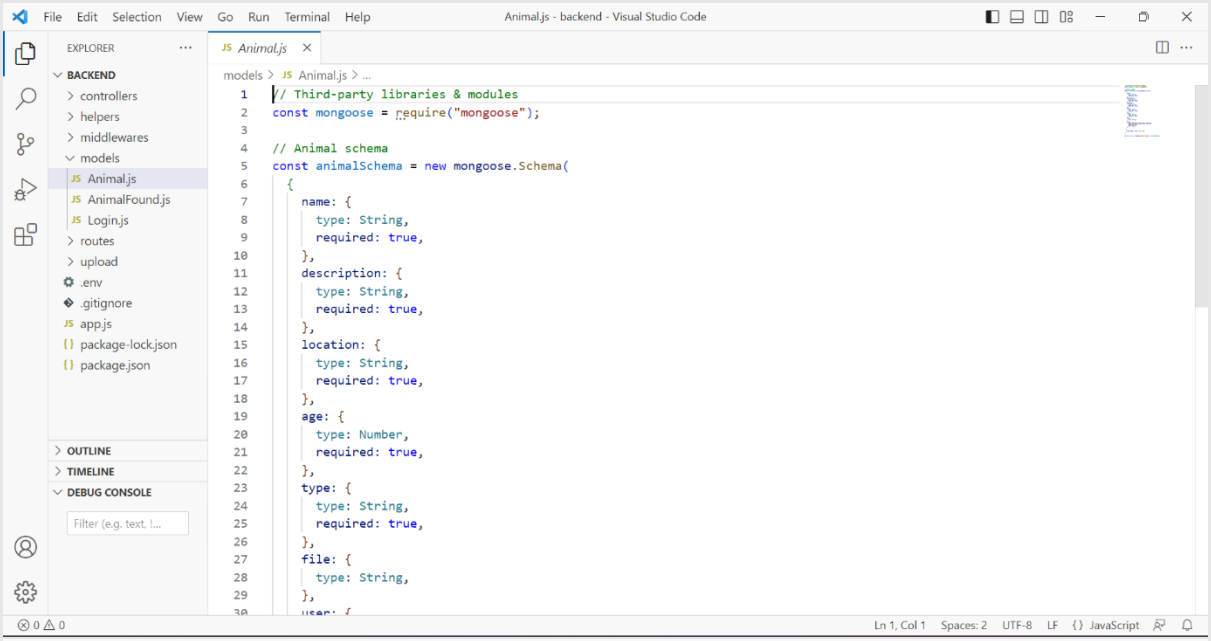


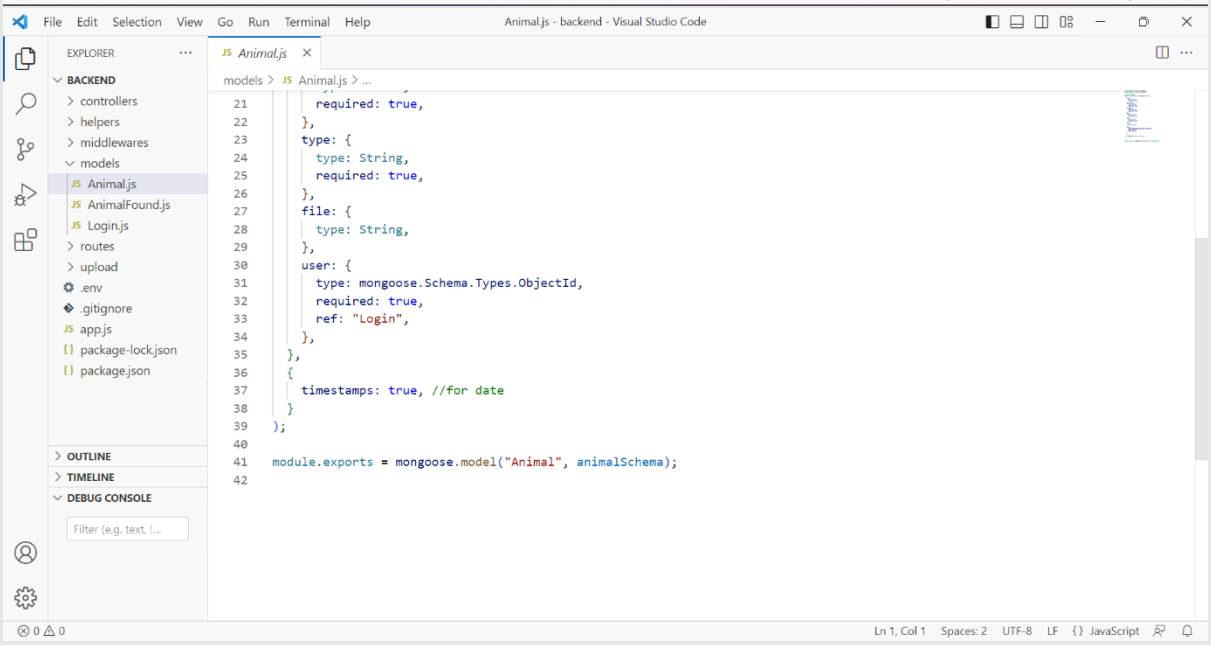
```
      return userData != null ? JSON.parse(userData) : null;
    } catch (err) {
      console.log(err);
    }
  };

  return (
    <SafeAreaView style={GlobalStyles.mainContainer}>
      <ScrollView
        style={GlobalStyles.scrollContainer}
        contentContainerStyle={GlobalStyles.scrollContentContainer}>
        <View style={Styles.topContainer}>
          <Image style={Styles.img} source={Images.logo} />
        </View>
        <View style={Styles.bottomContainer}>
          <Text style={Styles.titleTxt}>Shelter Me</Text>
          <Text style={Styles.subTitleTxt}>
            <Icon name="paw" size={20} color={Colors.gray} />
            Just giving them a happy life!
          </Text>
          <View style={Styles.btnContainer}>
            <PrimaryButton
              bgColor={Colors.primary}
              txtColor={Colors.light}
              btnTxt="Get Started"
              btnFunc={() =>
                readData().then(data => {
                  if (data) {
                    navigation.navigate(Routes.HOME);
```


