Abstract

Booking appointments via the website. Result of tests via website. Raise awareness. The goal of the system is to create a tool for managing the workflow of a veterinarian. There was a need for a lightweight application that would keep track of patients, appointments, procedures and medication. All these vets need a web application to manage their work, clients, patients, medication, timetables. Clients can make an Online Appointment with the help of a website and also can make the emergency call to the Doctor. Veterinary clinic systems had been established with the objective to help animals with health problems or physically injured, giving medical care to the pets. Our project saves effort and time to serve the category of livestock owners.

Animal clinic system has been established with the objective to help animals with the health problem or physical injuries, giving a medical care to the pets, our project saves efforts in time to serve the category of livestock owners. Veterinarians also help manage campaigns to prevent and eradicate diseases such as tuberculosis and rabies that pose threats to both humans and animals. Preventive healthcare programs and appropriate diagnosis, treatment, and care will promote the health of our pets and increase their longevity.

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1. INTRODUCTION

1.1 Introduction

The aim of this project is to create an animal clinic website that serves as a comprehensive resource for pet owners. The website will provide information and resources on pet care services such as booking an appointment, Consultation, Treatment, Vaccinations and Deworming, Laboratory Diagnostics, Pet Food and Accessories etc. The ultimate goal is to help pet owners provide the best care for their pets, ensuring that they live happy and healthy lives. The website will be designed and developed with a user-friendly interface and modern web development technologies.

In order to complete this website, several scopes of study is in need to achieve the major scopes are discussed as follows:

- 1. HTML
- 2. CSS
- 3. PHP
- 4. Database
- 5. AWS (S3 Service)

1.2 Necessity

- 1. The main objective of this project is to save the time of pet owner by providing all the pet care services under one roof.
- 2. Focus on the health issues of pets and reduce the workload of pet owners.
- 3. This website provides an appointment option to make an online appointment easily.
- 4. Give clinic staff an easy way in doing information maintenance.
- 5. E-access to the system.
- 6. Upgraded performance.

1.3 Objective

This website can be used by pet lovers and pet owners to find accurate information on petcare, especially when it comes to topics such as nutrition and health. Till now this website is mainly focused on dogs, cats but it can be further expanded on several pet categories like rabbits, horses, tortoises, ducks, etc and in future we can also add payment gateway.

1.4 Theme of Mini-Project

Animal clinic system has been established with the objective to help animals with the health problem or physical injuries, giving a medical care to the pets, our project saves efforts in time to serve the category of livestock owners. Veterinarians also help manage campaigns to prevent and eradicate diseases such as tuberculosis and rabies that pose threats to both humans and animals. Preventive healthcare programs and appropriate diagnosis, treatment, and care will promote the health of our pets and increase their longevity.

2. LITERATURE SURVEY

Problem:

One of the problems that we see is that the booking appointment is not organized for the client and the appearance of ads is annoying and obscures the vision of the client.

Animal clinic website that serves as a comprehensive resource for pet owners. The website will provide information and resources on pet care services such as booking an appointment, Consultation, Treatment, Vaccinations and Deworming, Laboratory Diagnostics, Pet Food and Accessories etc. The ultimate goal is to help pet owners provide the best care for their pets, ensuring that they live happy and healthy lives. The website will be designed and developed with a user-friendly interface and modern web development technologies.

We are making this website for our client Dr. Ameet Subhash Pardeshi. He is a Veterinary Physician who wants the website for their pet clinic named as Animal Clinic. He wants such a website which include online booking of an appointment and also the facility of emergency calls. Further requirement of our client is he wants small photo gallery option on that page so we have added the achievement of a clinic and some surgeries images in a photo gallery. Client also requested for the customer's review which has been added to our website. Website will bring together pet owners and people willing to provide services together. This gives pet owners the ability to choose the types of services they need like Consultation, Treatment, Vaccinations and Deworming, Laboratory Diagnostics, Pet Food and Accessories etc. Dynamic service for pet owners is book an appointment online. Front-end of the application is designed using HTML and CSS language, back-end using JavaScript language, database using SQL, and server-side communication using PHP language. After the language selection phase was complete, then the second phase started. The second phase consisted of creating the layout of front-end pages keeping in mind the relationship between them, the functionality of those

pages, the designing home pages and other pages, and the deciding relationship between that all pages and how an appointment booking mechanism will work. Considering all the criteria of the project was split into 5 parts: coding front-end pages, coding back-end according to front-end, designing and writing database, writing server-side code for communication between back-end and database and last were testing. Writing the vii code for the front-end pages was easy compared to other tasks in the project. The more difficult tasks were writing the back-end code that provides functionality to the web application. We have gone through many websites like pet clinics for samples. We have collected many design samples and at last we have made the final design layout for the website which is attractive and simple as per client requirement.

