SEPT Presentation

Abdullah Abdosh – s4007967

Shreyas Shah – s4005805

Mohammed Ahtesh - s4006644

Idris Aklan – s4003401

Yifan Shen – s3939815

Farahan Wazer - s3944027

Introduction

- Welcome to our presentation!
- Our goal was to develop a web-based application that digitizes appointment bookings, prescription and Medical record management alongside providing a means for new pet owners to learn.
- We accomplished this using technologies like Spring Boot, React, Docker, and AWS.
- Today well walk your through our journey from ideation to deployment, highlighting our key features.

Product and its Architecture

Frontend Development:

- **Programming Language:** JavaScript
- **Framework:** React.js

Backend Development:

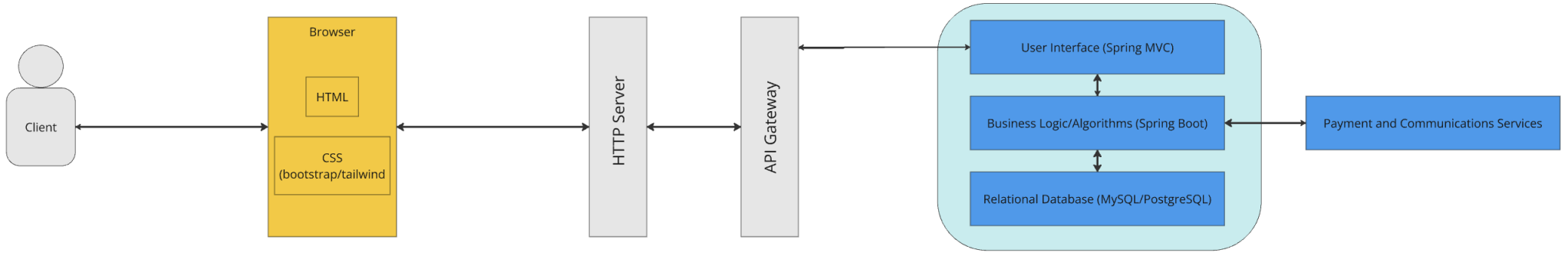
- **Programming Language:** Java
- **Framework:** Spring Boot

Database:

- **Database Management System:** SQLite

Integrated Development Environment (IDE):

- **IDE:** Visual Studio Code (VSCode)



Pipeline architecture

Overview: Breaks the prescription refill process into stages for faster and more efficient handling.

Key Stages:

User Input: Form submission.

- **Validation**: Ensures valid pet, vet, and medication details.
- **Payment Processing**: Handles credit card/PayPal transactions.
- **Prescription Submission**: Stores the request and notifies pharmacy/vet.
- **Confirmation**: User receives confirmation and notifications.

Pipeline Architecture in Prescription

- **Parallel Processing**: Stages run simultaneously for faster performance.
- **Modular Design**: Easy to update or add features.
- **Scalability & Efficiency**: Ideal for handling multiple requests efficiently.

Project Retrospective Development pipeline

What Worked Well:

- Our task board in GitHub helped streamline collaboration, allowing team members to track progress efficiently. Daily Scrum meetings ensured open communication and rapid issue resolution.

Improvements:

- We identified a need for clearer documentation of user stories. Early feedback loops could enhance our understanding of requirements, leading to fewer revisions.

Surprises:

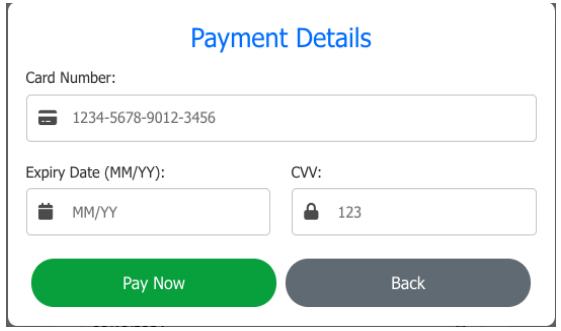
- The complexity of integrating back-end logic and database configuration, exceeded our initial estimates.

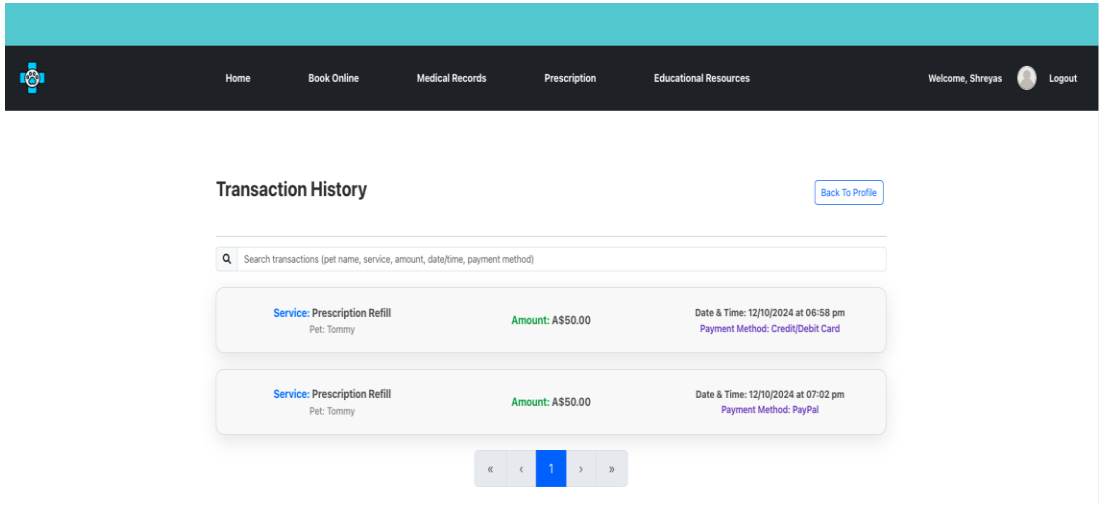
Lessons Learned:

