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LABORATORY REPORT

Week 11: Phase 2 & Week 12: Phase 3
of Group Final Project

Pawfect Match

A Pet Matchmaking System

SUBMITTED BY:

ROLES & MEMBERS:

Project & GitHub Manager	- Adille, Charlene Mae T.
Back-End Developer	- Aguilar, Jhon Kenneth S.
Documentation Officer	- Balunsay, Hazel Marie I.
Front-End Developer	- Relos, Enrick G.
Database Manager	- Romano, Juno Alligah B.

BS INFORMATION TECHNOLOGY 2B

SUBMITTED TO:

Dr. Guillermo V. Red, Jr.
Assistant Professor IV
Computer Studies Department

April 23, 2025



Week 11: Phase 2 - UI Development

I. FRONT-END PAGES

A. Visitor (Guest User) Pages

1. Home

The screenshot shows the homepage of Pawfect Match. At the top, there's a dark header bar with the logo and navigation links: Home, Browse Pets, About Us, and Login. The main content area has a light gray background. In the center, there's a large text block: "Find Your Perfect Pet Companion" followed by a subtext: "Browse through our collection of adorable pets waiting for their forever homes." Below this is an orange "Browse Pets" button. To the right of the text block is a decorative sidebar with a repeating pattern of dog bones and paw prints on a teal background. Below the main content is a section titled "Why Choose Pawfect Match?" with a horizontal line separating it from the rest of the page.

This screenshot is identical to the one above, but it highlights the "Why Choose Pawfect Match?" section. It features three cards with icons and descriptions: "Perfect Matches" (heart icon), "Trusted Process" (shield icon), and "Easy Communication" (speech bubbles icon). The footer at the bottom contains the company name "Pawfect Match" and the tagline "Helping pets find their perfect homes since 2024".

2. Brows Pets

This screenshot shows the homepage again, but the focus is on the "Browse Pets" section. It features the same "Find Your Perfect Pet Companion" text and "Browse Pets" button as the previous screenshots. The decorative sidebar with the dog bone/paw print pattern is also present. Below the main content is another "Why Choose Pawfect Match?" section, similar to the one above.



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Pawfect Match

Available Pets

Search pets...

Pet 1

Max
Golden Retriever 2 years
New York, NY
Friendly and energetic Golden Retriever who loves playing fetch and going for long walks.

Pet 2

Luna
Labrador Retriever 1 year
Los Angeles, CA
Sweet and playful Labrador who enjoys swimming and playing with toys.

Pet 3

Rex
German Shepherd 3 years
Chicago, IL
Intelligent and loyal German Shepherd, great with training and protection.

Pet 4

Pet 5

Pet 6

Home Browse Pets About Us Login

Filter by Breed Sort by

Pawfect Match

Available Pets

Search pets...

Pet 1

Max
Golden Retriever 2 years
New York, NY
Friendly and energetic Golden Retriever who loves playing fetch and going for long walks.

Pet 2

Luna
Labrador Retriever 1 year
Los Angeles, CA
Sweet and playful Labrador who enjoys swimming and playing with toys.

Pet 3

Rex
German Shepherd 3 years
Chicago, IL
Intelligent and loyal German Shepherd, great with training and protection.

Pet 4

Pet 5

Pet 6

Browse Pets About Us Login

Sort by

You need to be logged in to interact with pets!

Login Register

3. About Us (also serves as “Complaint”)

Pawfect Match

About Us

Our Mission

At Pawfect Match, we're dedicated to helping dogs find their forever homes. Our platform connects loving pet owners with potential adopters, making the adoption process smoother and more enjoyable for everyone involved.

The Team

Developer 1
Charlene Mae Adille
Lead Developer
Passionate about both technology and animal welfare, John brings 10 years of web development experience to the team.

Developer 2
Enrick Guiller Relos
Frontend Developer
With a background in animal shelters and design, Jane ensures our platform is both beautiful and user-friendly.

Developer 3
Jhon Kenneth Aguilar
Backend Developer
Specializing in database design and API development, Mike ensures our platform runs smoothly and securely.

Developer 4
Developer 5

Home Browse Pets About Us Login



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The screenshot shows a section of a website with a dark header. Below it, there are two developer profiles in a grid:

- Juno Alligah Romano**
Mobile Developer
Leading our mobile app development, Sarah brings expertise in creating seamless cross-platform experiences.
- Hazel Marie Balunsay**
QA Engineer
Ensuring the highest quality through comprehensive testing and user feedback implementation.

Each profile includes social media links (Facebook, LinkedIn, Twitter) and a "Send Message" button. A "Contact Us" form is also visible at the bottom of the page.