File Edit Selection View Go Run Terminal Help
Welcome.js - mobileapp - Visual Studio Code
EXPLORER
Welcome.js
src > screens > Welcome.js > ...
MOBILE...
constants
helpers
hooks
navigation
screens
styles
AddAnimal.js
Animal.js
Animals.js
EditProfile.js
index.js
Login.js
PasswordReset.js
Profile.js
Register.js
Welcome.js
services
OUTLINE
TIMELINE
DEBUG CONSOLE
Filter (e.g. text, !...
68);
69 };
70
71 // Internal styles
72 const Styles = StyleSheet.create({
73 topContainer: {
74 height: 200,
75 alignItems: 'center',
76 justifyContent: 'center',
77 },
78 img: {
79 height: '100%',
80 resizeMode: 'contain',
81 },
82 bottomContainer: {
83 width: '100%',
84 alignItems: 'center',
85 justifyContent: 'center',
86 },
87 titleTxt: {
88 marginTop: 20,
89 fontSize: 32,
90 fontWeight: 'bold',
91 textAlign: 'center',
92 color: Colors.dark,
93 },
94 subTitleTxt: {
95 marginTop: 20,
96 fontSize: 15,
97 textAlign: 'center',
Ln 1, Col 1 Spaces: 2 UTF-8 CRLF { } JavaScript