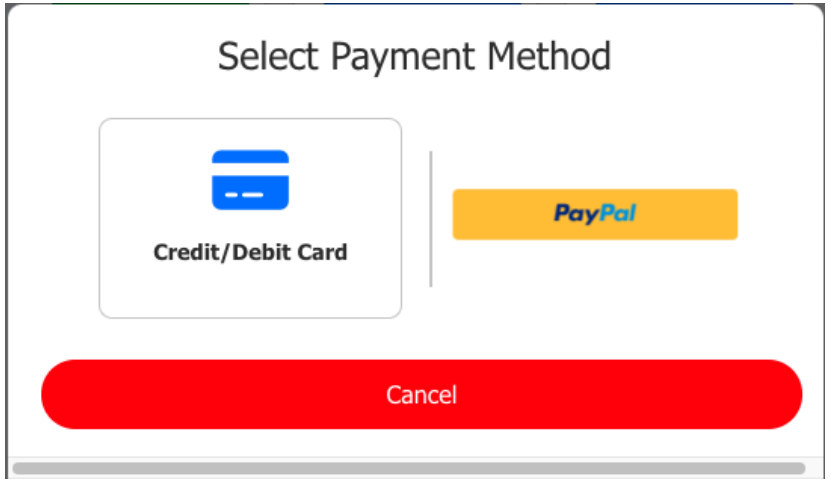
- We learned the importance of adaptability in our Agile process. Regularly reviewing our backlog allowed us to pivot based on client feedback and emerging project needs.

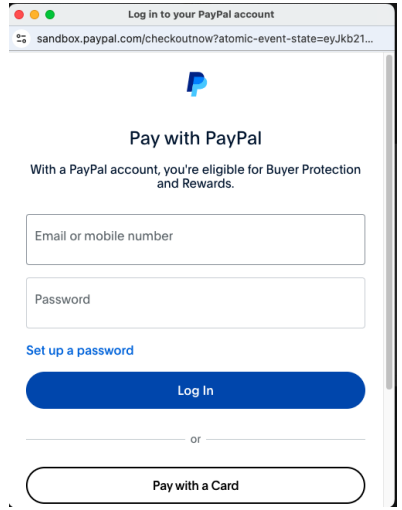
Interesting design/ features (payment) (1 min)

- Pet Owners have an efficient way of paying for their pets' appointment bookings and prescription refills.
- After they fill out their preferences, they are presented with a modal in which they can select either paying by credit/debit card or by using PayPal.
- If a pet owner chooses the credit/debit card option, they will be presented with an appealing payment form where they can enter their credit/debit card details.
- Validation, placeholders and icons are implemented to ensure that they don't enter any incorrect inputs.
- For the PayPal method, a new window is presented to them with PayPal's website shown, where they can either log in to their existing PayPal account or choose to pay with a card.
- This option is much more secure as PayPal has advanced security measures in place for their payment processes.
- Once a payment is completed, a successful payment modal with the details of the service are displayed.
- For the transaction history, it displays a list of all the transactions made by a pet owner, including service type, pet name, amount, date/time and payment method. They can also search for a specific transaction.









Communication & Task Board (30s)

- Used Microsoft Teams for communication.
- Had a minimum of 4 SCRUM meetings in a week on both Teams and in-person.
- Had discussed about our individual progress, any issues and planned on what we were going to do before the next meeting.
- Ensured the GitHub Project Task Board was regularly updated with any new user stories, test cases, tasks and bugs.
- Assigned estimate points for each user story, test case, task and bug.
- Use of the project board helped us stay organised, and made it easier to track the status of work.
- Organising the work into columns such as 'To Do', 'In Progress' and 'Done' allowed the team to visualise the state of each task or bug.
- The 'Sprint' iterations and the ability to assign certain members to an issue helped manage and separate the workload.

91	Add Pet Medical Record #154	idris-Ak	Sprint 1	5	✅ Done	Type: Task
92	Modify all user stories to match the preferred format #146	Shreyas-Shah30	Sprint 1	2	✅ Done	Type: Task
93	backend/database set up #171	farahan31	Sprint 1	4	✅ Done	Type: Task
94	connect backend with Medical record and display the record #174	farahan31	Sprint 1	5	✅ Done	Type: Task
95	Update SRS document to include all new changes and updates #181	idris-Ak, mahtesh...	Sprint 1	3	✅ Done	Type: Task

Things That Went Well

- *Front-end: The new user profile page was built using React.js, leveraging reusable components, which reduced development time.*
- *Back-end: Successfully set up the API for user authentication and integrated it with the front-end, enabling secure login and registration.*
- *Regular meetings and communications through the team helped to clarify API needs and integration requirements.*

Things That Could Have Gone Better

- *Rework in front-end code because of the conflict between the codes. (Didn't pull&push properly)*
- *Back-end: Although the API for user authentication was delivered on time, some performance issues under load weren't identified until late in the sprint, causing delays in testing.*
- *Prioritization between essential back-end features and front-end UI components could have been better coordinated, leading to better timing on both sides.*

Things That Surprised Us

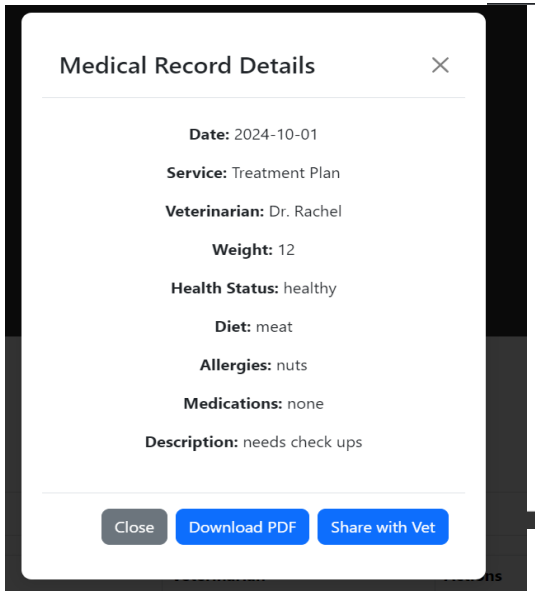
- *The state management in React became more complex as new features were added, requiring a refactor to improve maintainability.*