The result that are acquired from the application are:

- 1. Time Management: A time saving website will be made available for all the users and also it will be very easy to make an appointment for the customers and on the owner side to manage and fetch the data.
- 2. Increasing of demands: The website will automatically gather crowd and have a great publicity about the services that are provided by the clinic.
- 3. Booking Speed: Customers can book an appointment for their pets easily from the place where they are with no worries.

Non- Functional Requirements

1. **Flexibility:** The website is convenient and flexible to be used. All can easily handle and use the website for free with great convenience.

2. **Availability:** The website is available all the time 24X7 to all the customers and one can visit they also visit the clinic and all types of emergencies are accepted.

3. **Usability:** The website can be easily used by the staff and it is easy to maintain the data as well.

4. **Maintainability:** The website is easy to modify and maintain as it has simple modules.

Amazon S3 Bucket

Amazon Simple Storage Service (Amazon S3) is an object storage service that offers industry-leading scalability, data availability, security, and performance. Customers of all sizes and industries can use Amazon S3 to store and protect any amount of data for a range of use cases, such as data lakes, websites, mobile applications, backup and restore, archive, enterprise applications, IoT devices, and big data analytics. Amazon S3 provides management features so that you can optimize, organize, and configure access to your data to meet your specific business, organizational, and compliance requirements.

Feature of S3 Bucket

Storage Classes

Amazon S3 offers a range of storage classes designed for different use cases. For example, you can store mission-critical production data in S3 Standard or S3 Express One Zone for frequent access, save costs by storing infrequently accessed data in S3 Standard-IA or S3 One Zone-IA, and archive data at the lowest costs in S3 Glacier Instant Retrieval, S3 Glacier Flexible Retrieval, and S3 Glacier Deep Archive.

Storage Management

Amazon S3 has storage management features that you can use to manage costs, meet regulatory requirements, reduce latency, and save multiple distinct copies of your data for compliance requirements.

- S3 Lifecycle Configure a lifecycle configuration to manage your objects and store them cost
 effectively throughout their lifecycle. You can transition objects to other S3 storage classes or
 expire objects that reach the end of their lifetimes.
- S3 Object Lock Prevent Amazon S3 objects from being deleted or overwritten for a fixed amount of time or indefinitely. You can use Object Lock to help meet regulatory requirements that require *write-once-read-many (WORM)* storage or to simply add another layer of protection against object changes and deletions.
- S3 Replication Replicate objects and their respective metadata and object tags to one or more
 destination buckets in the same or different AWS Regions for reduced latency, compliance,
 security, and other use cases.
- S3 Batch Operations Manage billions of objects at scale with a single S3 API request or a
 few clicks in the Amazon S3 console. You can use Batch Operations to perform operations
 such as Copy, Invoke AWS Lambda function, and Restore on millions or billions of objects.

Access Management and Security

Amazon S3 provides features for auditing and managing access to your buckets and objects. By default, S3 buckets and the objects in them are private. You have access only to the S3 resources that you create. To grant granular resource permissions that support your specific use case or to audit the permissions of your Amazon S3 resources

Strong Consistency

Amazon S3 provides strong read-after-write consistency for PUT and DELETE requests of objects in your Amazon S3 bucket in all AWS Regions. This behavior applies to both writes of new objects as well as PUT requests that overwrite existing objects and DELETE requests. In addition, read operations on Amazon S3 Select, Amazon S3 access control lists (ACLs), Amazon S3 Object Tags, and object metadata (for example, the HEAD object) are strongly consistent

How S3 Works?

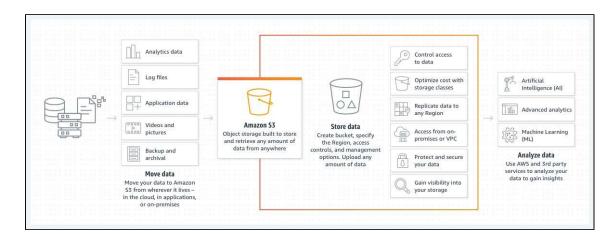


Figure 1.0 S3 Working

Amazon Simple Storage Service (Amazon S3) is an object storage service offering industry-leading scalability, data availability, security, and performance. Customers of all sizes and industries can store and protect any amount of data for virtually any use case, such as data lakes, cloud-native applications, and mobile apps. With cost-effective storage classes and easy-to-use management features, you can optimize costs, organize data, and configure fine-tuned access controls to meet specific business, organizational, and compliance requirements.

Advantages:

- 1. Easy access to the pet owners and fast service provider due to the application.
- 2. Reduces the time of pet owners and provides effective and fast emergency services.
- 3. Quick and easy to book the appointment.
- 4. Easy access to the location and contact.
- 5. Can view reviews from the website.
- 6. The website is available all the time for the users.