The screenshot shows a "Contact Us" form on a white background. It includes fields for Name, Email, and Message, along with a "Send Message" button. The form is preceded by a "Contact Us" heading and a brief description.

4. Login

The screenshot shows the login page for Pawfect Match. At the top, there's a navigation bar with the logo, Home, Browse Pets, About Us, and a prominent Login button. The main area is titled "Login" and contains fields for "Email address" and "Password", followed by a "Login" button. Below the button, a link says "Don't have an account? [Register here](#)". The footer of the page includes the Pawfect Match logo and the text "Helping pets find their perfect homes since 2024".



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Pawfect Match

Home Browse Pets About Us Login

Register

Full Name: Charlene Adille

Email address: charlene@gmail.com

Password:
Confirm Password:

Register

Already have an account? [Login here](#)

B. Pet Owner Pages

1. Home

Pawfect Match

Home Browse Pets My Pets About Us charlene

Find Your Perfect Pet Companion

Browse through our collection of adorable pets waiting for their forever homes.

[Browse Pets](#)



Why Choose Pawfect Match?

http://C:/Users/Greck/Desktop/PWFFECT 2/index.html

2. Browse Pets

Pawfect Match

Home Browse Pets My Pets About Us charlene

Available Pets

Search pets...

Pet 1

Max

Golden Retriever 2 years
New York, NY
Friendly and energetic Golden Retriever who enjoys playing fetch and going for long walks.

Luna

Labrador Retriever 1 year
Los Angeles, CA
Luna is a sweet and playful Labrador who enjoys cuddling and playing with toys. She's house trained and up to date on all vaccinations.

Pet thumbnail Pet thumbnail Pet thumbnail

Close Send Match Request Favorite



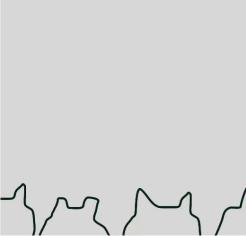
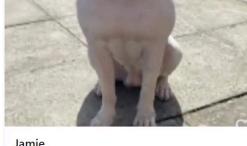
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3. My Pets

Pawfect Match

Home Browse Pets My Pets About Us charlene + Add New Pet

My Pets

 <p>Jamie • Labrador Retriever • 1 years • Guinobatan, Albay dwdww</p> <p>Edit Delete</p>	 <p>jopay • Bulldog • 2 years • Guinobatan, Albay erre34</p> <p>Edit Delete</p>	 <p>pepee • Labrador Retriever • 0.5 years • legazpi erererr</p> <p>Edit Delete</p>
 <p>Jamie • Labrador Retriever • 1 years • Guinobatan, Albay dwdww</p> <p>Edit Delete</p>	 <p>jopay • Bulldog • 2 years • Guinobatan, Albay erre34</p> <p>Edit Delete</p>	 <p>pepee • Labrador Retriever • 0.5 years • legazpi erererr</p> <p>Edit Delete</p>

Pawfect Match
Helping pets find their perfect homes since 2024.

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4. About Us

Pawfect Match

Home Browse Pets About Us Login

About Us

Our Mission

At Pawfect Match, we're dedicated to helping dogs find their forever homes. Our platform connects loving pet owners with potential adopters, making the adoption process smoother and more enjoyable for everyone involved.

The Team

 Charlene Mae Adille Lead Developer Passionate about both technology and animal welfare. John brings 10 years of web development experience to the team. View Profile	 Enrick Guillier Relos Frontend Developer With a background in animal shelters and design, Jane ensures our platform is both beautiful and user-friendly. View Profile	 Jhon Kenneth Aguilar Backend Developer Specializing in database design and API development, Mike ensures our platform runs smoothly and securely. View Profile
 Developer 4 View Profile	 Developer 5 View Profile	



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experience to the team. user-friendly. securely.

 Developer 4
Juno Alligah Romano
Mobile Developer
Leading our mobile app development, Sarah brings expertise in creating seamless cross-platform experiences.

 Developer 5
Hazel Marie Balunsay
QA Engineer
Ensuring the highest quality through comprehensive testing and user feedback implementation.

Contact Us
Have questions or suggestions? We'd love to hear from you!

Name

Email

Message

Contact Us
Have questions or suggestions? We'd love to hear from you!

Name

Email

Message

Pawfect Match
Helping pets find their perfect homes since 2024.

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5. Account

 Pawfect Match

Home Browse Pets My Pets About Us  charlene ▾

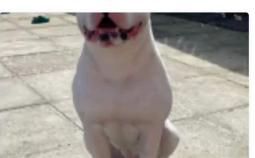
 My Pets
 My Favorites
 Logout

Available Pets

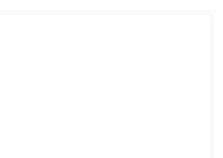
Search pets... 