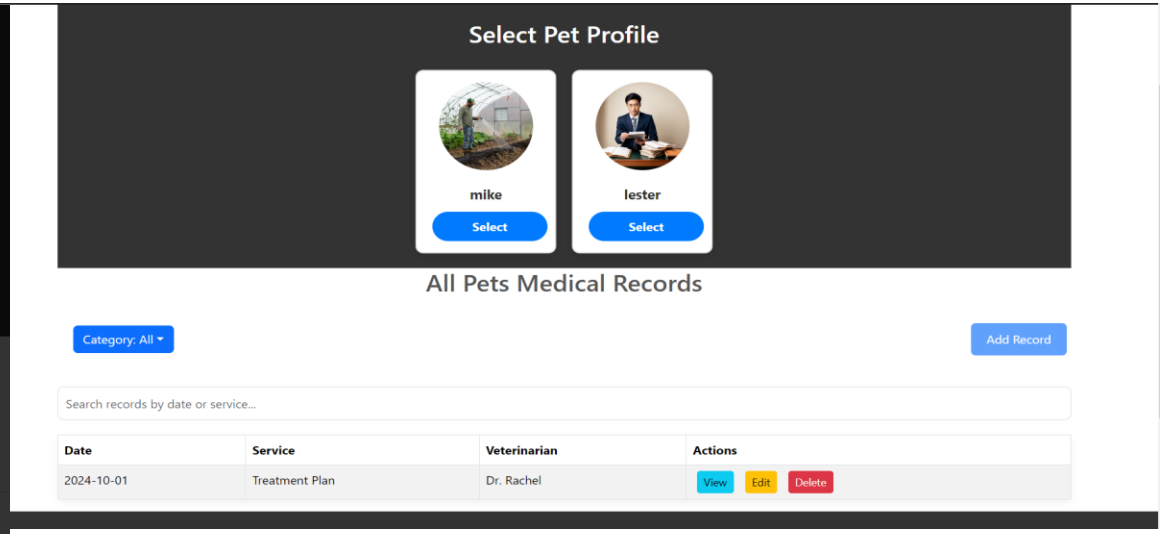
Lessons Learned

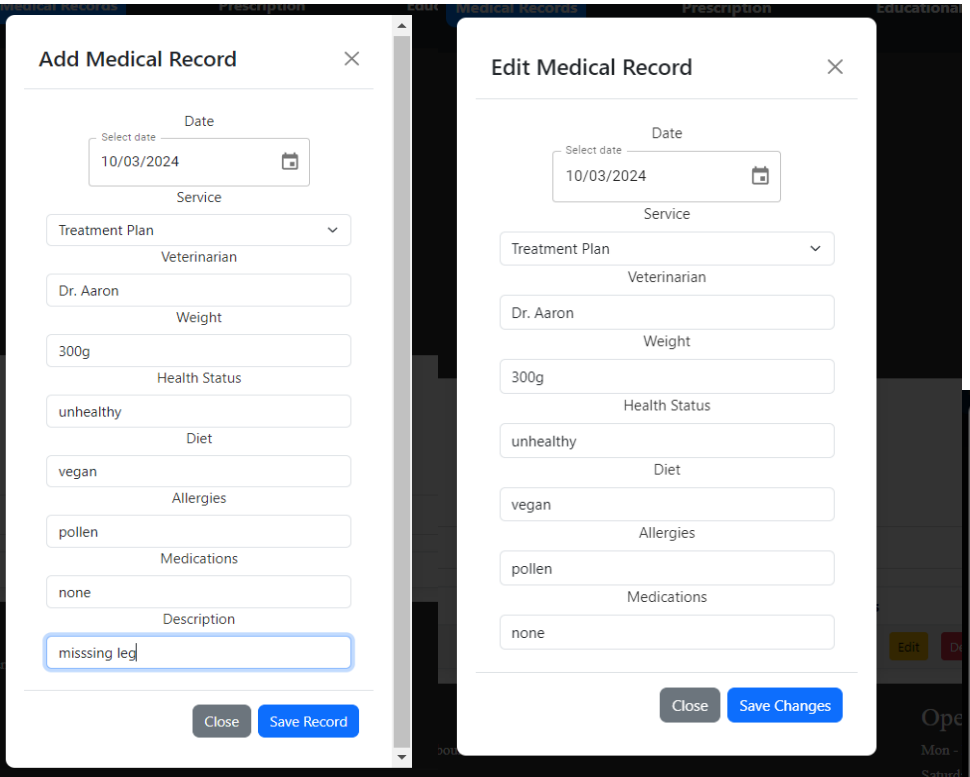
- *Back-end performance testing should be conducted earlier in the sprint, especially for critical features like authentication.*

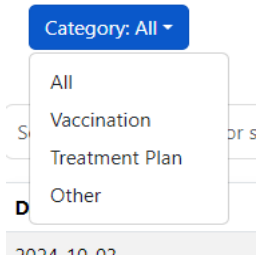
Medical records

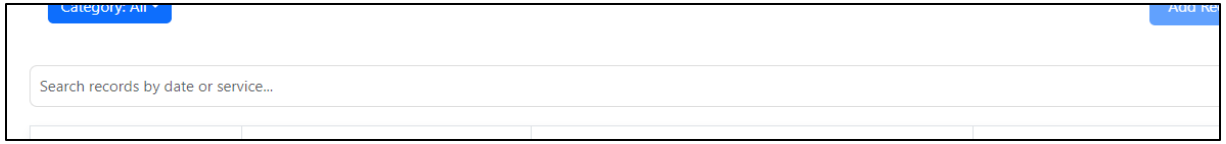
1. Securely view Medical Records
2. Adding, delete & editing pet's medical history
3. Download Medical Records
4. share Medical Records with vets
5. Vet can view shared medical records
6. Filter by service and/or pet
7. Seach by date or service