Disadvantages:

- 1. Very few veterinary clinic websites are active.
- 2. Buy and purchase of medicine is not available.
- 3. Needs highly skilled developers.
- 4. Calling through the provided contact number is not possible as it is a desktop application

3. SYSTEM DEVELOPMENT

3.1 Requirement Specification

Animal clinic website that serves as a comprehensive resource for pet owners. The website will provide information and resources on pet care services such as booking an appointment, Consultation, Treatment, Vaccinations and Deworming, Laboratory Diagnostics, Pet Food and Accessories etc. The ultimate goal is to help pet owners provide the best care for their pets, ensuring that they live happy and healthy lives. The website will be designed and developed with a user-friendly interface and modern web development technologies.

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- 3. **Usability:** The website can be easily used by the staff and it is easy to maintain the data as well.
- 4. **Maintainability:** The website is easy to modify and maintain as it has simple modules

3.1.1 DFD

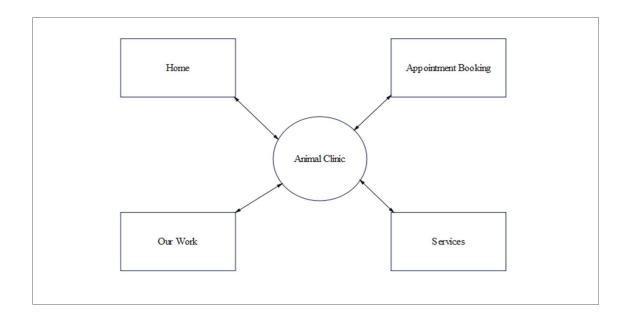


Figure 1.1 DFD Level 0

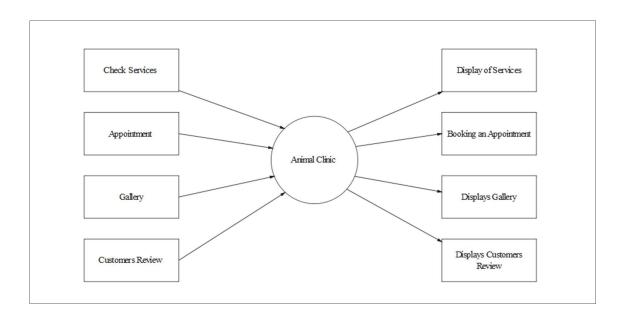


Figure 1.2 DFD Level 1

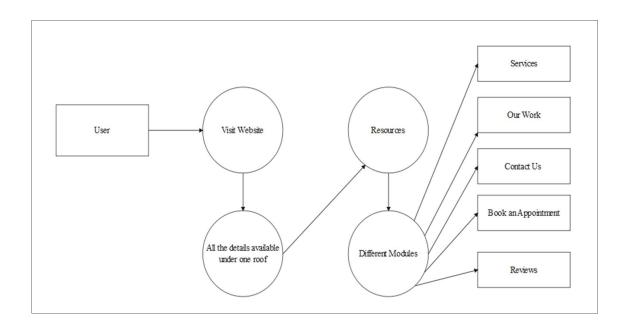


Figure 1.3 DFD Level 2

3.2 Database Design/ER Diagram

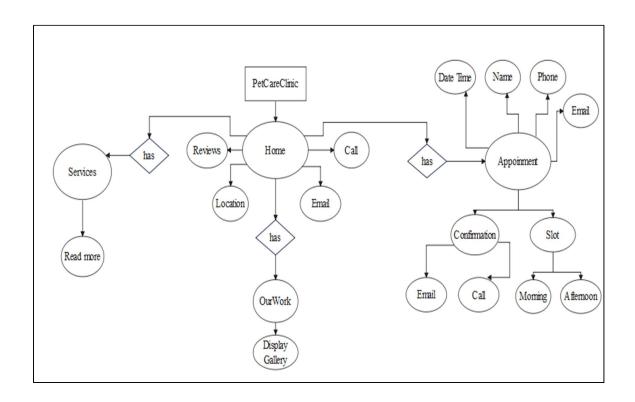
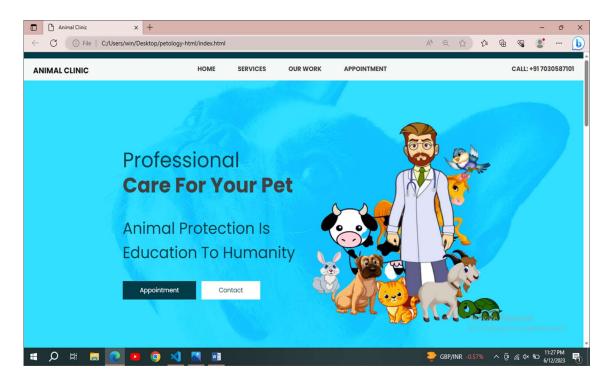


