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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.  
**Front-End Developer** - Relos, Enrick G.  
**Back-End Developer** - Aguilar, Jhon Kenneth S.  
**Database Manager** - Romano, Juno Alligah B.  
**Documentation Officer** - Balunsay, Hazel Marie I.

BS INFORMATION TECHNOLOGY 2B

SUBMITTED TO:

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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 the word "Pawfect Match". Below the header, the main title "Find Your Perfect Pet Companion" is displayed prominently. A subtext "Browse through our collection of adorable pets waiting for their forever homes." is followed by an orange "Browse Pets" button. To the right of the main content area is a decorative sidebar with a repeating pattern of dog bones and paw prints on a teal background. At the bottom of the page, there's a section titled "Why Choose Pawfect Match?".

This screenshot is identical to the one above, but it highlights the "Why Choose Pawfect Match?" section. It features three cards: "Perfect Matches" (with a heart icon), "Trusted Process" (with a shield icon), and "Easy Communication" (with a speech bubble icon). Each card has a brief description below it.

##### 2. Brows Pets

The screenshot shows a page titled "Find Your Perfect Pet Companion" with the same layout as the homepage. It includes the main title, a "Browse Pets" button, and the "Why Choose Pawfect Match?" section at the bottom. The URL "file:///C:/Users/tony/Downloads/PWAFECT%20/browses.html" is visible at the very bottom of the page.



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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  
About  
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 3

Pet 4

Pet 5

Pet 6

You need to be logged in to interact with pets!  
Login Register

Home Browse Pets About Us Login

Sort by

### 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. The overall design is clean with a white background and black text.

The screenshot shows a "Contact Us" form on a website. It has a dark header and a light-colored body. The form fields are:

- Name (text input)
- Email (text input)
- Message (text area)
- A "Send Message" button at the bottom.

Below the form, there's a footer with the Pawfect Match logo, a tagline "Helping pets find their perfect homes since 2024.", and copyright information "© 2024 Pawfect Match. All rights reserved."

## 4. Login

The screenshot shows the login page for Pawfect Match. It has a dark header with the Pawfect Match logo and navigation links for Home, Browse Pets, About Us, and Login. The main content area is titled "Login" and contains:

- Email address (text input)
- Password (text input)
- A large "Login" button.
- Text below the button: "Don't have an account? [Register here](#)".

At the bottom of the page, there's a footer with the Pawfect Match logo, tagline, and copyright information "© 2024 Pawfect Match. All rights reserved."



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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

Pet Name	Breed	Age	Location	User ID	Action Buttons
Jamie	Labrador Retriever	1 years	Guinobatan, Albay	dwdww	
jopay	Bulldog	2 years	Guinobatan, Albay	erre34	
pepee	Labrador Retriever	0.5 years	legazpi	ererrr	

<http://C:/Users/charlene/Desktop/Pawfect%20My%20Pet.html>

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

Developer 1	Developer 2	Developer 3
<b>Charlene Mae Adille</b> Lead Developer Passionate about both technology and animal welfare. John brings 10 years of web development experience to the team. 	<b>Enrick Guiller Relos</b> Frontend Developer With a background in animal shelters and design, Jane ensures our platform is both beautiful and user-friendly. 	<b>Jhon Kenneth Aguilar</b> Backend Developer Specializing in database design and API development, Mike ensures our platform runs smoothly and securely. 
<b>Developer 4</b> 	<b>Developer 5</b> 	



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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 ▾

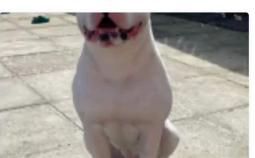
 My Pets  
 My Favorites  
 Logout

**Available Pets**

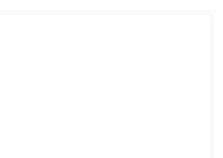
Search pets... 