 Pet 1

Max
Golden Retriever 2 years
New York, NY
Friendly and energetic Golden Retriever who loves playing fetch and going for long walks.

 Luna

Luna
Labrador Retriever 1 year
Los Angeles, CA
Sweet and playful Labrador who enjoys swimming and playing with toys.

 Pet 3

Rex
German Shepherd 3 years
Chicago, IL
Intelligent and loyal German Shepherd, great with training and protection.



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The screenshot shows a mobile application interface for 'Pawfect Match'. At the top, there's a navigation bar with icons for paw prints, a search bar, and user information ('About Us' and 'charlene'). Below the header, a large title 'My Favorite Pets' is centered. Underneath it, the heading 'Available Pets' is displayed above a search bar with placeholder text 'Search pets...'. A small icon labeled 'Pet 1' is visible. The main content area features two cards for pets named 'Max' and 'Pete'. Each card has a large 'UNAVAILABLE' message in white text. The 'Max' card includes details: 'Max', 'Golden Retriever', '2 years', 'New York, NY', and a brief description: 'Friendly and energetic Golden Retriever, loves playing fetch and going for long walks.' The 'Pete' card includes details: 'Pete', 'German Shepherd', '3 years', and a brief description: 'German Shepherd, great with children, loves to play with his owner.' Each card has a 'View Details' button and a red 'Remove' button.

II. ANNOTATION SHOWING WHICH USE CASE EACH PAGE COVERS

A. Visitor (Guest User) Pages

1. Home

 Pawfect Match Home Browse Pets About Us Login

Use Case Covered:



Upon entering the Pawfect Match platform, visitors are greeted with an inviting homepage that encapsulates the essence of the service. This page offers insights into the platform's mission, values, and the unique features that set it apart, aiming to engage users and encourage them to explore further.

2. Brows Pets

The screenshot shows the homepage of Pawfect Match. At the top, there is a navigation bar with links for Home, Browse Pets, About Us, and Login. The main header features the text "Find Your Perfect Pet Companion" and a subtext "Browse through our collection of adorable pets waiting for their forever homes." Below this is a yellow "Browse Pets" button. To the right of the text area is a decorative sidebar with a green background and white icons of bones, paw prints, and dogs.

Why Choose Pawfect Match?

The screenshot shows the "Available Pets" section of the Pawfect Match website. The page title is "Available Pets". It includes a search bar, a filter by breed dropdown, and a sort by dropdown. Below the search bar, there are six pet cards, each with a thumbnail image, the pet's name, breed, age, location, and a brief description. The pets listed are Max (Golden Retriever, 2 years, New York, NY), Luna (Labrador Retriever, 1 year, Los Angeles, CA), Rex (German Shepherd, 3 years, Chicago, IL), Pet 1, Pet 5, and Pet 6. The URL in the address bar is "file:///C:/Users/Dirick/Desktop/PWPFECT%20/browses.html".



The screenshot shows a web application interface for 'Pawfect Match'. At the top, there's a navigation bar with links for 'Browse Pets', 'About Us', and 'Login'. Below the navigation, a modal window is open, displaying information about a pet named 'Luna'. The modal includes a profile picture, the pet's name ('Luna'), breed ('Labrador Retriever'), age ('1 year'), location ('Los Angeles, CA'), and a brief description: 'Luna is a sweet and playful Labrador who enjoys cuddling and playing with toys. She's house trained and up to date on all vaccinations.' There are also buttons for 'Login' and 'Register'.

Use Case Covered:

This page showcases a gallery of pet profiles, allowing visitors to peruse available pets. Each profile provides a glimpse into the pet's characteristics. However, to interact further—such as sending match requests or adding to favorites—visitors are prompted to log in or register, ensuring a secure and personalized experience.

3. About Us (also serves as “Complaint”)

The screenshot shows the 'About Us' page of the Pawfect Match website. The page has a dark header with the site's logo and navigation links for 'Home', 'Browse Pets', 'About Us', and 'Login'. The main content area is titled 'About Us' and features a section titled 'Our Mission' with a brief description of the platform's purpose: 'At Pawfect Match, we're dedicated to helping dogs find their forever homes. Our platform connects loving pet owners with potential adopters, making the adoption process smoother and more enjoyable for everyone involved.' Below this, there's a section titled 'The Team' featuring four team members: 'Developer 1' (Charlene Mae Adille, Lead Developer), 'Developer 2' (Enrick Guiller Relos, Frontend Developer), 'Developer 3' (Jhon Kenneth Aguilar, Backend Developer), and 'Developer 4' (Mike Johnson, Database Admin). Each team member has a small profile picture and a list of social media icons below their name.