Figure 1.4 ER Diagram

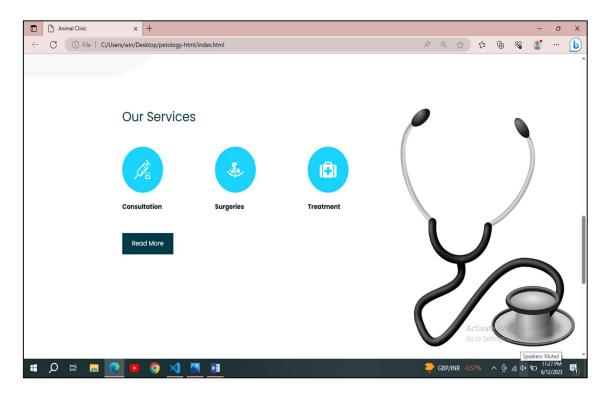
4. PERFORMANCE EVALUATION

Front-End



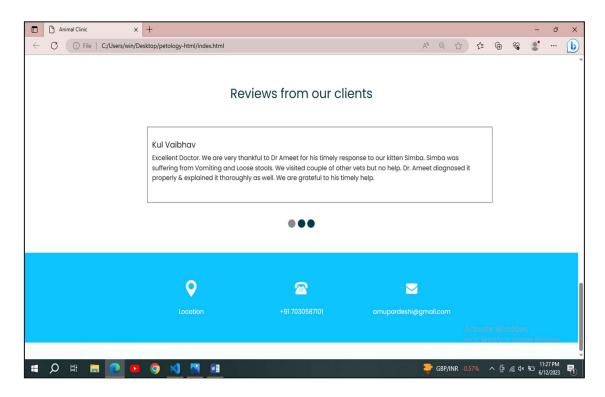
Screenshot 4.0 Home Page

The above Screenshot represents the front page that the home page. Home page contains the navbar along with the name of the clinic at the left corner, there is the option for call given at the right corner later there is a logo of the clinic. Certain buttons are provided to redirect to particular page. The appointment but will redirect the page to appointment page whereas, the contact button will redirect to the google page of the clinic.



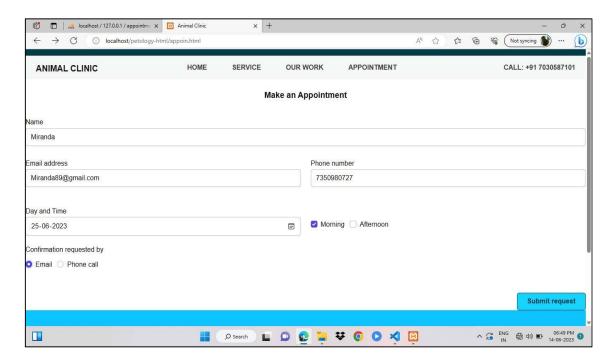
Screenshot 4.1 Services

The second screenshot is of the service section from the home page it displays few of the services which are provided by the clinic and after clicking on the Read More button it redirectes to the services page and displays all the services available.



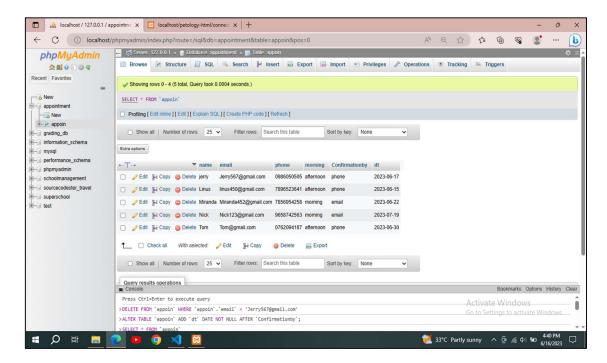
Screenshot 4.2 Client Review

The above screenshot displays the reviews from the clients and it also displays the footer part of the page which includes location after clicking on location it directes the page to the google maps, similar is for the mailing and contact.



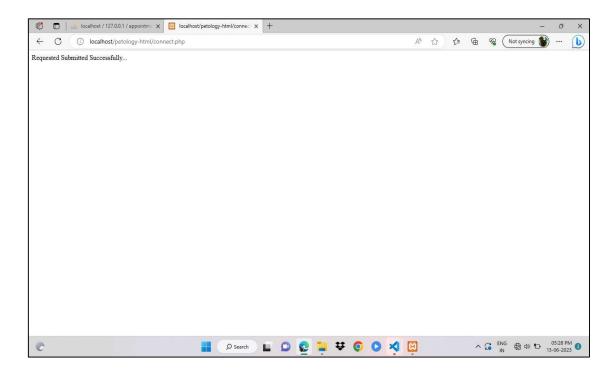
Screenshot 4.3 Appointment Page

The appointment page contains navbar along with the footer section. The appointment page has different fields to take enteries and store the result in the backend in the database. The page has fields like Name, Email Address, Phone Number, Day and time slot option in checkbox format and a confirmation request radio button option and the last is the button is to submit request.