 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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## II. ANNOTATION SHOWING WHICH USE CASE EACH PAGE COVERS

### A. Visitor (Guest User) Pages

#### 1. Home

#### 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

A screenshot of the Pawfect Match homepage. At the top, there is a dark header bar with the logo and navigation links: Home, Browse Pets, About Us, and Login. Below the header, the main content area has a light gray background. In the center, there is a large text box with the heading "Find Your Perfect Pet Companion" in bold. Below the heading, a subtext says "Browse through our collection of adorable pets waiting for their forever homes." A yellow button labeled "Browse Pets" is centered below the subtext. To the right of the text box is a decorative sidebar with a green background featuring a repeating pattern of white paw prints and dog bones.

### Why Choose Pawfect Match?

A screenshot of the Pawfect Match homepage showing the "Available Pets" section. The URL in the address bar is "file:///C:/Users/Enrich/Desktop/PWPFECT 2/browses.html". The page has a dark header bar with the logo and navigation links: Home, Browse Pets, About Us, and Login. Below the header, the main content area has a light gray background. The heading "Available Pets" is displayed in bold. There is a search bar with placeholder text "Search pets..." and a magnifying glass icon. To the right of the search bar are two dropdown menus: "Filter by Breed" and "Sort by". Below the search bar, there are six pet cards arranged in two rows of three. Each card includes a small thumbnail image, the pet's name, breed, age, location, and a brief description. For example, the first pet is named Max, is a Golden Retriever, 2 years old, from New York, NY, and is described as friendly and energetic. The second pet is Luna, a Labrador Retriever, 1 year old, from Los Angeles, CA, and is described as sweet and playful. The third pet is Rex, a German Shepherd, 3 years old, from Chicago, IL, and is described as intelligent and loyal.



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 for a pet named 'Luna'. The modal displays the following information:

- Luna**: Labrador Retriever, 1 year old, from Los Angeles, CA.
- About**: A brief description stating 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.
- Thumbnail Images**: Three thumbnail images of Luna are shown below her name.
- Login/Register Buttons**: Buttons for 'Login' and 'Register' are located at the bottom of the modal.

Outside the modal, other pets are listed: 'Max' (Golden Retriever, 2 years old, from New York, NY) and 'Pet 4' (German Shepherd, 3 years old). There are also buttons for 'Pet 5' and 'Pet 6'.

### 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 contains two sections:

- Our Mission**: A brief statement explaining 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."
- The Team**: A section listing four team members, each with a profile picture and a 'Developer' badge.
  - Charlene Mae Adille** (Lead Developer): Passionate about both technology and animal welfare, Jane brings 10 years of web development experience to the team. Social media icons for LinkedIn, GitHub, and Twitter are shown.
  - Enrick Guiller Relos** (Frontend Developer): With a background in animal shelters and design, Jane ensures our platform is both beautiful and user-friendly. Social media icons for LinkedIn, GitHub, and Twitter are shown.
  - Jhon Kenneth Aguilar** (Backend Developer): Specializing in database design and API development, Mike ensures our platform runs smoothly and securely. Social media icons for LinkedIn, GitHub, and Twitter are shown.
  - Developer 4** and **Developer 5**: Placeholder entries for the fourth and fifth team members.



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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 icon, followed by the text 'experience to the team.' and social media sharing icons. The second column contains a placeholder for an image or icon, followed by the text 'user-friendly.' and social media sharing icons. The third column contains a placeholder for an image or icon, followed by the text 'securely.' and social media sharing icons. Below this grid is a section titled 'Contact Us' with the sub-instruction 'Have questions or suggestions? We'd love to hear from you!'. It includes three input fields: 'Name', 'Email', and 'Message', each with a corresponding placeholder text ('Name', 'Email', and 'Message'). The bottom prototype is a simplified version of the same page, showing a single large input field for the 'Message' and a 'Send Message' button. At the very bottom of the page is a dark footer bar containing the text 'Pawfect Match', 'Helping pets find their perfect homes since 2024.', and '© 2024 Pawfect Match. All rights reserved.'

