



PawMate
Together, Fur-ever!

Project Documentation

1. Website Requirements

a. Type of Website:

The website is a **pet adoption platform** that falls under the category of a **Community Service website**. It is dedicated to connecting abandoned pets with loving homes while actively supporting animal welfare efforts.

b. Website Name: **Pawmate.site**

c. Website Interface Overview (Admin & User)



Landing Page

The sign up page has a "Welcome to PawMate!" header. It contains fields for Username, Password, First Name, Last Name, Address, Age, Sex, Gender, Description, Phone Number, and Preferred Pet. A "Sign Up" button is at the bottom.

Sign Up Page

The log in page has a "Welcome to PawMate!" header. It contains fields for Username and Password, and a "Login" button. Below the fields is a link "Don't have an account? Sign up here".

Log In Page



Home Page (For Users)

Meet the Team

Buduan, Front End Developer and Designer	David, Back End Developer and Database Administrator	Gomez, Front End Developer and Database Administrator
Keele, Front End Developer and Designer	Nacpil, Full Stack Developer	Salangsang, Back End Developer and Database Administrator

Contact Us

About Page

Furry Pals

Birman Cat A strikingly beautiful breed with stunning blue eyes and a gentle, affectionate personality, often described as a "people-oriented" cat. Read more	Siamese Cat An elegant, vocal breed with striking blue eyes and color points, known for its affectionate nature. Read more	Rag Doll Cat A large, affectionate breed that goes limp when picked up, known for its striking blue eyes and friendly, easygoing temperament. Read more
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Pet Gallery Page

Hi, I'm Ann!

The Shih Tzu is a small, charming dog known for its affectionate nature and long, flowing coat. They are often referred to as "lion dogs" due to their fluffy appearance. This breed requires low maintenance, preferring a calm environment with short daily walks or indoor play. Their long, silky coats need regular grooming to prevent matting, but many owners opt for a shorter "puppy cut" for easier maintenance. Shih Tzus are generally friendly with strangers and make great companion dogs due to their small size and relatively low activity needs. However, they are prone to certain health issues, particularly with their eyes and breathing.

Pet Information Page

Doggy Dentures, Pedigree Dentastix!

A muscular yet affectionate breed, the American Bulldog is known for its loyalty, gentle temperament, and strength. They are often used as working dogs and as loving family guardians.

Advertisement Pop Up

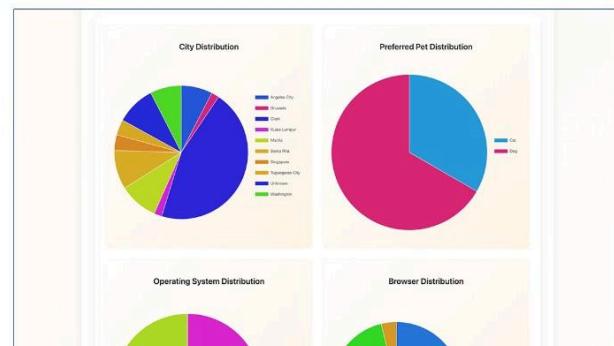
PawMate Admin

Total Users	Today's Logins
9	14

User Activity Logs

Username	First Name	City	Preferred Pet	IP Address	Device Type	Device Model	OS	Browser	VPN Detected
mac	mac	Santa Rita	Dog	161.49.149.114	Desktop	Macintosh; Intel Mac OS X 10.15.7	Mac	Chrome	No
it_salangsang	John Patrick	Angeles City	Cat	129.25.78.248	Desktop	Windows NT 10.0; Win64; x64	Windows	Chrome	No
kendeez	ken	Clerk	Dog	129.25.77.7	Desktop	Windows NT 10.0; Win64; x64; rv:131.0	Windows	Firefox	No
mac	mac	Santa Rita	Dog	161.49.149.114	Desktop	Macintosh; Intel Mac OS X 10.15.7	Mac	Safari	No

Admin Dashboard Page (Table)



Admin Dashboard Page (Graphs)

2. Domain Name

The pawmate.site domain name was purchased through GoDaddy, a domain registrar and web hosting company. The website files are hosted on the existing 'Wow Lubao' AWS EC2 instance. An Elastic IP address was then allocated and associated with the instance. Finally, the DNS records in GoDaddy's domain management console were updated to point to this Elastic IP address.