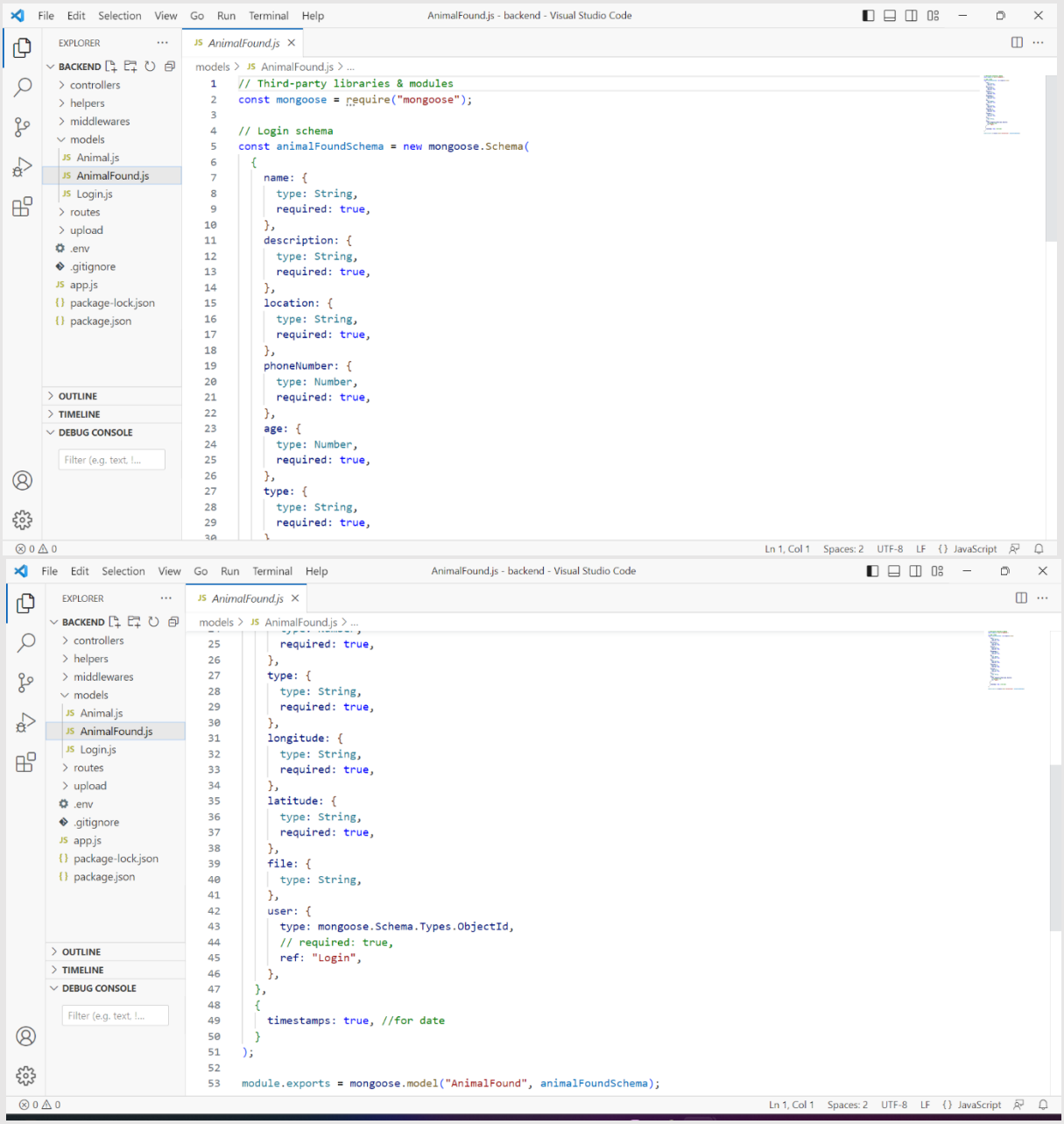
Webapp backend

Animal



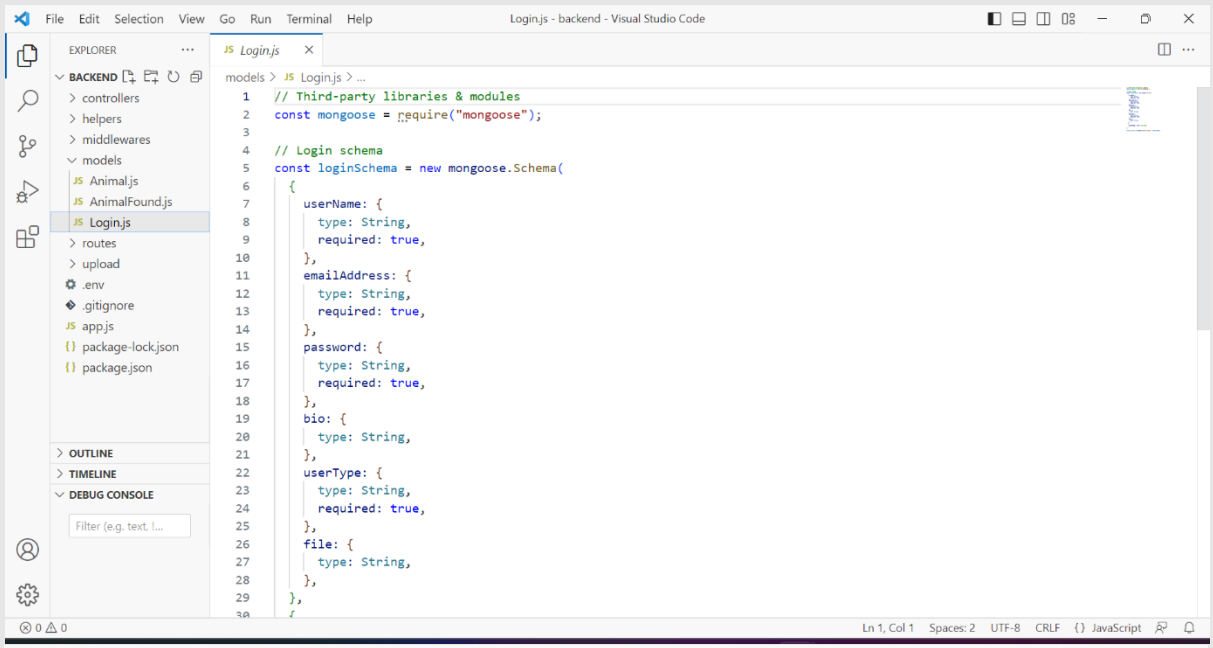


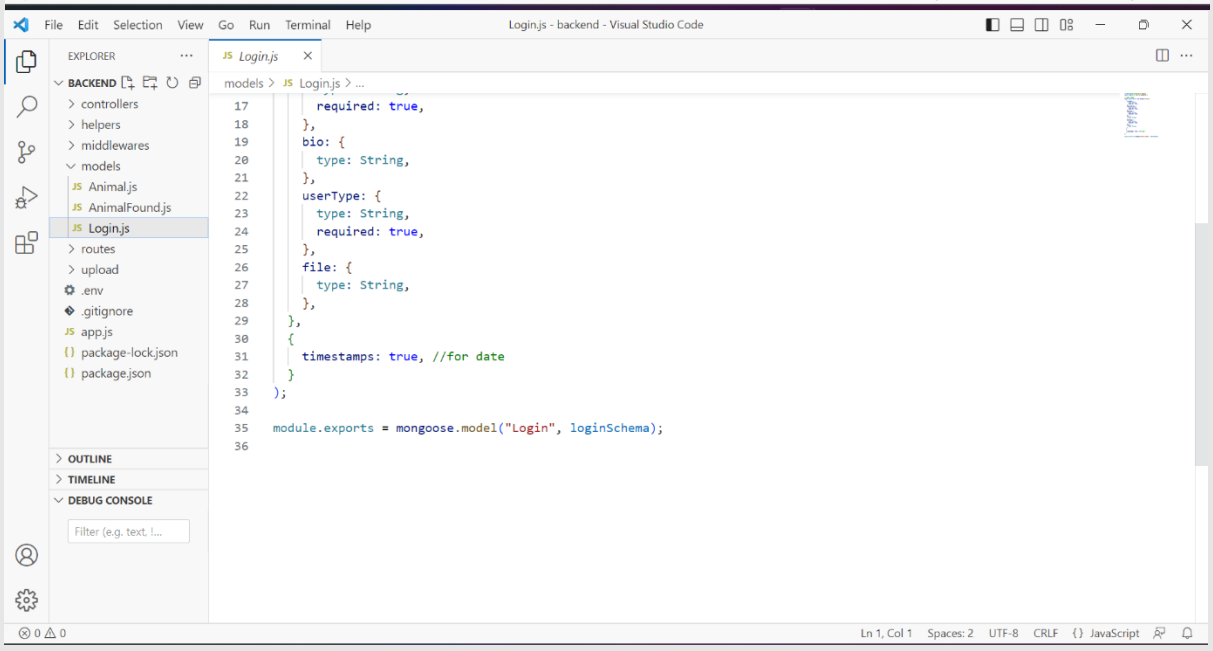
Animal Found



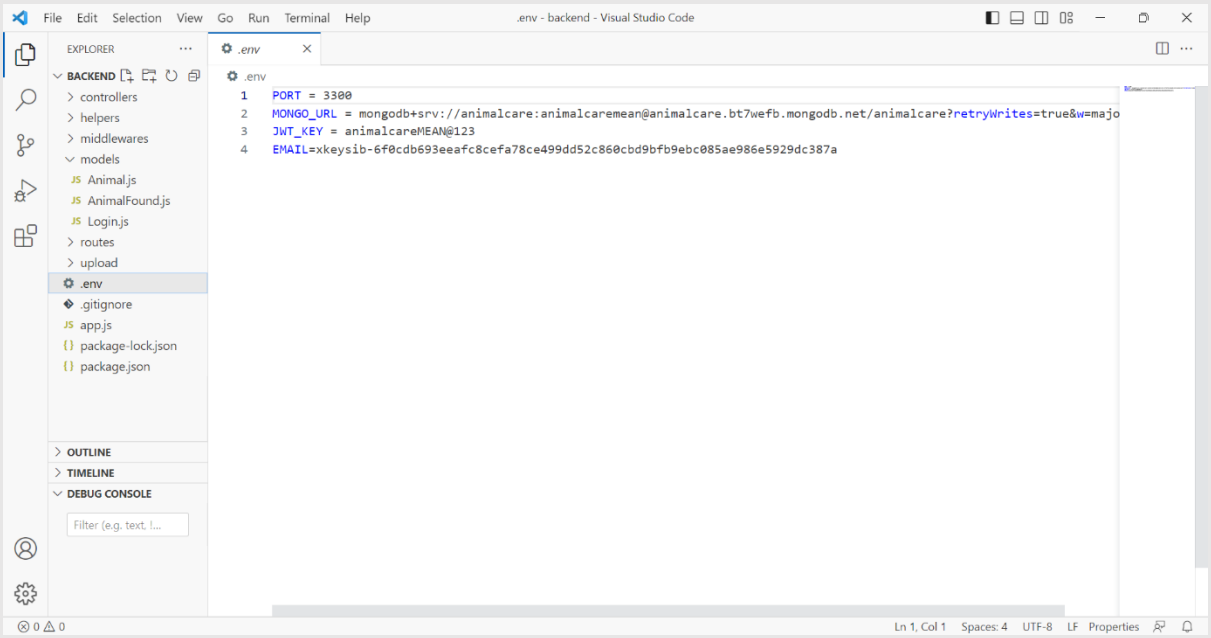
```
// Third-party libraries & modules
const mongoose = require("mongoose");

// Login schema
const animalFoundSchema = new mongoose.Schema(
  {
    name: {
      type: String,
      required: true,
    },
    description: {
      type: String,
      required: true,
    },
    location: {
      type: String,
      required: true,
    },
    phoneNumber: {
      type: Number,
      required: true,
    },
    age: {
      type: Number,
      required: true,
    },
    type: {
      type: String,
      required: true,
    },
    longitude: {
      type: String,
      required: true,
    },
    latitude: {
      type: String,
      required: true,
    },
    file: {
      type: String,
    },
    user: {
      type: mongoose.Schema.Types.ObjectId,
      // required: true,
      ref: "Login",
    },
  },
  {
    timestamps: true, //for date
  }
);

module.exports = mongoose.model("AnimalFound", animalFoundSchema);
```