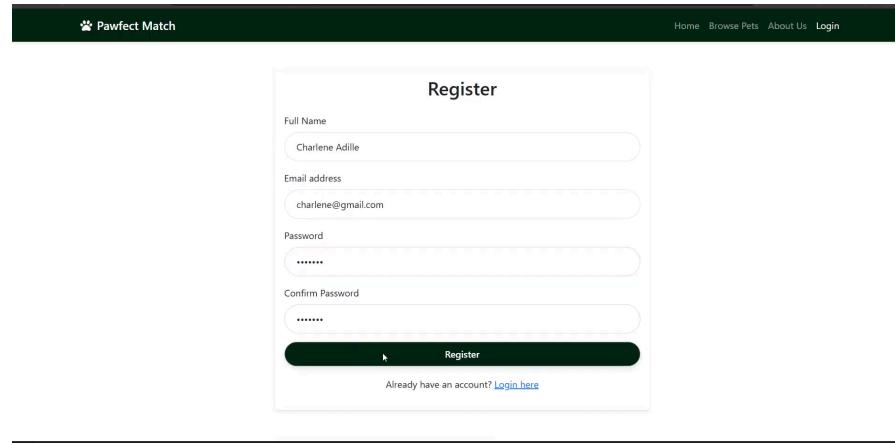
### Use Case Covered:

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



The screenshot shows the homepage of the Pawfect Match website. At the top, there's 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 image with a repeating pattern of dog bones and paw prints on a teal background. Below this section is a white box containing the heading 'Why Choose Pawfect Match?' followed by a URL in the address bar: 'file:///C:/Users/Greck/Desktop/PWFFECT%20/index.html#'. The overall layout is clean and modern.

### 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

The screenshot shows a modal window displaying a pet profile for 'Luna'. The profile includes basic information: Luna is a female Labrador Retriever, 1 year old, and located in Los Angeles, CA. Below this is a detailed 'About' section stating she is sweet and playful, enjoys cuddling and playing with toys, and is house-trained. There's also a note about her vaccinations. On the left, another pet profile for 'Max' is partially visible, showing he is a male Golden Retriever, 2 years old, from New York, NY, and enjoys playing fetch and going for long walks. At the bottom of the modal are three buttons: 'Close', 'Send Match Request', and 'Favorite'. The background of the page shows other pet profiles with their names, species, ages, and locations.

### 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

Developer 2

Enrick Guillermo 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 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 4

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.

My Favorite Pets

UN

undefined undefined undefined undefined  
View Details Remove

UN

undefined undefined undefined undefined  
View Details Remove

Sort by

### 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 a GitHub repository page for 'PawfectMatch-FullStackWebApp'. The repository has 24 commits across 3 branches. Key commits include:

- 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 is described as "Pawfect Match - A Pet Matching System". It has 1 star, 2 watching, 0 forks, and 4 contributors. There are sections for About, Releases, Packages, and Contributors.

### 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
```

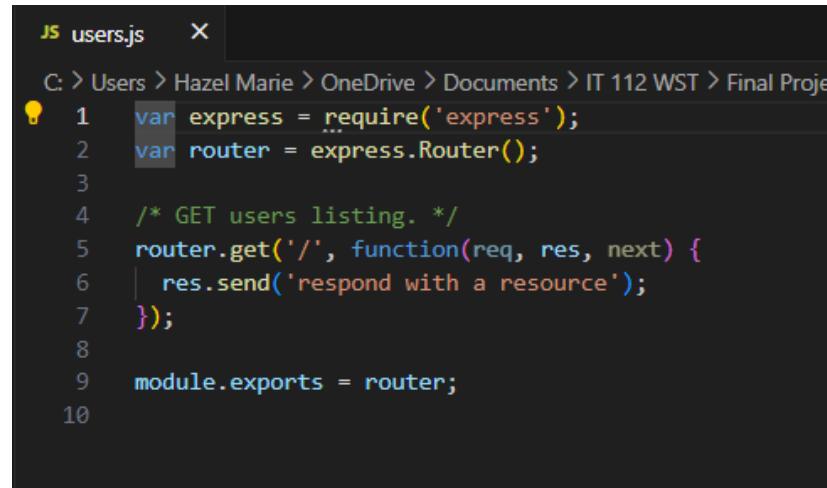
JS product.js X

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;
```