Screenshot 4.4 Database Table

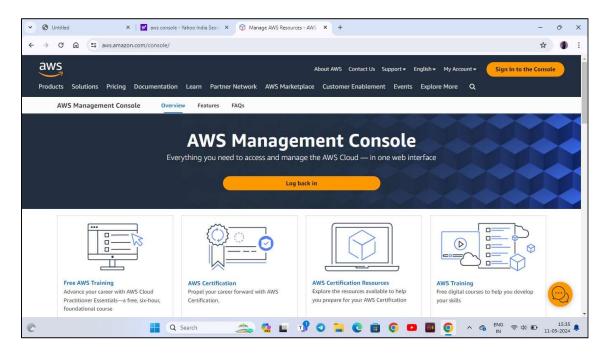
The database name is appoin it contains fields such as name, email, phone, slot, Confirmationby. The screenshot displays all the inserted data from the front-end and it has been displayed in the database table. The primary key in the database table is set to the E-mail and its type is varchar, name is of the varchar type, phone is integer type, Confirmationby is set to varchar.



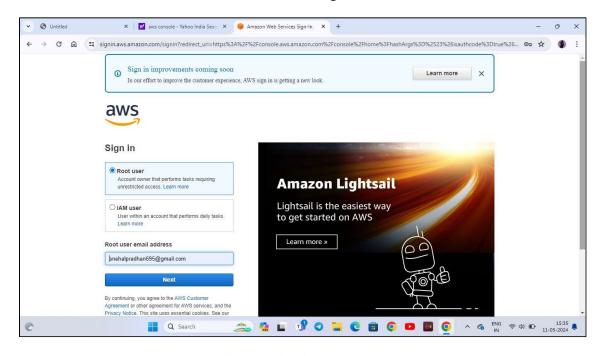
Screenshot 4.5 Submitted Successfully

The above Screenshot shows a message in which the response has been submitted successfully and then data has been generated to the database table.

