THE UNIVERSITY OF SYDNEY

School of Information Technologies
Faculty of Engineering & IT

ASSIGNMENT/PROJECT COVERSHEET - GROUP ASSESSMENT

Unit of Study: ISYS2110

Assignment name: Analysis & Design: Group Project: BestMate

Tutorial time: Remote Prac 4 (10 am) **Tutor name:** Qifan Chen

DECLARATION

We the undersigned declare that we have read and understood the *University of Sydney Academic Dishonesty and Plagiarism in Coursework Policy*, an, and except where specifically acknowledged, the work contained in this assignment/project is our own work, and has not been copied from other sources or been previously submitted for award or assessment.

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We realise that we may be asked to identify those portions of the work contributed by each of us and required to demonstrate our individual knowledge of the relevant material by answering oral questions or by undertaking supplementary work, either written or in the laboratory, in order to arrive at the final assessment mark.

Project team members				
Student name	**Student ID**	**Participated**	**Agree to share**	**Signature**
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5.		Yes / No	Yes / No	
6.		Yes / No	Yes / No	
7.		Yes / No	Yes / No	
8.		Yes / No	Yes / No	
9.		Yes / No	Yes / No	
10.		Yes / No	Yes / No	

Background and Motivation:

We went through the phases of system development to design a web system for BestMate Paradise, a virtual organization, that aims to provide boarding services for most popular pet kinds along with food, arrangement of special activities and insurance plans. The requirement gathering phase revealed the usefulness and importance of such a system among our targeted users as follows.

If you own pet(s), please brief below any difficulties that you face managing time for your pet.
12 responses

Managing work with play time

They are very clingy always want attention.

Rambo, my dog, runs around too much, can't find time to chase it

no difficulty

i have to worry about them being alone when i go to work

Ensuring the get the right amount of social intersction

Emergency overseas meetings

Difficult time management

Lacking attentive care

System Design and Layout Decisions:

System design and layout decisions were kept in adherence with the strong laws of usability which means that the prototype produced does not make any user think about its usage and any user can use it without any minimal training on using it.

The organized two to three level hierarchy navigation keeps information flow organized and enforces ease of navigation through the webpages of the website. The mindful use

of tooltips, which are labels that pop up when users hover over the icon, checks for the ease of usability of icons in the website. Use of customer feedback forms across the different pages of the web system is apt to ensure to not miss out on any customer concerns or complaints for the business. Succinct feedback system builds rooms for further improvements. Booking forms and registration, login systems are also mindfully organized.

In this way, the prototype produced leverages the HCI theory to inculcate focus on the design of computer technology and, in particular, the interaction between humans (the users) and computers.

Targeted users:

1. Business people:

   This population tends to have a tight working schedule and may occasionally need to go on a work trip. We can therefore fill the gap and ensure their pets get sufficient care while they are not around.

   Additionally, these populations may also want some of our fancy facilities which they cannot acquire at home such as swimming pools or playgrounds for pets. They usually have the money to pay for them.

2. Shift workers:

   These populations have an irregular working schedule which means they may have a different biological clock from their pets. Pets can be interrupted while they need

proper rest for the next work shift. In this case, they can send their pets to our hotel to ensure their working performance.

3. Family travelers:

Sometimes, family members want to go on a long-distance vacation and bringing a pet with them can be hard. They can use our service to make sure their pets are taken care of and view daily feedback from the caregivers via online platforms.

4. Chronic condition patients:

Patients with chronic health conditions may occasionally need to go to the hospital for treatments. Meanwhile, they are not able to take care of their pets. Therefore, they can purchase services from us to make sure both their pets and themselves are under quality care.