Login


File Edit Selection View Go Run Terminal Help
Login.js - backend - Visual Studio Code
EXPLORER
BACKEND
controllers
helpers
middlewares
models
Animal.js
AnimalFound.js
Login.js
routes
upload
.env
.gitignore
app.js
package-lock.json
package.json
OUTLINE
TIMELINE
DEBUG CONSOLE
Filter (e.g. text, !...
models > Login.js > ...
// Third-party libraries & modules
const mongoose = require("mongoose");
// Login schema
const loginSchema = new mongoose.Schema(
{
userName: {
type: String,
required: true,
},
emailAddress: {
type: String,
required: true,
},
password: {
type: String,
required: true,
},
bio: {
type: String,
},
userType: {
type: String,
required: true,
},
file: {
type: String,
},
},
Ln 1, Col 1 Spaces: 2 UTF-8 CRLF {} JavaScript

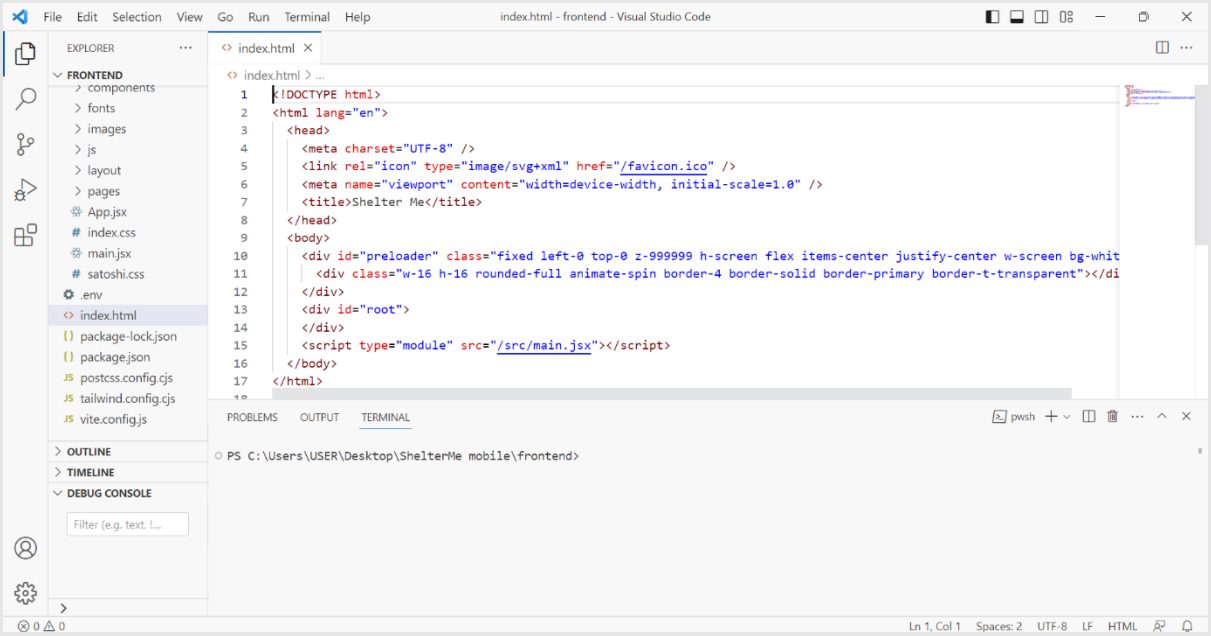

File Edit Selection View Go Run Terminal Help
Login.js - backend - Visual Studio Code
EXPLORER
BACKEND
controllers
helpers
middlewares
models
Animal.js
AnimalFound.js
Login.js
routes
upload
.env
.gitignore
app.js
package-lock.json
package.json
OUTLINE
TIMELINE
DEBUG CONSOLE
Filter (e.g. text, !...
models > Login.js > ...
required: true,
},
bio: {
type: String,
},
userType: {
type: String,
required: true,
},
file: {
type: String,
},
},
{
timestamps: true, //for date
}
);
module.exports = mongoose.model("Login", loginSchema);
Ln 1, Col 1 Spaces: 2 UTF-8 CRLF {} JavaScript