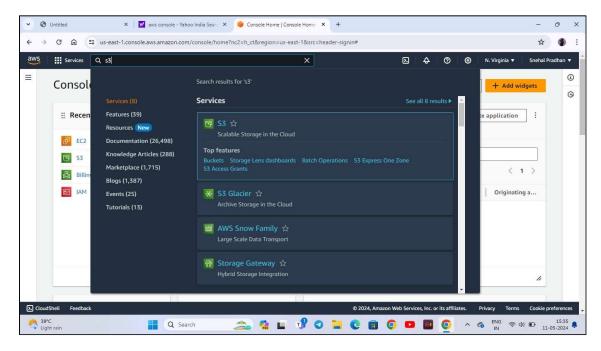
Back-End



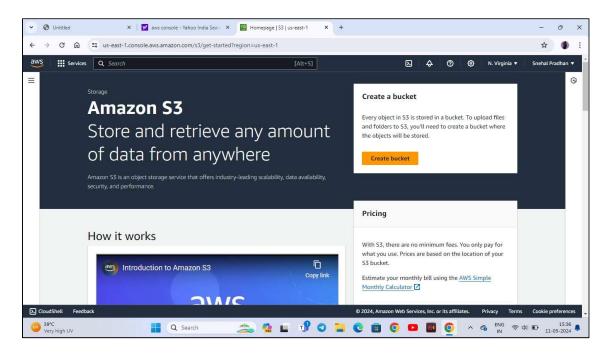
Screenshot 4.6 AWS Sign in Console



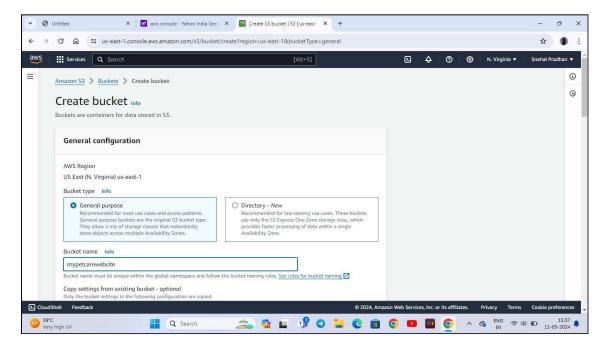
Screenshot 4.7 Sign in to AWS Account



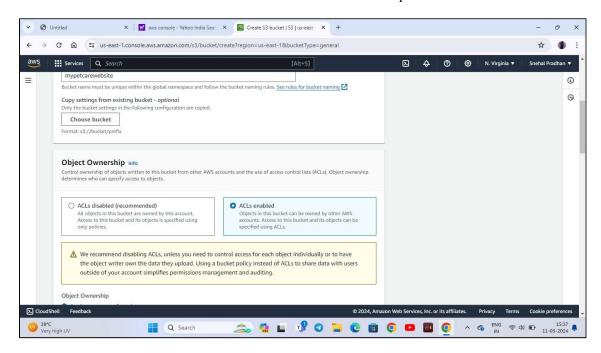
Screenshot 4.8 Search for S3 Service



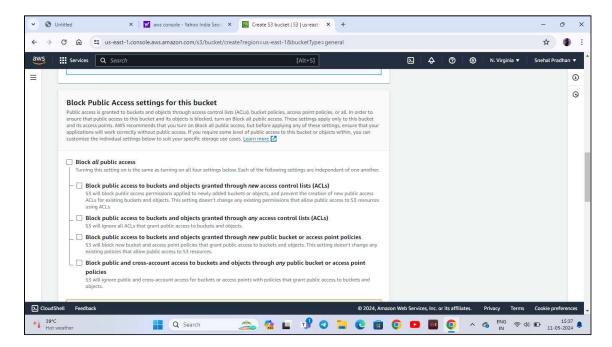
Screenshot 4.9 Create a Bucket



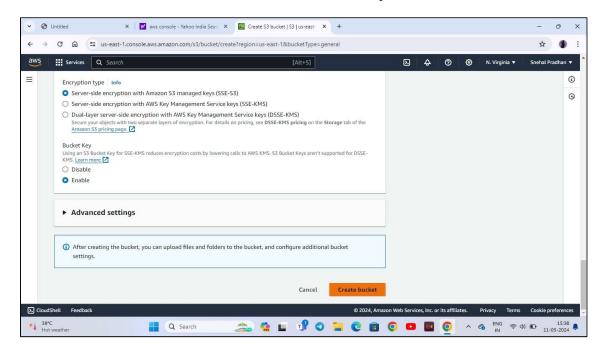
Screenshot 4.10 Create a bucket with unique name



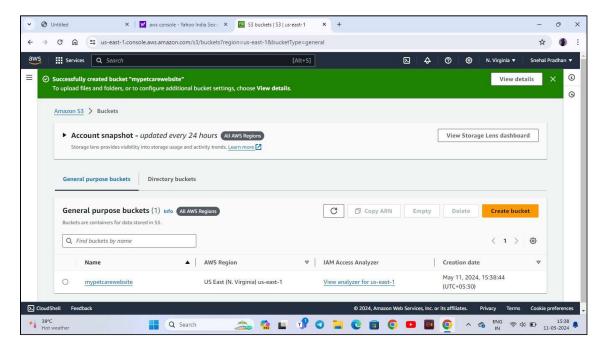
Screenshot 4.11 Enable Access Control List



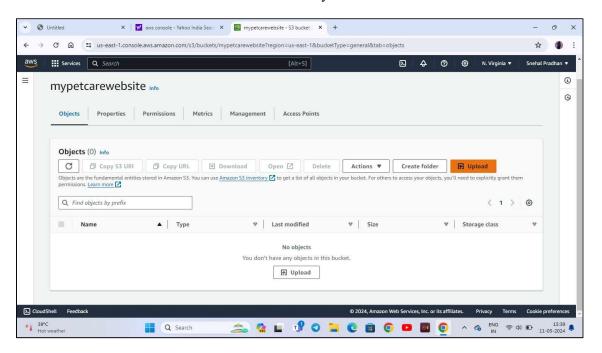
Screenshot 4.12 Uncheck the block all public access



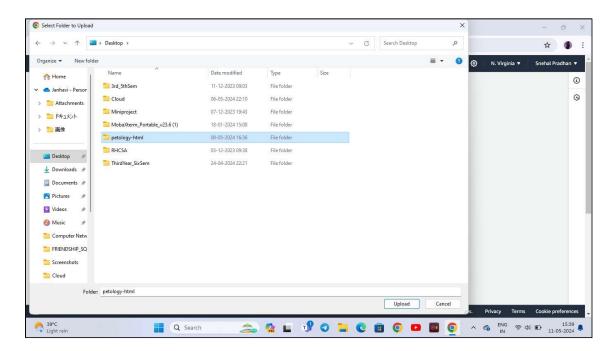
Screenshot 4.13 Click on Create Bucket



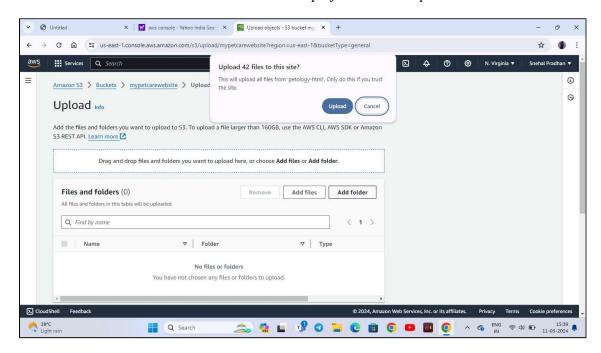
Screenshot 4.14 Successfully created the bucket