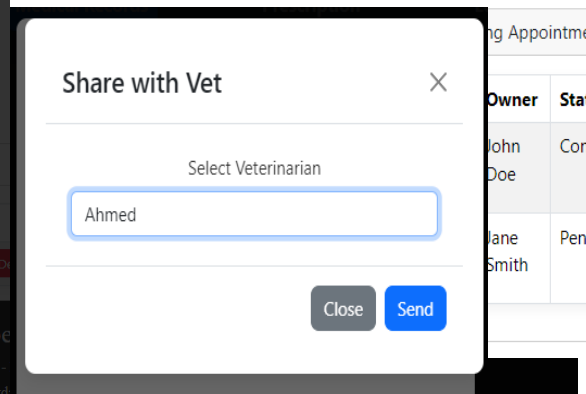


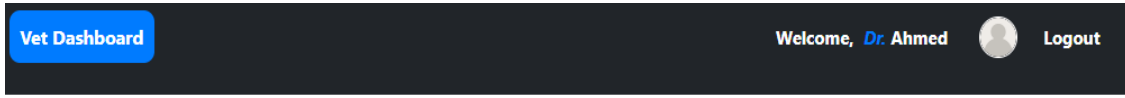


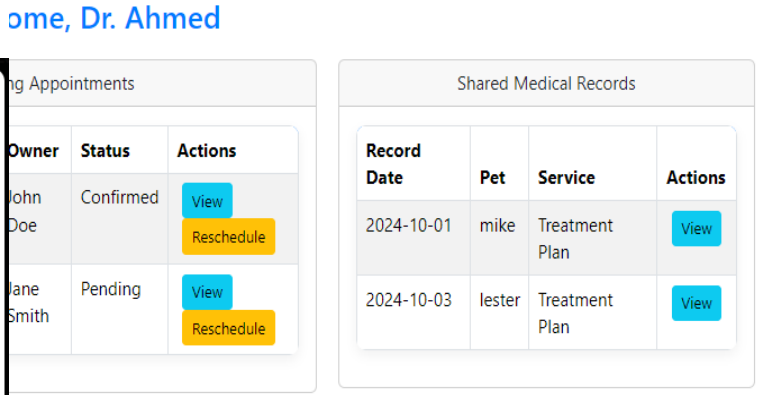






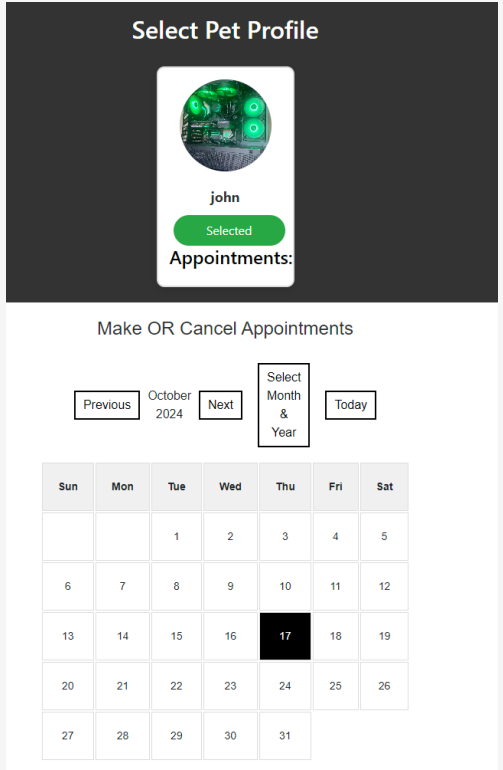


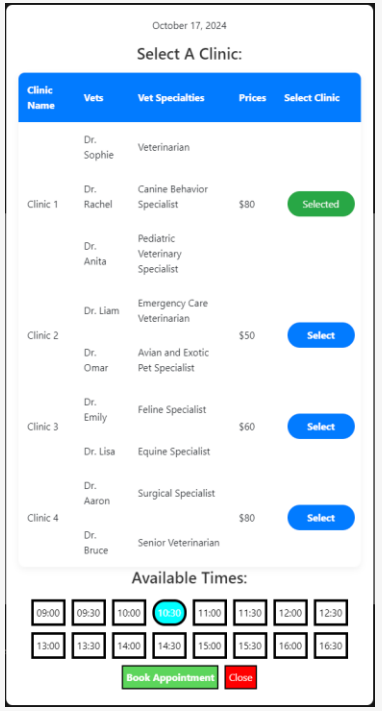


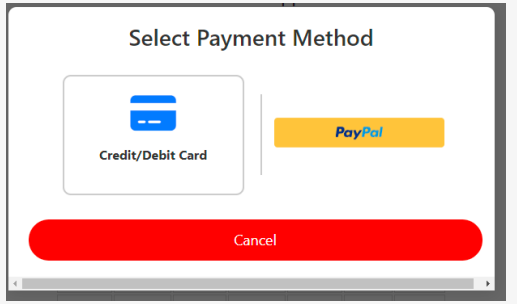


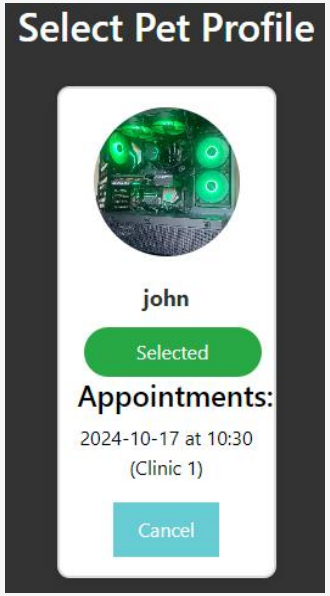
Appointment Mangement

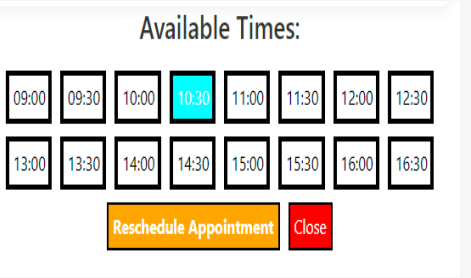
- User pet selection UI integrated.
- Appointment date selection implemented.
- Table of clinics with their prices for comparison has been implemented.
- Payment for a booked appointment was also implemented.
- Appointment management has also been integrated.