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The image displays two wireframe prototypes of a contact us page. The top prototype features a grid layout with three columns. The first column contains a placeholder for an image or logo, followed by the text "experience to the team." and a row of social media icons. The second column contains the text "user-friendly." and a row of social media icons. The third column contains the text "securely" and a row of social media icons. Below these columns are two developer profiles: "Developer 4" (Juno Alligah Romano, Mobile Developer) and "Developer 5" (Hazel Marie Balunsay, QA Engineer). Each profile includes a small image, their name, title, and a brief description of their expertise. The bottom prototype is a simplified version with a "Contact Us" heading, a placeholder for a message, and a "Send Message" button. At the very bottom of the page, there is a dark footer bar with the text "Pawfect Match" and "Helping pets find their perfect homes since 2024" on the left, and "© 2024 Pawfect Match. All rights reserved." on the right.

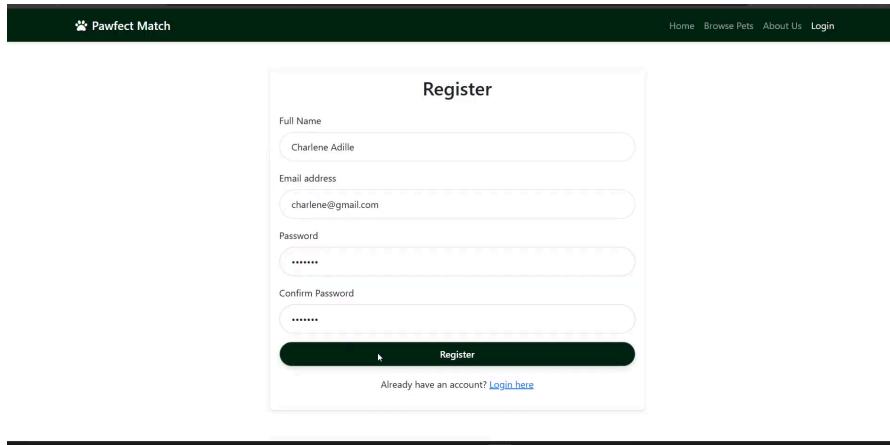
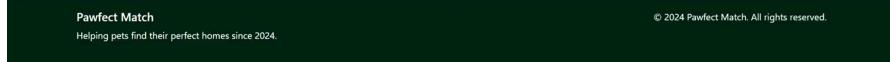
Use Case Covered:

The About Us section delves into the story behind Pawfect Match, introducing the dedicated team and outlining the platform's mission. Additionally, it serves as a channel for visitors to voice concerns or inquiries through a contact form, fostering transparency and open communication.

4. Login



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Use Case Covered:

This portal facilitates user authentication. Existing users can enter their credentials to access personalized features, while new users are guided through a straightforward registration process, laying the foundation for a tailored pet-matching journey.

B. Pet Owner Pages

1. Home



A screenshot of the Pawfect Match website. At the top, there is a navigation bar with links for Home, Browse Pets, My Pets, About Us, and a user profile for "charlene". Below the navigation is a main section titled "Find Your Perfect Pet Companion" with a sub-instruction "Browse through our collection of adorable pets waiting for their forever homes." A "Browse Pets" button is present. To the right of the text is a decorative background featuring a repeating pattern of dog bones and paw prints on a teal background. Below this section is a "Why Choose Pawfect Match?" heading.

Use Case Covered:

Once logged in, pet owners are welcomed to a personalized dashboard. This central hub provides quick access to essential features, recent activities, and updates, ensuring users can navigate the platform with ease and efficiency.

2. Browse Pets

A screenshot of the Pawfect Match website's "Available Pets" section. On the left, there is a sidebar with a search bar and a list of available pets, including "Pet 1", "Max", and "Luna". The "Luna" profile is expanded, showing details like breed ("Labrador Retriever"), age ("1 year"), location ("Los Angeles, CA"), and a description ("Luna is a sweet and playful Labrador who enjoys cuddling and playing with toys. She's house trained and up to date on all vaccinations."). There are also buttons for "Send Match Request" and "Favorite". Other profiles for "Pet 1" and "Max" are partially visible below.

Use Case Covered:

Beyond mere browsing, this page empowers pet owners to actively engage with the pet community. Users can send match requests, add pets to their favorites, and delve deeper into profiles, facilitating meaningful connections.