AWS Services Search [Options+S] Instances (1/3) Info Last updated less than a minute ago Connect Instance state Actions Launch instances

Find Instance by attribute or tag (case-sensitive) All states

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
WowLubao	i-0064fc22291c810b0	Running	t2.micro	2/2 checks passed	View alarms +	ap-southeast-1b
BackUp	i-03f0d3978fb74607	Running	t2.micro	2/2 checks passed	View alarms +	ap-southeast-1b
BackUp	i-0c6ea9048dd10e61c	Running	t2.micro	2/2 checks passed	View alarms +	ap-southeast-1b

i-0064fc22291c810b0 (WowLubao)

Details Status and alarms Monitoring Security Networking Storage Tags

Instance summary Info

Instance ID: i-0064fc22291c810b0	Public IPv4 address: 54.251.37.177 [open address]	Private IPv4 addresses: 172.31.24.133
IPv6 address: -	Instance state: Running	Public IPv4 DNS: ec2-54-251-37-177.ap-southeast-1.compute.amazonaws.com [open address]
Hostname type: IP name: ip-172-31-24-133.ap-southeast-1.compute.internal	Private IP DNS name (IPv4 only): ip-172-31-24-133.ap-southeast-1.compute.internal	Elastic IP addresses: 54.251.37.177 [Public IP]
Answer private resource DNS name: IPv4 (A)	Instance type: t2.micro	AWS Compute Optimizer binding: VPC ID: -
Auto-assigned IP address: -		

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EC2 Instance (Connected with a Elastic IP Address):

AWS Services Search [Options+S] Elastic IP addresses (2/2) Actions Allocate Elastic IP address

Find resources by attribute or tag

Name	Allocated IPv4 addr...	Type	Allocation ID	Reverse DNS record	Associated instance ID
54.151.151.218	Public IP	eipalloc-094c1a3b46882eb77	-	-	-
54.251.37.177	Public IP	eipalloc-021118a422cbx0082	-	-	i-0064fc22291c810b0

Elastic IP addresses: 54.151.151.218, 54.151.151.218

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Creation of Elastic IP Address :

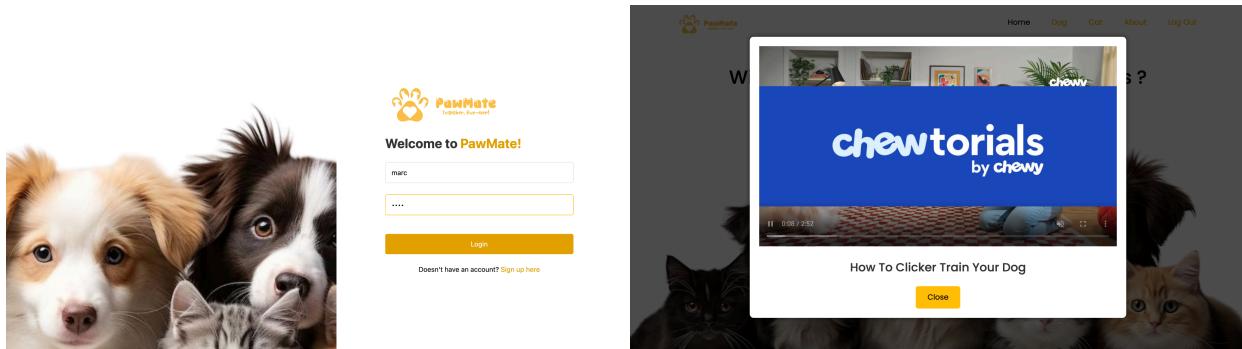
Integration of the Elastic IP Address to Domain Name :