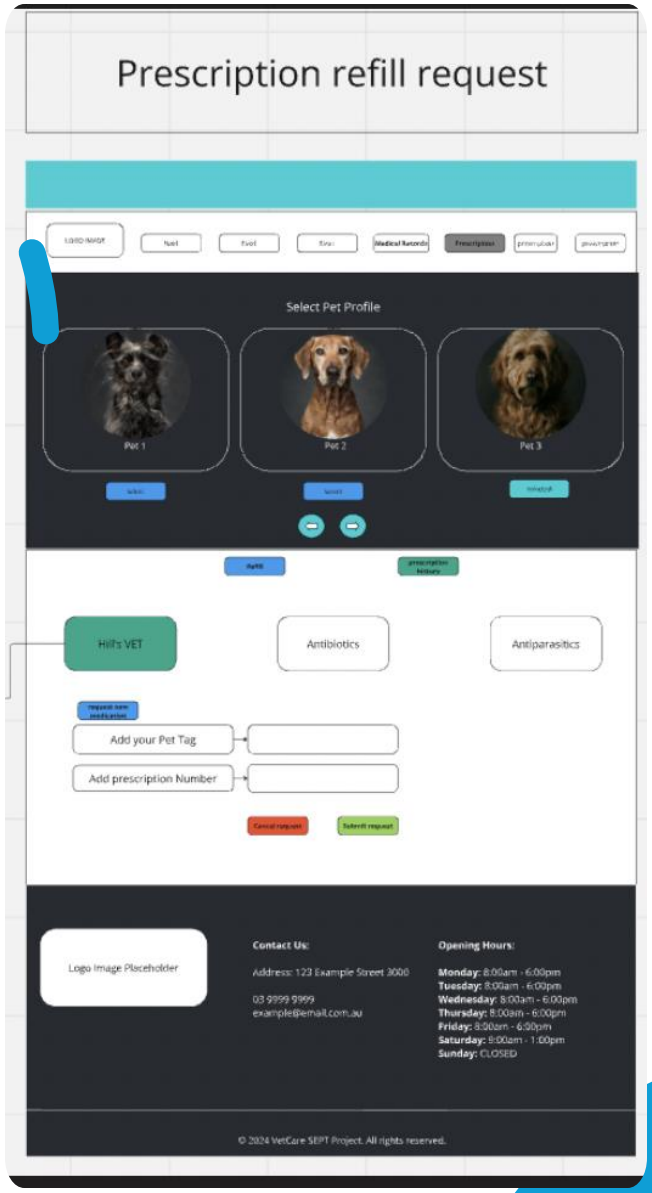


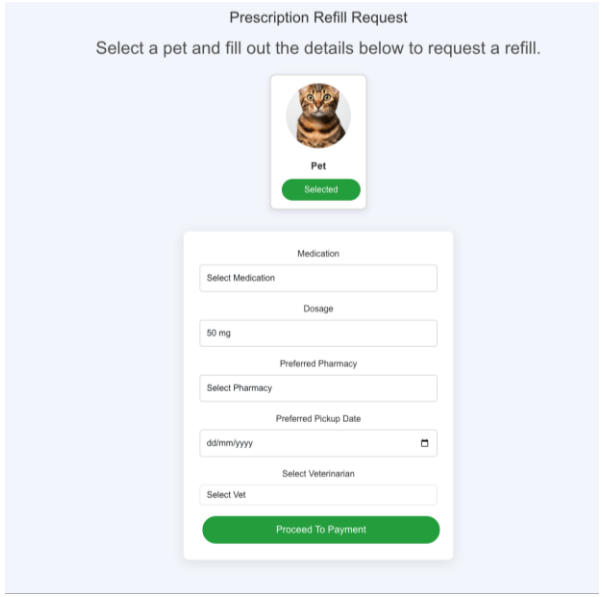


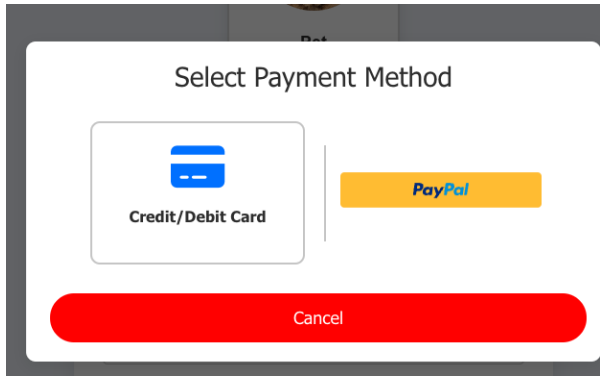
Prescription Refill

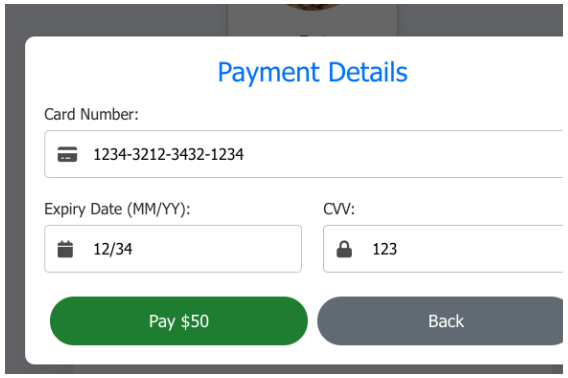
Key features

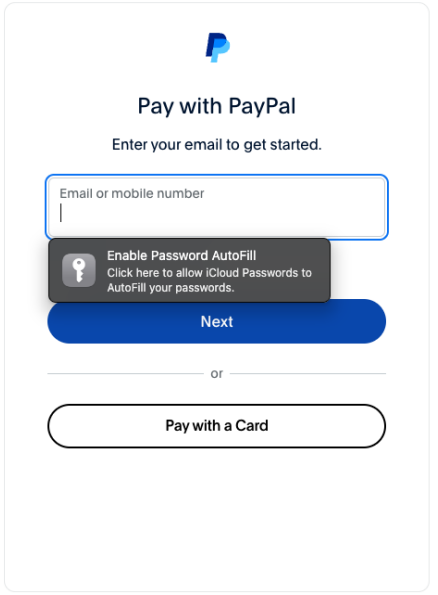
1. Pet Selection
2. Form for Prescription Refill Details
3. Payment Method Selection
4. Credit Card Payment Form
5. PayPal Integration
6. Prescription Request Submission
7. Confirmation




Prescription Refill Request
Select a pet and fill out the details below to request a refill.
Pet
Selected
Medication
Select Medication
Dosage
50 mg
Preferred Pharmacy
Select Pharmacy
Preferred Pickup Date
dd/mm/yyyy
Select Veterinarian
Select Vet
Proceed To Payment