3. My Pets

The screenshot shows the 'My Pets' section of the Pawfect Match website. It features three pet profiles:

- Jamie**: Labrador Retriever, 1 year old, from Guinobatan, Albay. Owner: dwdww. Profile picture: A white dog sitting on a sidewalk.
- jopay**: Bulldog, 2 years old, from Guinobatan, Albay. Owner: erre34. Profile picture: A brown and white dog being held.
- pepee**: Labrador Retriever, 0.5 years old, from Legazpi. Owner: eererr. Profile picture: A line graph.

At the bottom, there are 'Edit' and 'Delete' buttons for each profile, and a footer with the Pawfect Match logo and copyright information.

Use Case Covered:

This dedicated space allows pet owners to manage their pet profiles comprehensively. From adding new pets with detailed information and images to editing existing profiles or removing outdated ones, users have full control over their pet's presence on the platform.

4. About Us



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Pawfect Match

Home Browse Pets About Us Login

About Us

Our Mission

At Pawfect Match, we're dedicated to helping dogs find their forever homes. Our platform connects loving pet owners with potential adopters, making the adoption process smoother and more enjoyable for everyone involved.

The Team

Developer 1

Charlene Mae Adille
Lead Developer

Passionate about both technology and animal welfare, John brings 10 years of web development experience to the team.

Developer 2

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Enrick Guillermo Relos
Frontend Developer

With a background in animal shelters and design, Jane ensures our platform is both beautiful and user-friendly.

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Developer 4

Developer 4

experience to the team.

user-friendly.

securely.

Developer 4

Juno Alligah Romano
Mobile Developer

Leading our mobile app development, Sarah brings expertise in creating seamless cross-platform experiences.

Developer 5

Hazel Marie Balunsay
QA Engineer

Ensuring the highest quality through comprehensive testing and user feedback implementation.

Contact Us

Have questions or suggestions? We'd love to hear from you!

Name

Email

Message

Contact Us

Have questions or suggestions? We'd love to hear from you!

Name

Email

Message

Send Message

Pawfect Match

Helping pets find their perfect homes since 2024.

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Use Case Covered:



Mirroring the visitor's view, this section reiterates the platform's mission and introduces the team. It also provides a direct line of communication for pet owners to share feedback, ask questions, or raise concerns, reinforcing the platform's commitment to user engagement.

5. Account

Pawfect Match

Available Pets

Search pets...

Pet 1

Max
Golden Retriever 2 years
New York, NY
Friendly and energetic Golden Retriever who loves playing fetch and going for long walks.

Luna
Labrador Retriever 1 year
Los Angeles, CA
Sweet and playful Labrador who enjoys swimming and playing with toys.

Rex
German Shepherd 3 years
Chicago, IL
Intelligent and loyal German Shepherd, great with training and protection.

charlene

My Pets
My Favorites
Logout

Filter by Breed Sort by

Pawfect Match

Available Pets

Search pets...

Pet 1

Max
Golden Retriever 2 years
New York, NY
Friendly and energetic Golden Retriever who loves playing fetch and going for long walks.

Luna
Labrador Retriever 1 year
Los Angeles, CA
Sweet and playful Labrador who enjoys swimming and playing with toys.

Rex
German Shepherd 3 years
Chicago, IL
Intelligent and loyal German Shepherd, great with training and protection.

charlene

My Favorite Pets

UN

UN

View Details Remove

View Details Remove

Use Case Covered:

This comprehensive account management area offers pet owners a consolidated view of their interactions. Users can review their favorite pets and monitor match requests, ensuring a seamless and personalized experience.



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III. SCREENSHOT OF GITHUB STRUCTURE

A.

The screenshot shows the GitHub repository page for 'PawfectMatch-FullStackWebApp'. The repository is public and has 24 commits. The commit history includes:

- cmta-05 Merge pull request #3 from cmta-05/backend-agular (c52d998 - now)
- Delete backend/.gitkeep (10 minutes ago)
- Create proper folder structure and add frontend files (2 days ago)
- Update PawfectMatch.md (yesterday)
- Create database (10 hours ago)
- Create docs (yesterday)

The repository has 2 stars, 0 forks, and 1 watch. It is described as 'A Pet Matching System'. There are no releases or packages published. The contributors listed are cmta-05 and user-0206.

IV. GITHUB URL TO /frontend FOLDER

- A. <https://github.com/cmta-05/PawfectMatch-FullStackWebApp/commit/8044277ad587aab3b17225d45675377cb843dbc9>



Week 12: Phase 3 - Backend and Database Integration

I. OVERVIEW OF BACK-END SET-UP

The backend system of *Pawfect Match* is built using Node.js with the Express.js framework, following a modular and scalable architecture. The structure follows the Model-View-Controller (MVC) design pattern, which promotes separation of concerns and maintainability.