3. IAM Users with Permissions

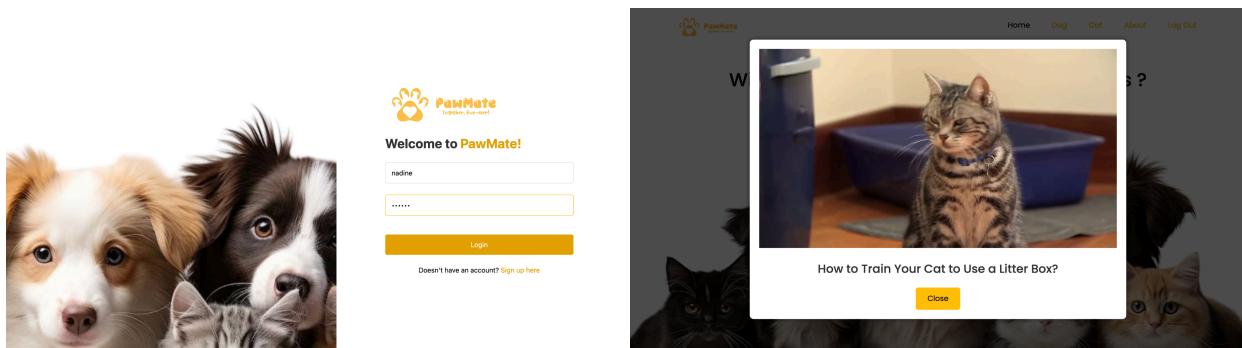
IAM User (pawmate-admin) and permissions.

4. Video Advertisement

The ads are tailored based on the fields filled out by users, specifically their preferred pet—either a dog or a cat. When a user selects a dog as their preferred pet, targeted ads will display random dog-related videos. Similarly, if a user selects a cat, the website will show random videos related to cats.



Username : marc (dog) | Displayed Ads : How to Clicker Train Your Dog



Username : nadine (cat) | Displayed Ads : How to Train Your Cat to Use a Litter Box?

5. Client List Analytics

The screenshot shows the PawMate Admin interface. At the top left is the logo and "PawMate Admin" text. At the top right is a "Logout" button. Below the header are two cards: one showing "10 Total Users" and another showing "17 Today's Logins". A "View Charts" button is located at the top right of the main content area. The main content is titled "User Activity Logs" and contains a table with four rows of data.

Username	First Name	City	Preferred Pet	IP Address	Device Type	Device Model	OS	Browser	VPN Detected
nadine	nadin	Santa Rita	Cat	161.49.149.114	Desktop	Macintosh; Intel Mac OS X 10_15_7	Mac	Chrome	No
marc	marc	Santa Rita	Dog	161.49.149.114	Desktop	Macintosh; Intel Mac OS X 10_15_7	Mac	Chrome	No
marc	marc	Santa Rita	Dog	161.49.149.114	Desktop	Macintosh; Intel Mac OS X 10_15_7	Mac	Chrome	No
marc	marc	Santa Rita	Dog	161.49.149.114	Desktop	Macintosh; Intel Mac OS X 10_15_7	Mac	Chrome	No

Admin Dashboard (Table)



Admin Dashboard (Pie Charts)

6. VPN Tool Utilized

The screenshot shows the PawMate Admin Dashboard interface. At the top, there are two summary boxes: one showing '10 Total Users' and another showing '18 Today's Logins'. Below this is a section titled 'User Activity Logs' with a 'View Charts' button. A table lists user activity details:

Username	First Name	City	Preferred Pet	IP Address	Device Type	Device Model	OS	Browser	VPN Detected
marc	marc	Singapore	Dog	77.111.245.13	Desktop	Macintosh; Intel Mac OS X 10_15_7	Mac	Chrome	Yes
nadine	nadin	Santa Rita	Cat	161.49.149.114	Desktop	Macintosh; Intel Mac OS X 10_15_7	Mac	Chrome	No

Admin Dashboard on Opera Browser (VPN)

7. Load Balancer and AWS Backup

The screenshot shows the AWS Load Balancer Details page for the load balancer "PawMate-Balancer". The left sidebar contains navigation links for Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Capacity Reservations, Images, AMIs, AMI Catalog, Elastic Block Store, Volumes, Snapshots, Lifecycle Manager, Network & Security, Security Groups, Elastic IPs, Placement Groups, Key Pairs, Network Interfaces, Load Balancing, Load Balancers, Target Groups, and Trust Stores. The main content area displays the following details:

- Load balancer type:** Application
- Status:** Active
- VPC:** vpc-0e82d75f219706529
- Hosted zone:** Z1LMS91P8CMLES
- Availability Zones:**
 - subnet-03fbda17248bbd7e8 (ap-southeast-1b)
 - subnet-0c602508942151b22 (ap-southeast-1a)
 - subnet-067805fd1bc26906b (ap-southeast-1c)
- Date created:** October 24, 2024, 00:07 (UTC+08:00)
- Load balancer ARN:** arn:aws:elasticloadbalancing:ap-southeast-1:471112858123:loadbalancer/app/PawMate-Balancer/b7229e522093ede
- DNS name:** PawMate-Balancer-134071194.ap-southeast-1.elb.amazonaws.com (A Record)

Below the details, there are tabs for **Listeners and rules**, **Network mapping**, **Resource map - new**, **Security**, **Monitoring**, **Integrations**, **Attributes**, and **Tags**. The **Listeners and rules** tab is selected, showing 1 rule defined.