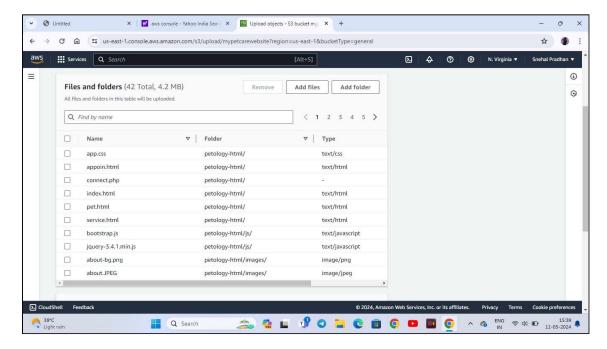
Screenshot 4.15 Click on upload button



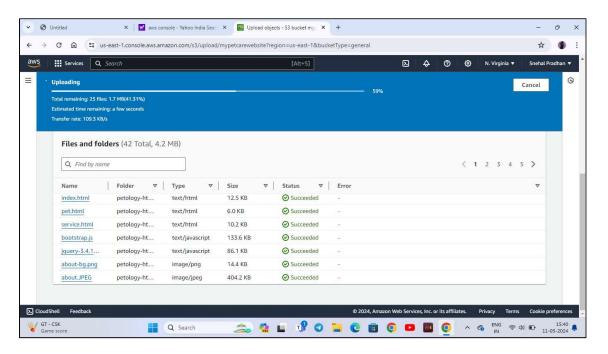
Screenshot 4.16 Select the project folder to upload



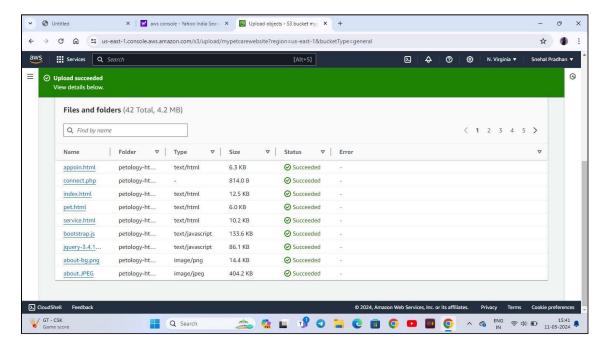
Screenshot 4.17 Upload Folder



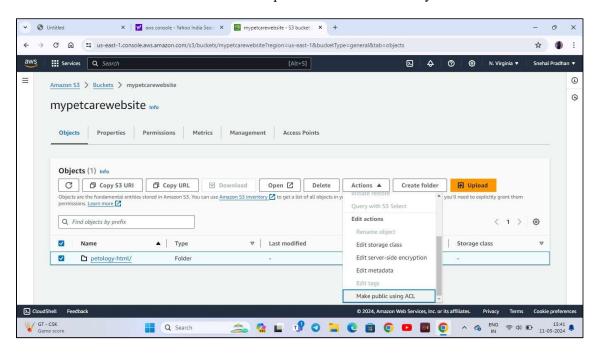
Screenshot 4.18 All files visible on interface



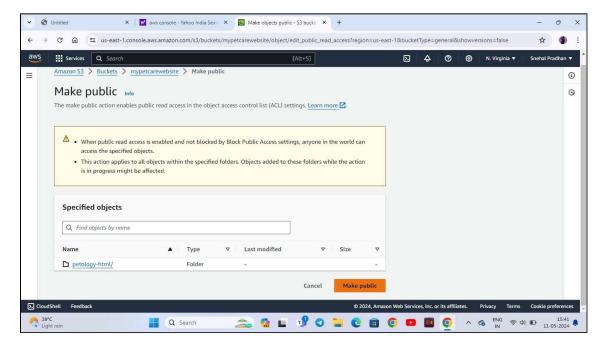
Screenshot 4.19 Uploading Files



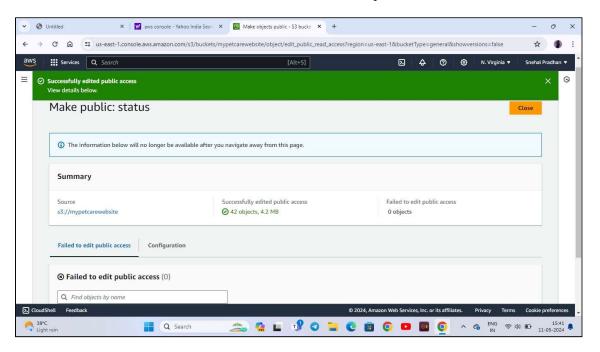
Screenshot 4.20 Upload all files successfully