A. Technologies Used

- a. **Node.js** – Server-side JavaScript runtime.
- b. **Express.js** – Web framework for building RESTful APIs.
- c. **MongoDB** – NoSQL database used for data persistence.
- d. **Mongoose** – ODM (Object Data Modeling) library for MongoDB.
- e. **Dotenv** – Manages environment variables.
- f. **JWT (JSON Web Token)** – For user authentication.
- g. **Git** – Version control system.
- h. **Thunder Client** – For API testing (indicated by .thunder directory).

B. Directory Structure

- a. **app.js / server.js** – Main entry points that initialize the app, configure middleware, and connect to the database.
- b. **/routes** – Contains route definitions for various entities and functionalities.
- c. **/controllers** – Handles business logic and serves as intermediaries between models and routes.
- d. **/models** – Defines Mongoose schemas and structures for database collections.
- e. **/views** – Manages server-rendered templates, if applicable.
- f. **/config** – Contains configuration files, such as database connection logic.
- g. **/public** – Static assets (e.g., CSS, images).
- h. **/bin** – Contains startup scripts, such as www.



- i. **/tests** – Directory reserved for test cases.

C. Authentication

User authentication is implemented using JSON Web Tokens (JWT), allowing secure, token-based user sessions. Tokens are verified for protected routes to ensure secure access.

D. Database Configuration

The database connection is handled via Mongoose, defined in a configuration file located in the /config directory. Environment variables stored in .env are used to keep sensitive information like database URLs secure.

E. API Testing

API testing was conducted using Thunder Client in Visual Studio Code to verify the functionality of the /products/add endpoint in the backend server. A POST request was sent with JSON data containing a product name and price. The server successfully responded with a 201 Created status code along with the inserted data and a generated Object ID, indicating that the request was processed correctly.

To further validate the operation, MongoDB Compass was used to inspect the database. The newly added entries were confirmed to be stored in the products collection within the project10DB database. This confirmed that the backend API correctly handled the data insertion and that the connection between the application and the database was functioning as expected.

This backend setup supports all core functionalities of the *Pawfect Match* system and is designed to be extendable as new features are added.

II. CODE SNIPPETS OF `server.js`, sample model, and routes



A. server.js

```
JS server.js X
C: > Users > Hazel Marie > OneDrive > Documents > IT 112 WST > Final Project > Pawfect Match_back-end > pr
1  require('dotenv').config();
2  const express = require('express');
3  const cors = require('cors');
4  const connectDB = require('../config/db');
5  const userRoutes = require('../routes/userRoutes');
6  const productRoutes = require('../routes/product');

7
8  const app = express();
9
10 // Connect to database
11 connectDB();
12
13 // Middleware
14 app.use(cors());
15 app.use(express.json());
16
17 // Routes
18 app.use('/api/users', userRoutes);
19 app.use('/api/products', productRoutes);
20
21 // Error handling middleware
22 app.use((err, req, res, next) => {
23   console.error(err.stack);
24   res.status(500).json({ message: 'Something went wrong!' });
25 });
26
27 const PORT = process.env.PORT || 4000;
28 app.listen(PORT, () => {
29   console.log(`Server running on port ${PORT}`);
30 });
31
```

B. sample model

```
JS product.js X
C: > Users > Hazel Marie > OneDrive > Documents > IT 112 WST > Final Project > Pawfect Match_back-end > pr
1  const mongoose = require('mongoose');
2
3  const productSchema = new mongoose.Schema({
4    name: String,
5    price: Number,
6    description: String,
7  });
8
9  module.exports = mongoose.model('Product', productSchema);
10
```



JS User.js X

C: > Users > Hazel Marie > OneDrive > Documents > IT 112 WST > Final Project > Pawfect Match_back-end > routes > User.js

```
1 const mongoose = require('mongoose');
2
3 const userSchema = new mongoose.Schema({
4   name: String,
5   email: String,
6   password: String,
7   role: String
8 });
9
10 module.exports = mongoose.model('User', userSchema);
11
```

C. routes

JS index.js X

C: > Users > Hazel Marie > OneDrive > Documents > IT 112 WST > Final Project > Pawfect Match_back-end > routes > index.js

```
1 var express = require('express');
2 var router = express.Router();
3
4 /* GET home page. */
5 router.get('/', function(req, res, next) {
6   res.render('index', { title: 'Express' });
7 });
8
9 module.exports = router;
10
```