Implementation of Load Balancer

The screenshot shows the AWS Backup Plan Details page for the backup plan "PawMate-Backup". The left sidebar contains navigation links for My account, Backup plans, Protected resources, Jobs, Restore testing, Legal holds, Settings, External resources, My organization, Backup Audit Manager, Frameworks, and Reports. The main content area displays the following summary:

Backup plan name	Version ID	Last modified	Last runtime
PawMate-Backup	YzA3ZTM1ODEtNzkyOC00NDVjLWJKN2YtMWNmOGUxOTdkODFk	October 24, 2024, 09:55:18 (UTC+08:00)	-

Below the summary, there are sections for **Backup rules** (1) and **Resource assignments** (1).

Backup rules (1)

Name	Backup vault	Destination Backup vault
PawMate-Backup-Rule	PawMate-Backup-Vault	-

Resource assignments (1)

Name	IAM role ARN	Creation time
PawMate-Backup-Instances	arn:awsiam::471112858123:role/service-role/AWSBackupDefaultServiceRole	October 24, 2024, 09:56:22 (UTC+08:00)

Implementation of AWS Backup (for EC2 Instances)

8. AWS Pricing Calculator

The screenshot shows the AWS Pricing Calculator interface. At the top, it displays an estimate summary: Upfront cost (0.00 USD), Monthly cost (97.84 USD), and Total 12 months cost (1,174.08 USD). Below this, the 'My Estimate' section lists resources with their service names, status, upfront cost, monthly cost, and descriptions. The listed services include Amazon EC2, Elastic Load Balancing, and AWS Backup. The total monthly cost for these services is 97.84 USD. A note at the bottom states: "AWS Pricing Calculator provides only an estimate of your AWS fees and doesn't include any taxes that might apply. Your actual fees depend on a variety of factors, including your actual usage of AWS services. Learn more." The footer includes links for Privacy, Site terms, and Cookie preferences, along with a copyright notice: "© 2024, Amazon Web Services, Inc. or its affiliates. All rights reserved."

Infrastructure Estimated Pricing

Note: These are only estimates with the assumption of deploying the website in a real-world setting. Additionally, the anticipated network traffic and storage needs of the website is only a rough estimate.

Summary of Estimated Expenses:

SERVICE	PRICE	TIMEFRAME
Domain Name (.site)	67 PHP	Per Year
AWS EC2 Service	49.06 USD	Per Month
AWS Elastic Load Balancing	47.60 USD	Per Month
AWS Backup	1.18 USD	Per Month
Monthly Total of AWS Services	97.84 USD	

EC2 Configuration:

Configuration	Value
Instance Type	t3.medium
No. of instances	3
Pricing Model	On-demand

Load Balancing Configuration:

Configuration	Value
Processed Bytes	5GB per hour
Average number of new connections per ALB	50 per second
Average connection duration	120 seconds
Requests per connection	5
Rule evaluations per request	2

EBS Backup Configuration:

Configuration	Value
Amount of primary data to be backed up	50GB
Estimated annual increase in primary data(%)	10%
Daily backups warm retention period	30 days
Weekly backups warm retention period	4 weeks
Monthly backups warm retention period	12 months
Monthly backups cold retention period	24 months

Task Assignments :

Member	Task	Contributions
Buduan, Mark Joseph	Front End Developer and Designer	Helped with cleaning out the front-end design and helped with some AWS configuration.
David, Kean Ghislain	Back End Developer and Database Administrator	Documentation in AWS Configuration and Pricing. Helped with the back-end.
Gomez, Patrick Lawrence	AWS Specialist and Database Administrator	Documentation in AWS Backup. Helped with the back-end.
Keele, Regine Ann	Front End Developer and Designer	Created the front-end design and helped with some AWS Configuration.
Nacpil, Marc Jayson	Full Stack Developer and Database Administrator	Created the back-end of the application and created some front-end pages of the website. Set the AWS configurations.
Salangsang John Patrick	Back End Developer and Database Administrator	Documentation in AWS Load Balancing. Helped with the back-end.