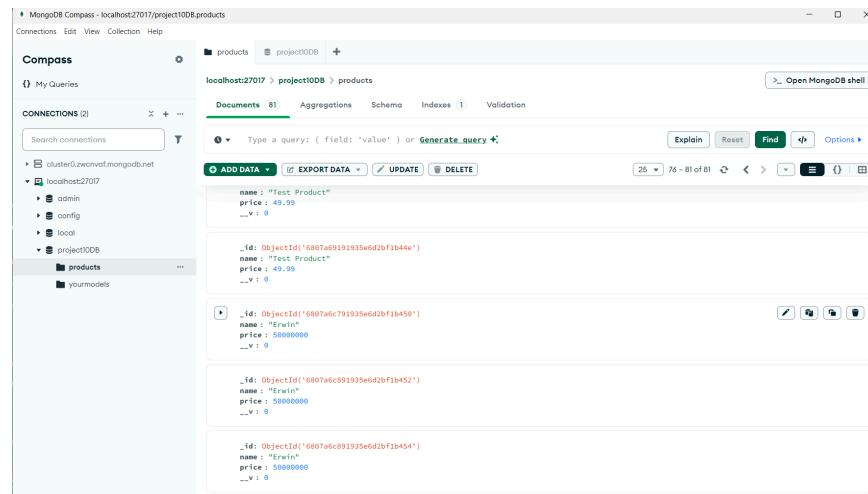
```
JS userRoutes.js ×
C: > Users > Hazel Marie > OneDrive > Documents > IT 112 WST > Final Project > Pawfect Match_back-end > project10 > routes > JS
1  const express = require('express');
2  const router = express.Router();
3  const User = require('../models/User');
4
5  // Create user
6  router.post('/', 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;
```



```
JS users.js    X
C: > Users > Hazel Marie > OneDrive > Documents > IT 112 WST > Final Project
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



MongoDB Compass - localhost:27017/project1008.products

Connections Edit View Collection Help

Compass

My Queries

Connections [2]

localhost:27017

- admin
- config
- local
- project1008
  - products
  - yourmodels

localhost:27017 > project1008 > products

Documents 81 Aggregations Schema Indexes Validation

Type a query: { field: 'value' } or [Generate query](#)

ADD DATA EXPORT DATA UPDATE DELETE

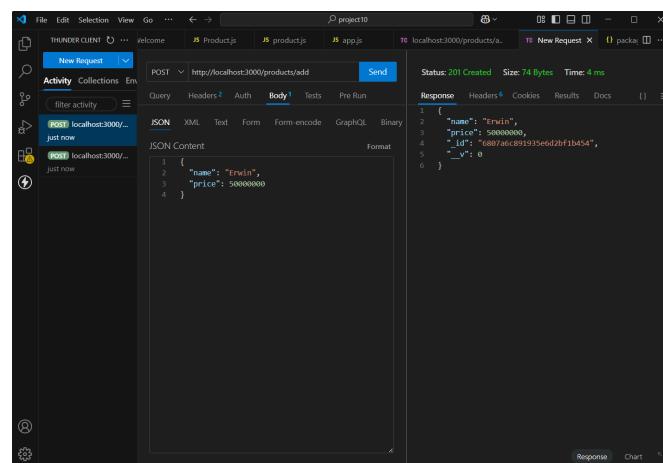
name : "Test Product"  
price : 49.99  
\_\_v : 0

\_id: ObjectId('6807ad691935e6d2bf1b4e4e')  
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



THUNDER CLIENT ... welcome Productjs productjs app.js localhost:3000/products/a New Request ...

New Request POST http://localhost:3000/products/add Send

Status: 201 Created Size: 74 Bytes Time: 4 ms

Activity Collections Env

POST localhost:3000/... just now

POST localhost:3000/... just now

POST localhost:3000/... just now

Filter activity

Headers Body Tests Pre Run

JSON XML Text Form Form encode GraphQL Binary

JSON Content Format

```
1 [
2   {
3     "name": "Erwin",
4     "price": 50000000
5   }
6 ]
```

Response Headers Cookies Results Docs



#### **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 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 backend logic was correctly implemented.