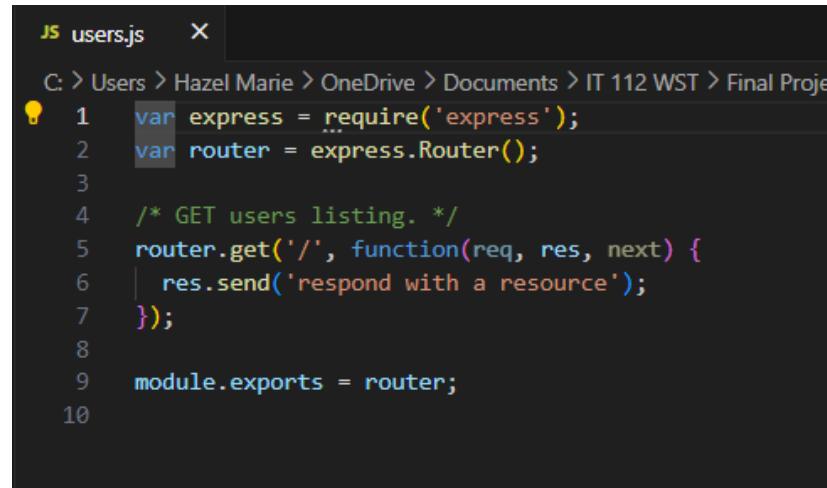
JS product.js X

C: > Users > Hazel Marie > OneDrive > Documents > IT 112 WST > Final Project > Pawfect Match_back-end > project10 > routes > product.js

```
1 const express = require('express');
2 const router = express.Router();
3 const Product = require('../models/Product'); // adjust path if needed
4
5 // POST /add - Insert a new product
6 router.post('/add', async (req, res) => {
7   try {
8     const newProduct = new Product(req.body); // assuming req.body has name, price, etc.
9     const savedProduct = await newProduct.save();
10    res.status(201).json(savedProduct);
11  } catch (error) {
12    res.status(400).json({ message: error.message });
13  }
14 });
15
16 // GET /all - Get all products (view in browser)
17 // GET all products
18 router.get('/', async (req, res) => {
19   try {
20     const products = await Product.find();
21     res.status(200).json(products); // Send them as JSON
22   } catch (err) {
23     res.status(500).json({ message: 'Error retrieving products' });
24   }
25 });
26
27
28 module.exports = router;
```



```
JS userRoutes.js ×
C: > Users > Hazel Marie > OneDrive > Documents > IT 112 WST > Final Project > Pawfect Match_back-end > project10 > routes > JS
1  const express = require('express');
2  const router = express.Router();
3  const User = require('../models/User');
4
5  // Create user
6  router.post('/', async (req, res) => {
7    console.log('POST /api/users hit');
8    try {
9      const user = new User(req.body);
10     await user.save();
11     res.status(201).json(user);
12   } catch (error) {
13     res.status(400).json({ message: error.message });
14   }
15 });
16
17 // Read all users
18 router.get('/', async (req, res) => {
19   console.log('GET /api/users hit');
20   try {
21     const users = await User.find();
22     res.json(users);
23   } catch (error) {
24     res.status(500).json({ message: error.message });
25   }
26 });
27
28 // Read single user
29 router.get('/:id', async (req, res) => {
30   try {
31     const user = await User.findById(req.params.id);
32     if (!user) {
33       return res.status(404).json({ message: 'User not found' });
34     }
35     res.json(user);
36   } catch (error) {
37     res.status(500).json({ message: error.message });
38   }
39 });
40
41 // Update user
42 router.put('/:id', async (req, res) => {
43   try {
44     const user = await User.findByIdAndUpdate(
45       req.params.id,
46       req.body,
47       { new: true }
48     );
49     if (!user) {
50       return res.status(404).json({ message: 'User not found' });
51     }
52     res.json(user);
53   } catch (error) {
54     res.status(400).json({ message: error.message });
55   }
56 });
57
58 // Delete user
59 router.delete('/:id', async (req, res) => {
60   try {
61     const user = await User.findByIdAndDelete(req.params.id);
62     if (!user) {
63       return res.status(404).json({ message: 'User not found' });
64     }
65     res.json({ message: 'User deleted successfully' });
66   } catch (error) {
67     res.status(500).json({ message: error.message });
68   }
69 });
70
71 module.exports = router;
```