Survey Outcomes:

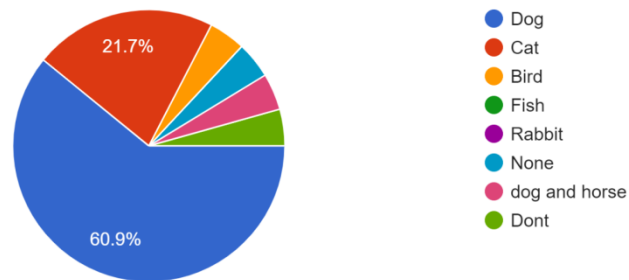Are you willing to send your pet to a hotel which is specially designed for pets?
(23 条回复)

Yes
No

87% 13%
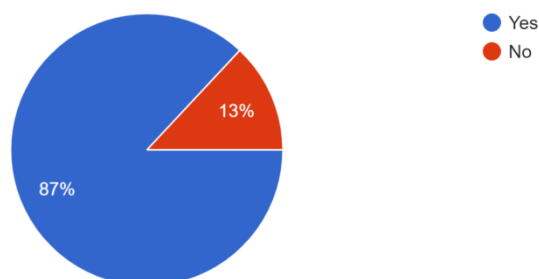
Based on the results, we can see that most of the respondents are willing to use a pet

hoteling service. Therefore, we actually can fulfill their needs in this market.

What kind of pet do you own?
(23 条回复)

From this question, we identify the most popular kinds of pets and therefore can coordinate our website content based on that. Since dogs and cats are the most dominant ones, we will majorly focus on service to these two types.

On a scale of 1-5, how much do you find it easy to manage the relationship between work and looking after your pet?
(23 条回复)
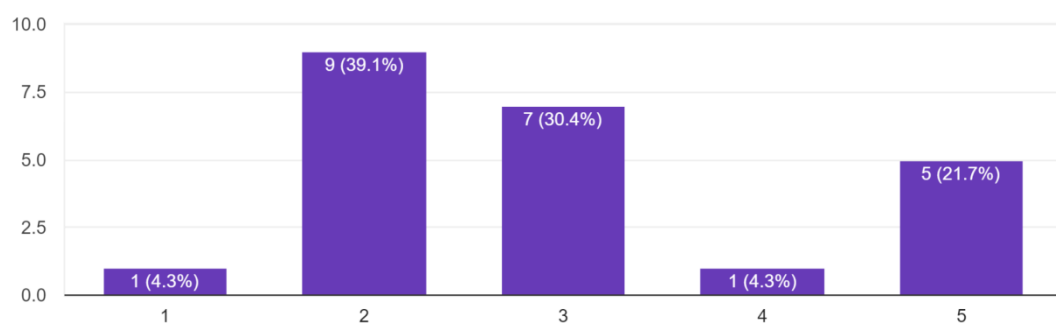
From this graph, we can learn that quite a few people do encounter difficulty taking care of pets during their life. This also illustrates an opportunity for us to offer support and provide reasonability of our business.

What is your biggest concern about a pets hotel?
(23 条回复)
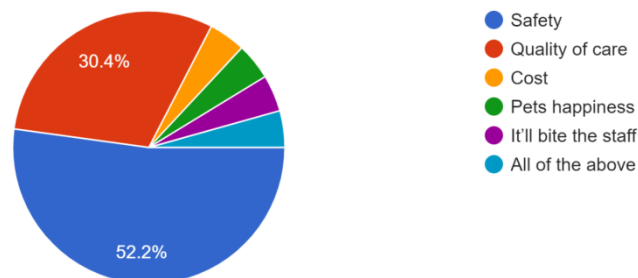
From this question, we can derive the most concerned issues customers have about pet caring business. We can then provide counter strategies to earn more trust from customers and gain competitive advantages.

Have you ever used any of the pet boarding services?
(21 条回复)
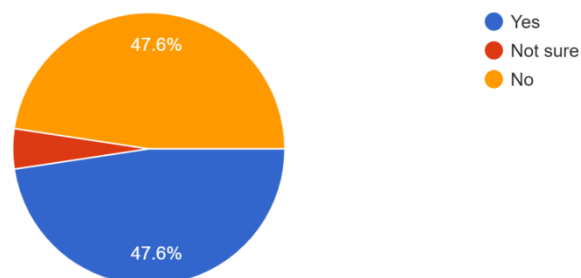
This question basically illustrates a market which we can fulfill. Since nearly half of the respondents have never used the service, we can regard them as potential future customers and improve our business further.

Functional requirement:

1. Login through unique id:

Description: in order to access the service, each user should have a   unique

account and login to the system. This functionality is necessary for the following

transaction processing and order management.

2. Display facilities and food of pets:

Description: facilities and food menu should be presented on the website in order

to help customers understand our service and attract their interest.