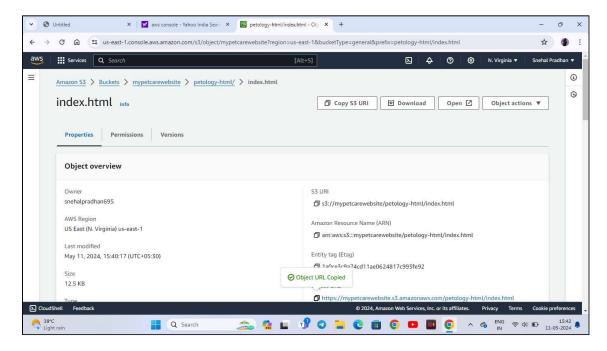
Screenshot 4.21 Click on Action and click on make public using ACL



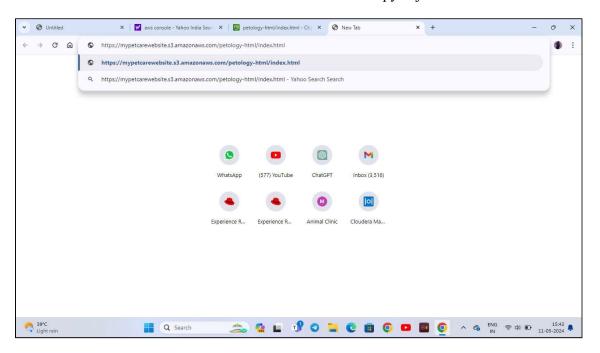
Screenshot 4.22 Click on make public



Screenshot 4.23 Successfully added public access



Screenshot 4.24 Select index.html and copy object url



Screenshot 4.25 Paste the copied object url to your default browser

5. CONCLUSION

Animal clinic is a website that provides useful information to the users. Users can be a pet owner or vice versa. Pet's owner can fill up online appointment forms through the website. Not only that, the website also provides online available services information and pet injury services. It makes it easier for pet's owner to fill the appointment form right in front of their computer. This project was expected to be one of the most useful systems for animal clinics because clients can avoid wasting their time, energy and money. With the existence of this website, it will act as a medium of interaction between the client and the clinic management. Clinic administrators can access all the website data easily and check any recent activities related to pets on the website front page.

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- [2] Database connectivity: https://www.youtube.com/watch?v=2HVKizgcfjo (20-03-2024)
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 $https://advithapethospital.com/?gclid=EAIaIQobChMIrKSpOTA_wIVMc0WBR11DQA\\ QEAAYASAAEgKZJvDBwE~(30-03-2024)$

[5] HTML: https://www.w3schools.com/html/html attributes.asp (01-04-2024)

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Academics Deogiri Institute of Engineering, and management Studies Chatrapati Sambhaji

Nagar, for providing me infrastructural facilities to work in, without which this work would

not have been possible.

Signature(s) of Students

Aditi Ajay Deshpande

Snehal Sanjay Pradhan



Dr. Ameet's = ANIMAL CLINIC OF AURANGABAD =

Dr.Ameet Subhash Pardeshi Veterinary Physician & Surgeon B.V.Sc.& A.H Reg.NO. MSVC-9908 Reg.NO. VCI-8384

SPONSORSHIP LETTER

Date: 20 March 2024

Dr.Ameet Subhash Pardeshi, Veterinary Physician & Surgeon, B.V.Sc. & A.H (Mumbai).

To, Snehal Sanjay Pradhan, Aditi Ajay Deshpande, DIEMS College, Aurangabad (Sambhajinagar).

Subject: Sponsorship for Animal Clinic Website.

My name is Dr.Ameet Subhash Pardeshi and I am a Veterinary Physician & Surgeon. I am the owner and founder of Animal Clinic of Aurangabad (Sambhajinagar).

I am writing this letter for requesting you to making a website for our clinic. While we have made great success in our surgeries. People like our services, our consultation so, we want that as many as possible people to connect with us and get to know about our clinic.

We need your help to continue pursuing our mission. That's why we would like to give you this sponsorship.

If you are agree for this sponsorship then we will discuss our all requirements for website in next meeting.

We really hope that you will respond favourably to this request.

Thank You.

Sincerely,

Dr. Ameet Subhash Pardeshi,

Mob: 7030587101,

Email: amupardeshi@gmail.com.

Email: amupardeshi@gmail.com Mob: 7030587101 /