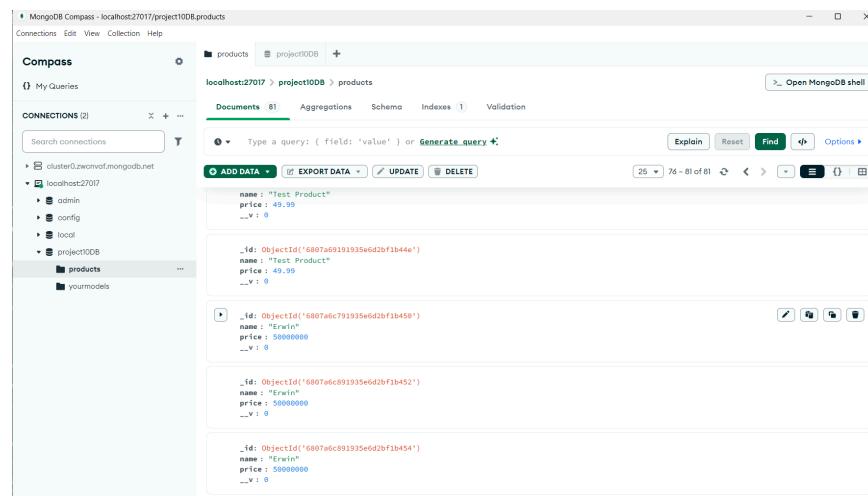


A screenshot of a code editor window titled "JS users.js". The code is a simple Node.js file using the Express framework. It defines a router and handles a GET request for the root path, responding with a resource. The code is as follows:

```
1 var express = require('express');
2 var router = express.Router();
3
4 /* GET users listing. */
5 router.get('/', function(req, res, next) {
6   res.send('respond with a resource');
7 });
8
9 module.exports = router;
10
```

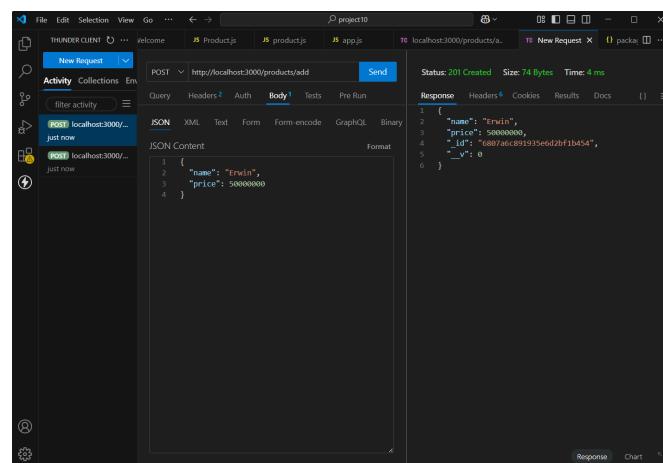
III. SCREENSHOT OF API TESTING

A. POST Request



A screenshot of the MongoDB Compass interface. The left sidebar shows connections and collections, with "products" selected under the "project100B" database. The main pane displays a list of 81 documents in the "products" collection. Each document has fields: _id, name, price, and __v. The first few documents are:

- `_id: ObjectId('6807ad6c791935e6d2bf1b450')`
name: "Test Product"
price: 49.99
__v: 0
- `_id: ObjectId('6807ad6c791935e6d2bf1b450')`
name: "Erwin"
price: 50000000
__v: 0
- `_id: ObjectId('6807ad6c891935e6d2bf1b452')`
name: "Erwin"
price: 50000000
__v: 0
- `_id: ObjectId('6807ad6c891935e6d2bf1b454')`
name: "Erwin"
price: 50000000
__v: 0



A screenshot of the Thunder Client application. A new request is being made to the URL `http://localhost:3000/products/add` using the POST method. The "Body" tab is selected, showing a JSON payload:

```
[{"name": "Erwin", "price": 50000000}
```

The response status is 201 Created, with a size of 74 bytes and a time of 4 ms. The response body is identical to the request body.



IV. GITHUB URL OF /backend FOLDER

- A. <https://github.com/cmta-05/PawfectMatch-FullStackWebApp/tree/main/backend>

V. Brief explanation of each group member's contribution

A. Project & GitHub Manager - Adille, Charlene Mae T.

- was responsible for assisting with the overall documentation, including the preparation of the README files for both the frontend and backend. She also helped organize and ensured that all required components were prepared for submission.

B. Back-End Developer - Aguilar, Jhon Kenneth S.

- took the lead in setting up the backend. He was responsible for organizing the backend folder structure, installing the necessary packages, connecting the application to MongoDB, and conducting API testing using Thunder Client or Postman.

C. Documentation Officer - Balunsay, Hazel Marie I.

- focused on documenting the progress of both the frontend and backend development. She compiled screenshots, organized the contents of the /docs folder, and helped write the performance report. She also contributed to the submission of the final deliverables.

D. Front-End Developer - Relos, Enrick G.

- handled most of the frontend development tasks. He set up the view structure, created common layouts, and built the pages. In addition, he styled the pages to ensure a consistent and user-friendly interface.

E. Database Manager - Romano, Juno Alligah B.

- worked closely with Aguilar on backend development. He defined the Mongoose models and created the necessary routes for data creation and retrieval. He also contributed to the MongoDB integration and helped ensure that the



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backend logic was correctly implemented.