3. Make booking for hotel room:

Description: orders can be made by users depending on their preferred available

activities and specific requirements. This step is the major focus of our service

process which the transactions initiate.

4. Make payment via different methods:

Description: different options are available for customers to make the purchase. The

monetary flow occurs within this function.

5. Manage orders made by users:

Description: Once the order is made by the users, they can access their order and

manage it accordingly. This function allows early withdrawals or reviews of

previous orders.

6. Fill in comment forms of the service:

   Description: The user can use the feedback function at any time to give their opinions about our service. This function allows better customer communications and provides more input for future improvement of our system.

7. Rate the service satisfaction of the hotel:

   Description: After the service is done, the user can give different satisfaction rates to the hotel. A brief justification is required in order to get info with higher value.

8. Request real-time feedback from hotel about their pets:

   Description: During the service, users can access their dashboard and request either a video or audio chat with the hotel to check how their pets are doing. This function can increase the interactivity between users and hotel and increase satisfaction.

Non-functional requirements:

1. Multiple languages translation:

   Since people with different cultural backgrounds may use our service, some additional languages such as Chinese, Spanish and Hindi. Further expansion of translation may be added based on user feedback.

2. Secure storage of user account info:

   All relevant information collected from the users should be stored in a secure

database and effort should be made to prevent potential leakage. Trust from customers should be emphasized and ensured at all times.

3. Design should be consistent in portable version:

   The layout of the system should be transportable to a mobile device. Same info and convenience should be provided for users with a mobile device and any inconsistency should be detected and avoided.

4. Availability should be 24/7:

   The site should be open for 24/7 in case of any emergency orders. Customers with long-term health issues may need support during the night and we may not want to lose these populations.

5. Visualization of the sites:

   Pet hotels can be hard to introduce by plain texts, therefore pictures and videos may be better sources of information. While providing more explanation to the users, they can also improve the overall readability and design of the websites.

Modelling and Design:

1. The landing page/home page ensures easy navigation to all other sections within the same page like Featured, Arrivals, Reviews and Blogs section, and all other web pages in the website including About us, Our Services, contact us, FAQ, Privacy

Policy, Sitemap, Booking form, Feedback form and Dashboard.