Environment file



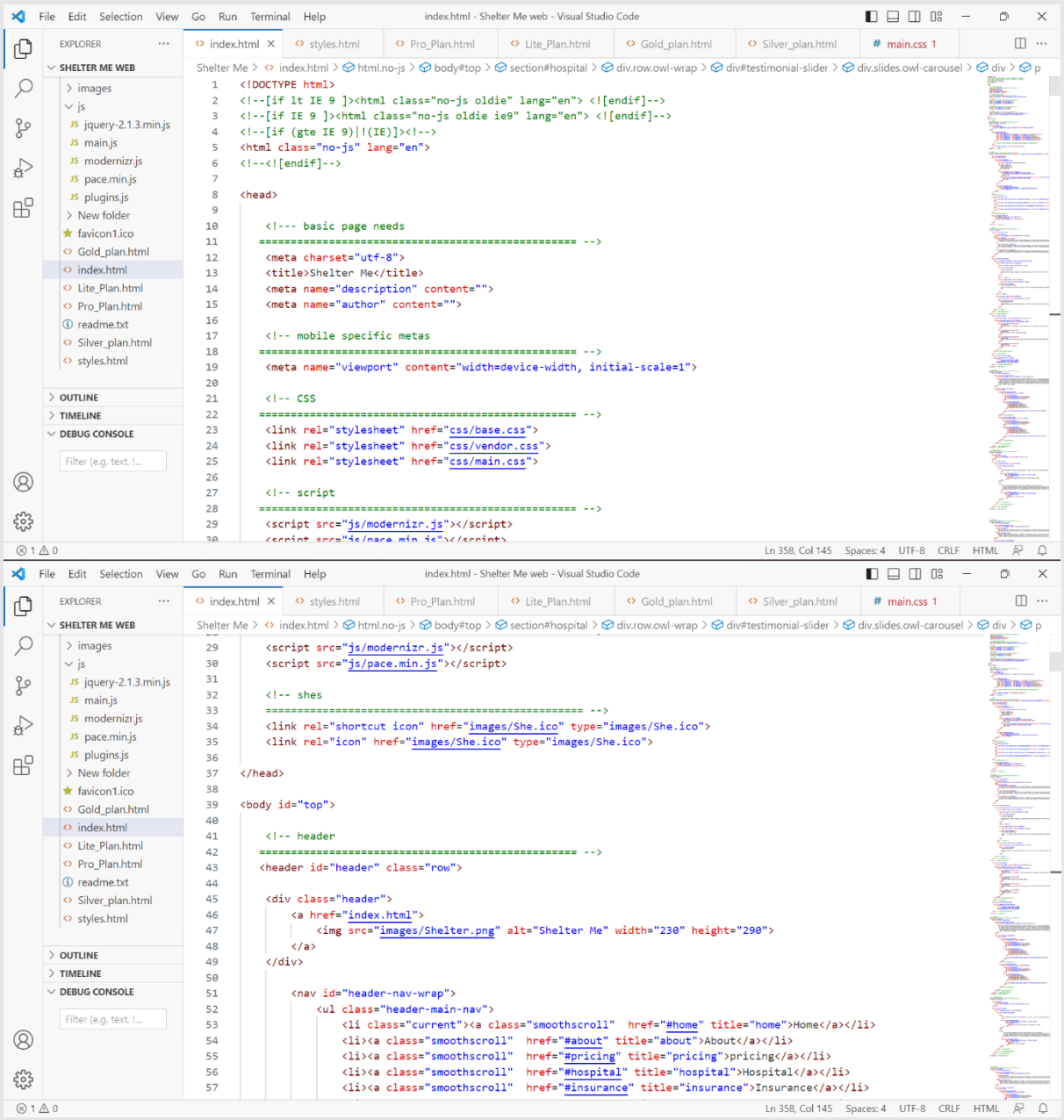
Frontend

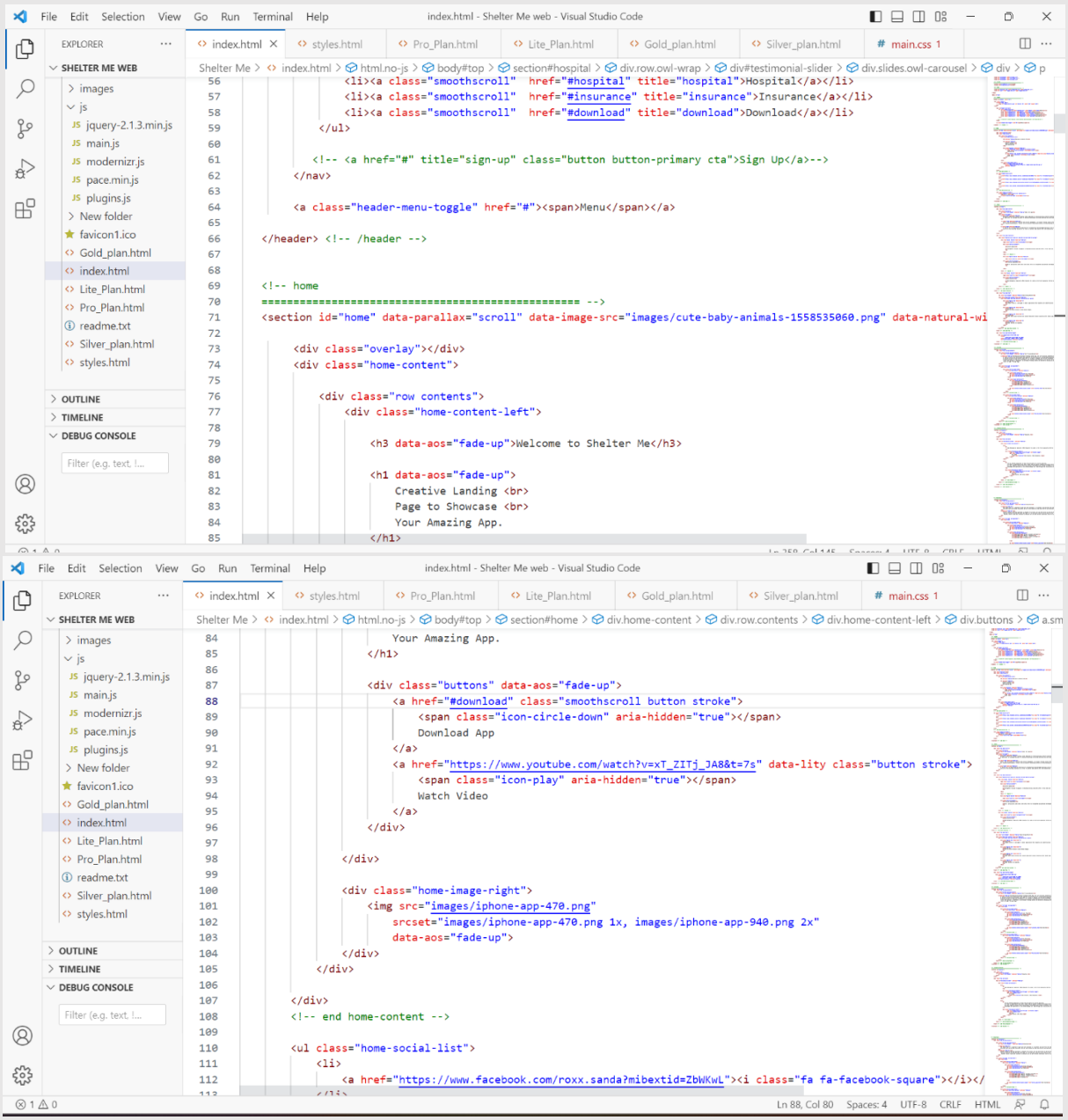
Index



Website Application

Index




File Edit Selection View Go Run Terminal Help
index.html - Shelter Me web - Visual Studio Code
EXPLORER
SHELTER ME WEB
images
js
jquery-2.1.3.min.js
main.js
modernizr.js
pace.min.js
plugins.js
New folder
favicon1.ico
Gold_plan.html
index.html
Lite_Plan.html
Pro_Plan.html
readme.txt
Silver_plan.html
styles.html
OUTLINE
TIMELINE
DEBUG CONSOLE
Filter (e.g. text, !...
index.html
styles.html
Pro_Plan.html
Lite_Plan.html
Gold_plan.html
Silver_plan.html
main.css 1
Hospital
Insurance
Download

<!-- Sign Up-->
</nav>
Menu
</header> <!-- /header -->
<!-- home
== -->
<section id="home" data-parallax="scroll" data-image-src="images/cute-baby-animals-1558535060.png" data-natural-wi

<h3 data-aos="fade-up">Welcome to Shelter Me</h3>
<h1 data-aos="fade-up">
Creative Landing
Page to Showcase
Your Amazing App.
</h1>

File Edit Selection View Go Run Terminal Help
index.html - Shelter Me web - Visual Studio Code
SHELTER ME WEB
Your Amazing App.
</h1>