Select Payment Method
Credit/Debit Card
PayPal
Cancel

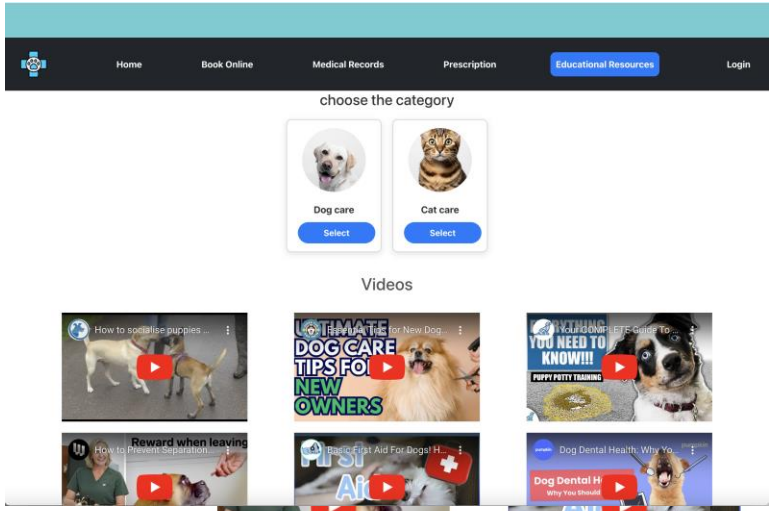

Payment Details
Card Number:
1234-3212-3432-1234
Expiry Date (MM/YY):
12/34
CVV:
123
Pay $50
Back

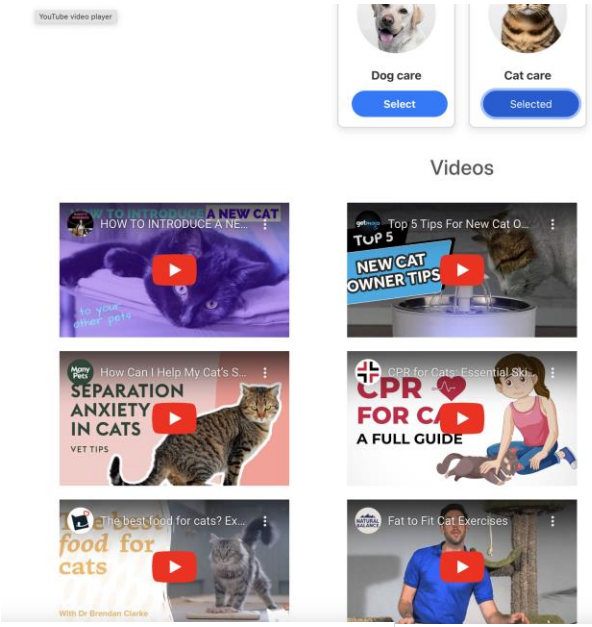

Pay with PayPal
Enter your email to get started.
Email or mobile number
Enable Password AutoFill
Click here to allow iCloud Passwords to AutoFill your passwords.
Next
or
Pay with a Card

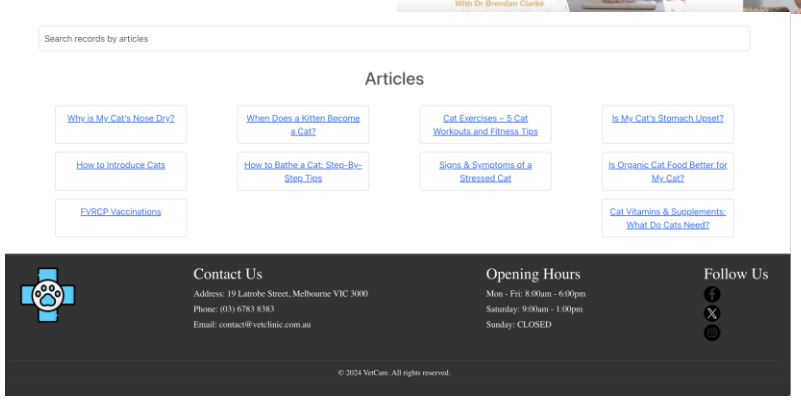
Update

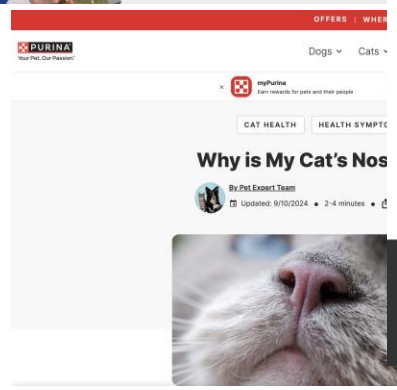
Educational Resource

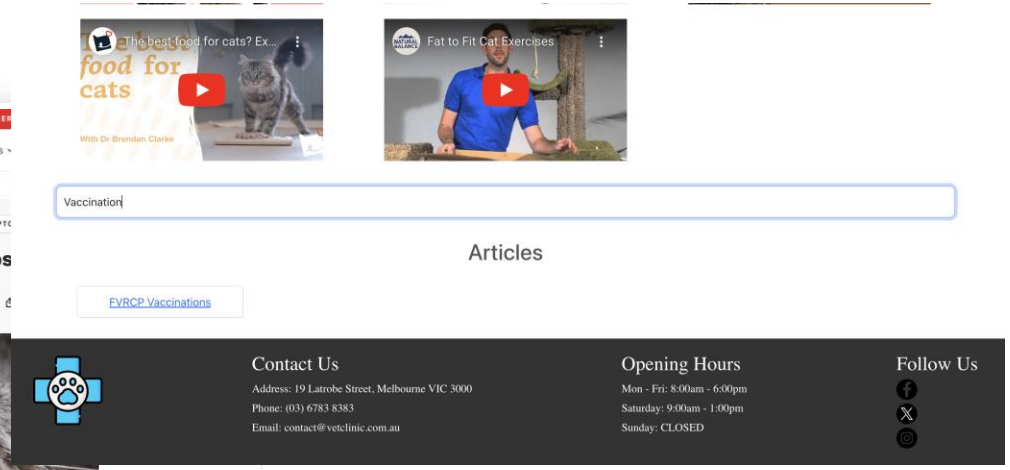
- Pet-related video viewing
- Pet related Article viewing
- Filter the content user wants