2. The About us section has a sub-menu linking Our team, Motivation and Analysis & Design pages as shown below.
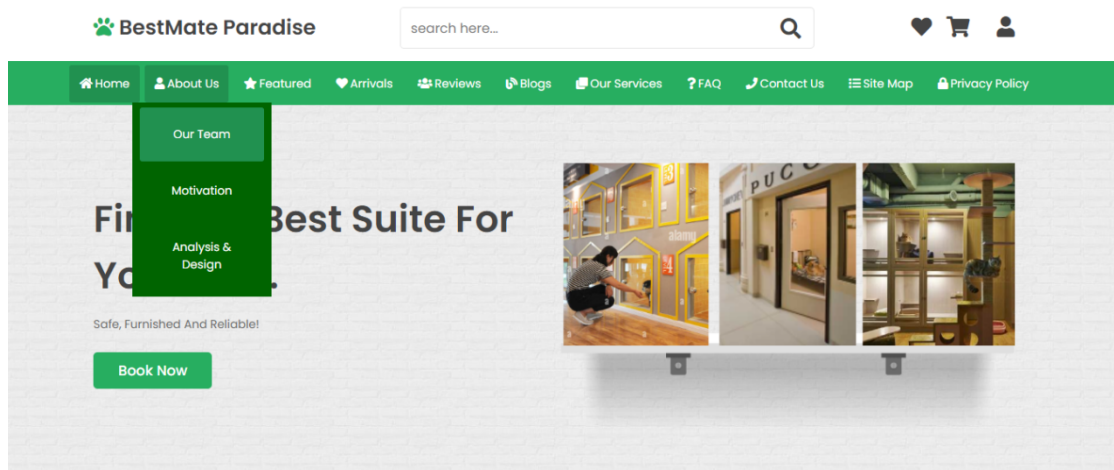
3. Our Services section links to three submenus namely Pet Suites, Pet Foods, Pet Activities and Pet insurance to help users navigate to the relevant information accordingly. To achieve a higher level of information organization, the Pet Suites, Pet Foods has further sub-menus like