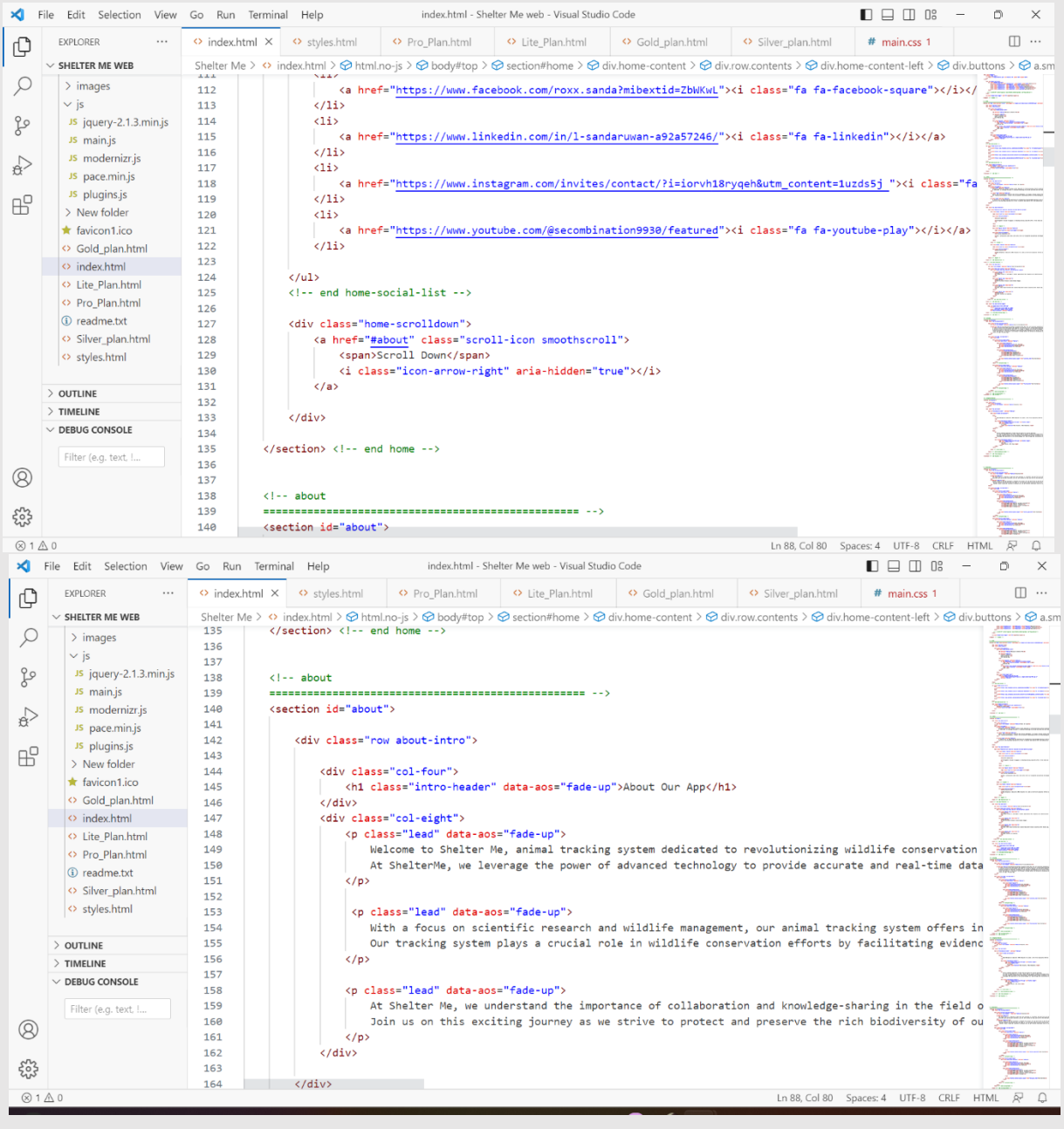
Download App

Watch Video

<img src="images/iphone-app-470.png"
srcset="images/iphone-app-470.png 1x, images/iphone-app-940.png 2x"
data-aos="fade-up">

<!-- end home-content -->
<ul class="home-social-list">

</
Ln 88, Col 80 Spaces: 4 UTF-8 CRLF HTML


File Edit Selection View Go Run Terminal Help
index.html - Shelter Me web - Visual Studio Code
EXPLORER
SHELTER ME WEB
images
js
jquery-2.1.3.min.js
main.js
modernizr.js
pace.min.js
plugins.js
New folder
favicon1.ico
Gold_plan.html
index.html
Lite_Plan.html
Pro_Plan.html
readme.txt
Silver_plan.html
styles.html
OUTLINE
TIMELINE
DEBUG CONSOLE
index.html
styles.html
Pro_Plan.html
Lite_Plan.html
Gold_plan.html
Silver_plan.html
main.css 1
Shelter Me > index.html > html.no-js > body#top > section#home > div.home-content > div.row.contents > div.home-content-left > div.buttons > a.sm
</

<i class="fa

<!-- end home-social-list -->

Scroll Down

</section> <!-- end home -->
<!-- about
== -->
<section id="about">
Ln 88, Col 80 Spaces: 4 UTF-8 CRLF HTML
File Edit Selection View Go Run Terminal Help
index.html - Shelter Me web - Visual Studio Code
</section> <!-- end home -->
<!-- about
== -->
<section id="about">

<h1 class="intro-header" data-aos="fade-up">About Our App</h1>

Welcome to Shelter Me, animal tracking system dedicated to revolutionizing wildlife conservation
At ShelterMe, we leverage the power of advanced technology to provide accurate and real-time data

With a focus on scientific research and wildlife management, our animal tracking system offers in
Our tracking system plays a crucial role in wildlife conservation efforts by facilitating evidenc

At Shelter Me, we understand the importance of collaboration and knowledge-sharing in the field o
Join us on this exciting journey as we strive to protect and preserve the rich biodiversity of ou

Ln 88, Col 80 Spaces: 4 UTF-8 CRLF HTML