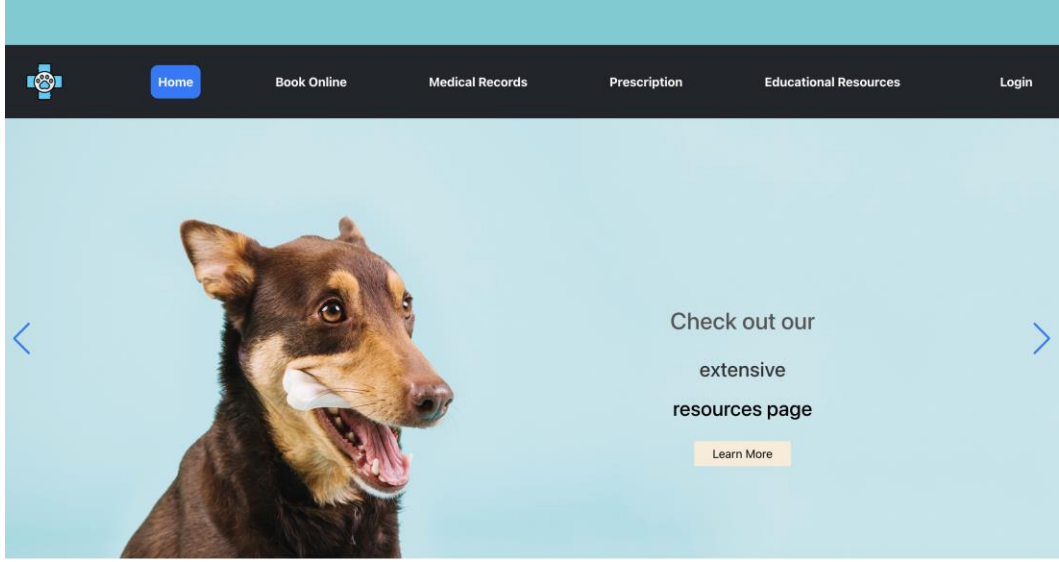


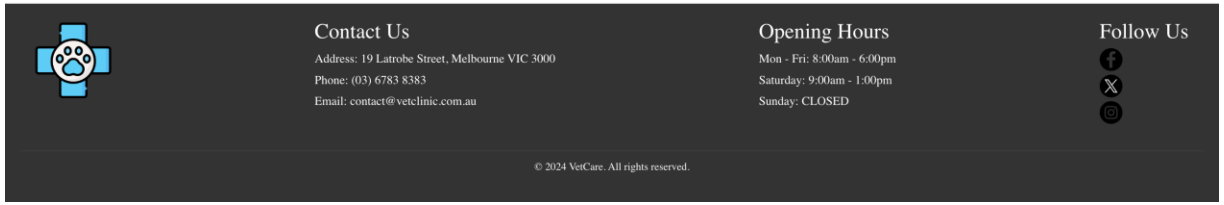


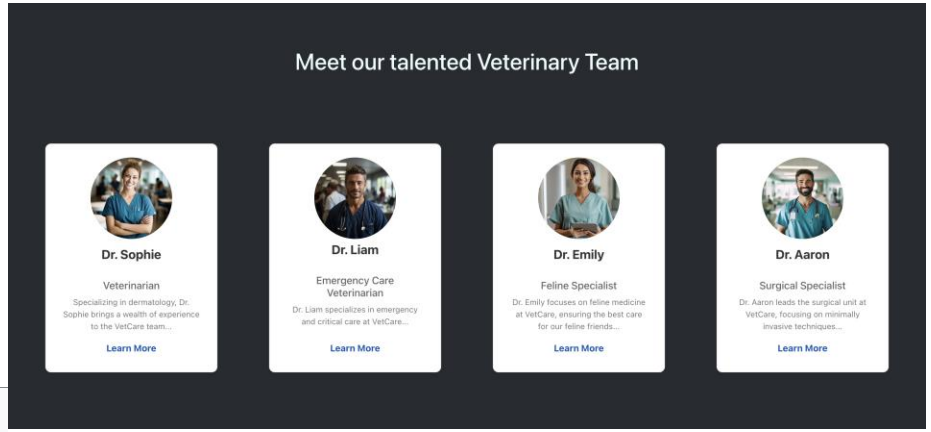


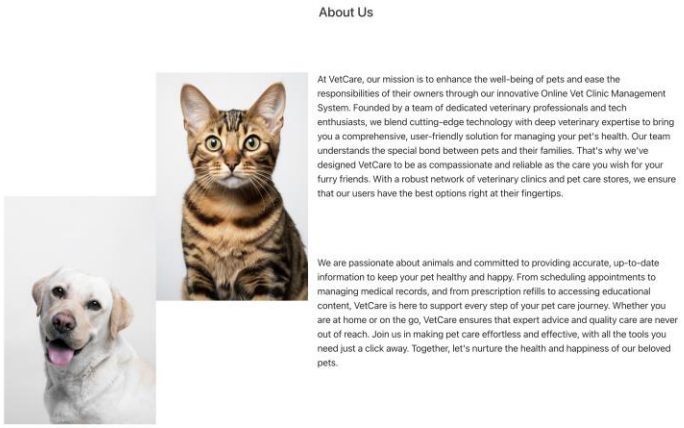
Home Page and Layout

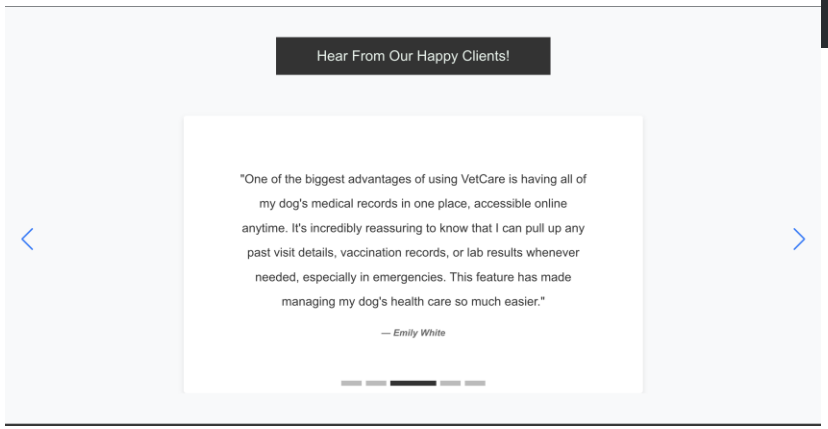
- Navbar and Footer components created and integrated properly within the pages
- Home Slider navigation with links to relevant/ common pages for quick and easy navigation
- About Us section with appropriate UI Design to promote easy navigation
- Vet Team with information and image paths retrieved from SQL database
- Customer Reviews navigation slider using high level JS and CSS Styling