Dog, Cat and Others to cater the particular information accordingly. This is as shown below.
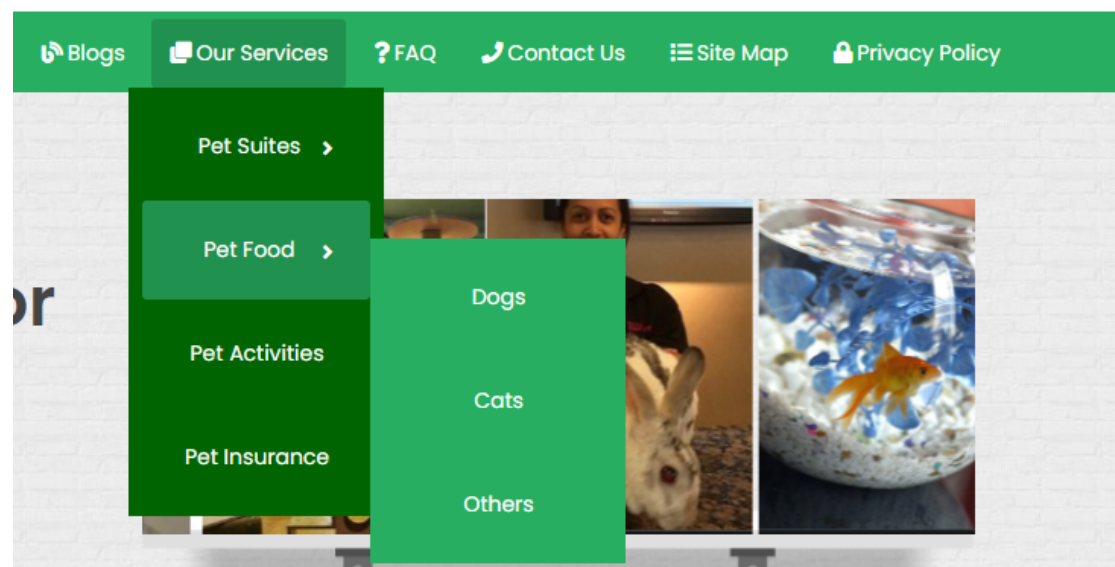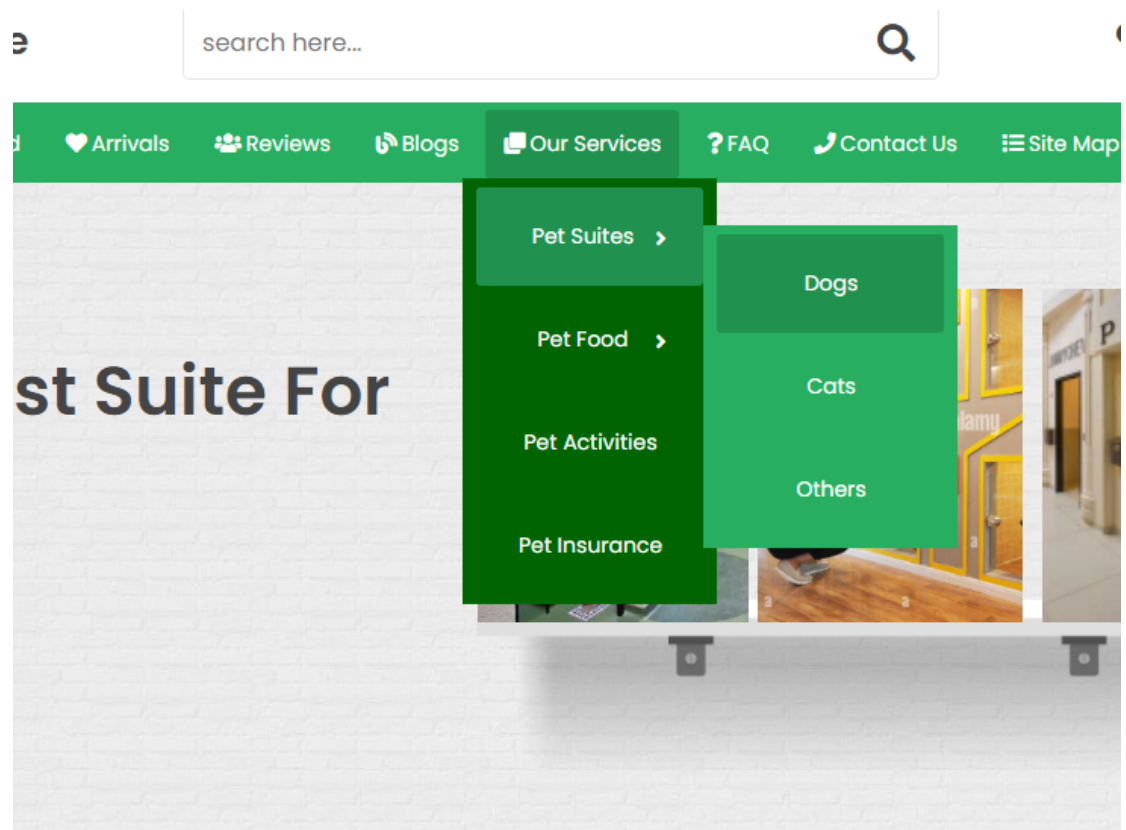
4. The first, second, and third icons as shown below are for feedback, dashboard and
   registration/login functionalities. These icons use tooltips.
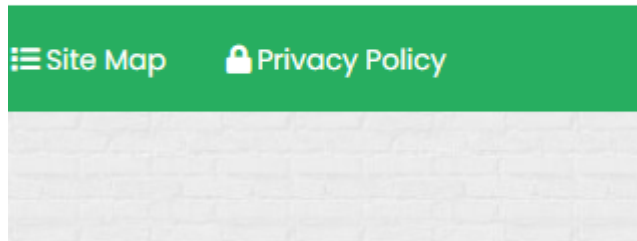
5. Below displays the login page with confirmation alert on successful login.