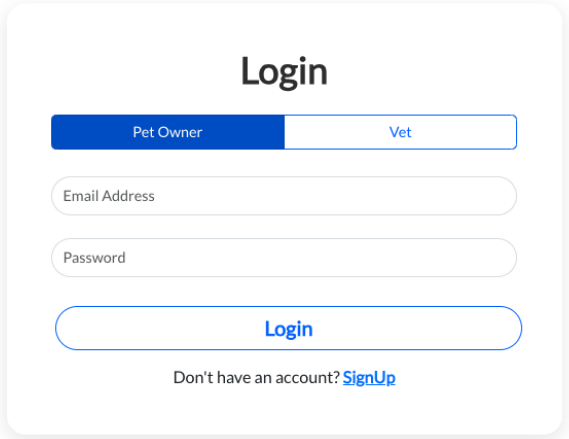


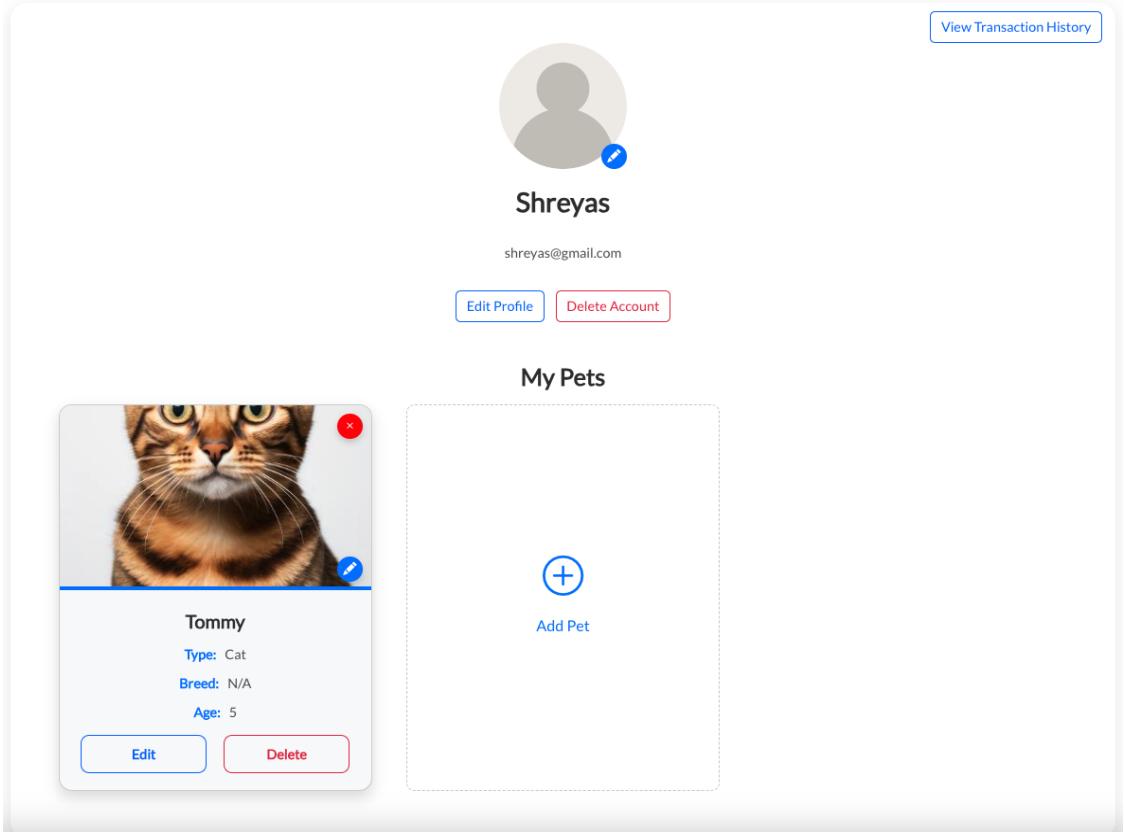


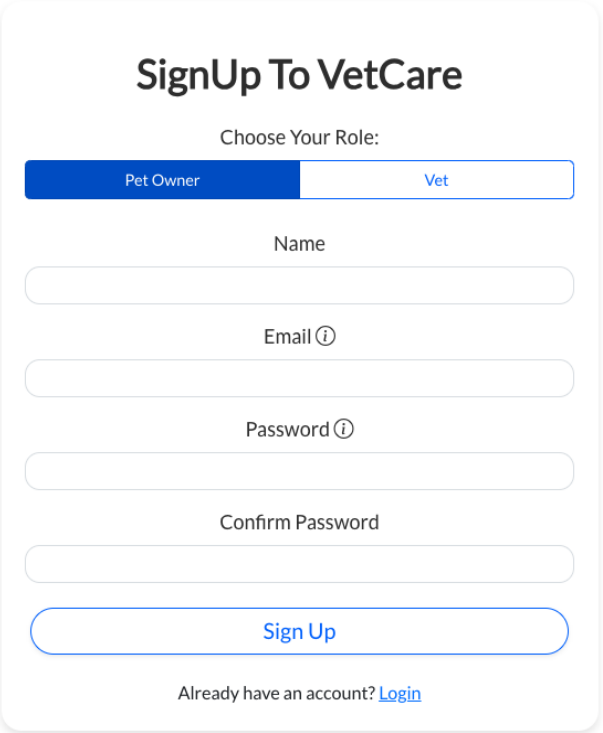


Login, SignUp, User and Pet Profile Management

- Completed and regularly updated the full SRS Document.
- Implemented the CI Pipeline for the project.
- Implemented JUnit and acceptance test cases for the Login, SignUp, Payment and the User and Pet Profile Management features.
- Created the frontend and backend functionality for the Login, SignUp, Payment and the User and Pet Profile Management feature s based on the user stories made for each feature and each task.
- Added all the necessary dependencies and the application properties to get Spring Boot working.







Conclusion

- In conclusion, our journey throughout this project included overcoming technical challenged, continuously adapting to new requirements and feedback from previous iterations, and finally developing a fully functional system.
- In the end, this project has provided us with great insight on many different types of frameworks and means of going from a concept to a fully functioning system.
- Thank you for listening to our presentation!