Similar is the interface for registration or sign up page.

6. Successful login redirects users to the dashboard as shown below. It lists the current

bookings of the user. It also helps the user to manage bookings like update or cancel

booking with the update and cancel buttons beside every booking.

Moreover, it helps the user to check how the pet has been so far using the Check Pet status button and book a virtual meet using the Book a meet button. This will help the user to ensure the pet's well-being in the hotel.

Clicking the second Dashboard icon (uses tooltips) also helps users navigate to the dashboard page.

Your Curent Bookings...

Booking Id	Suite Type	Food Choices	Checkin Day	Duration	Amount		
#1	Dog Suite	Kibble	15/6/22	2 Days	$123	✎	X
#2	Cat Suite	Deli Meats	7/6/22	18 Days	$923	✎	X

Book A Short Meet!

Check Pet Status

7. The feedback form as shown below pops up when the user clicks on the first Feedback icon on the topmost bar. There are links to this feedback form across different pages of the website for efficient feedback trapping methods by the business.
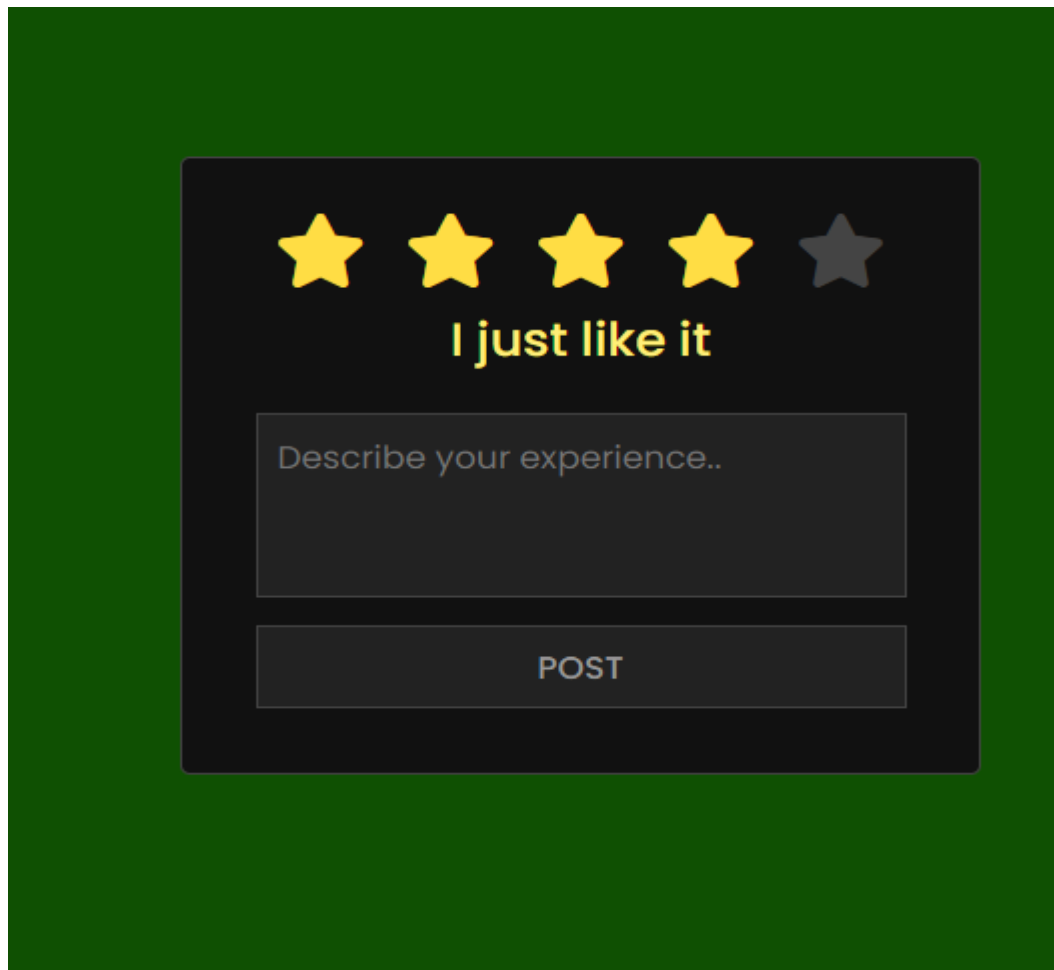
8. The book now button in the homepage lands the user to the booking page (a series of pages) that will help the system record the useful booking information about the users' bookings. The system gives a confirmation alert on successful booking and redirects the user to the homepage.
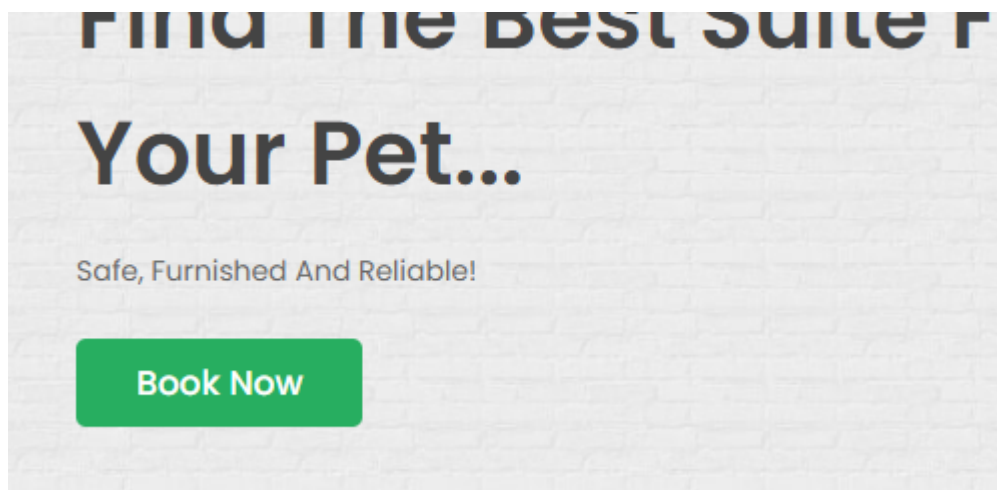
Booking Details

About Pet   More Info.   Billing Address   Card Details

① — ② — ③   ④

Your Pet Kind:

Breed

Gender

Male

Age

NEXT

9. The pages under Our Services section all have the Book Now button to help users book a room for the pet(s) instantly.

🏠 Home   👤 About Us   📋 Our Services   ❓ FAQ   📞 Contact Us   ☰ Site Map   🔒 Privacy Policy

Special Housing For Dogs...

Warm Bed For Warm Sleep

Special Little Body Needs Special Little Place To Spend During The Night. Each Pet Will Have His/Her Own Sleeping Space Without Any Interruption.

Reservation Is Acceptable If Your Fella Has Any 'Personal' Preference.

Daily Disinfection And Sanitation Is In Place To Keep Them Healthy And Happy.

Special Requests Can Be Added After The Order Is Placed, The Enquiry Will Be Processed Within One Working Day.

Book Now

10. Moreso, as shown above the individual pages under Pet suites, Pet Food, Pet Activities and Pet Insurance reveals information about that particular category.

11. Every page of the website has easy navigation to all other pages to ensure easy traversal throughout the web system.

Use case diagram:
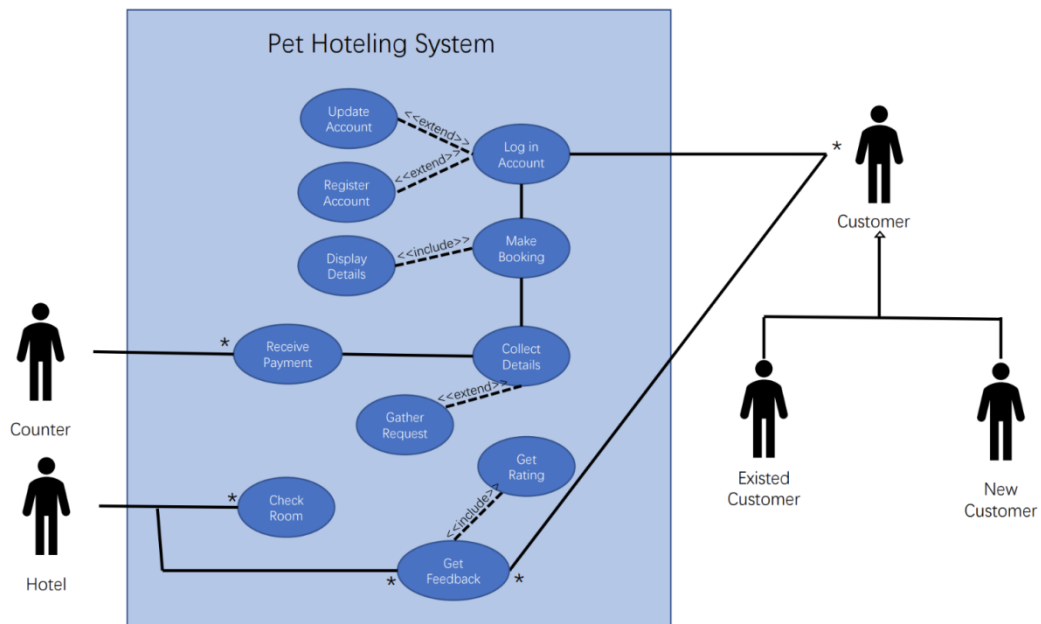
Use case descriptions:

Use Case Name:	Login through unique id
ID:	1
Importance Level:	High
Primary Actor:	Customers
Stakeholders:	Customers, Pet Hotel

Brief Description	Each user should have a unique account and login to the system. This functionality is necessary for the following transaction processing and order management.
Trigger:	Customers visit the website and click the login button.
Association:	Customer, Pet Store
Include:	
Extend:	Update Account, Register Account
Generalisation:	
Normal Flow:	1. The Customer clicks on the user icon. 2. The customer fills in his/her account details. 3. The system checks the details and decides whether the log in succeeds.
Subflow:	3.1. If the details are correct, login process succeeds and the user logs in. 3.2. If the details are wrong, notifying the user about it and remind him/her to reset using email if necessary.
Alternate Flow	1. If the customer does not have an account, jump to register.

	2. If the customer forgets his/her password, use the email address to reset.
Pre-condition:	The Customer has a valid account in our database.
Post-condition:	Customers can make a booking, manage their orders and give us feedback.

Use Case Name:	Display facilities and food of pets
ID:	2
Importance Level:	Medium
Primary Actor:	Customers
Stakeholders:	Customers, Pet Hotel
Brief Description	Facilities and food menu should be presented on the website in order to help customers understand our service and attract their interest.
Trigger:	Customer clicks on the suite/food/special activity/insurance links.
Association:	Customer, Pet Store

Include:	
Extend:	
Generalisation:	
Normal Flow:	1. The Customer clicks the Our Service icon. 2. The customer selects among suites, food, activity or insurance info they want to view. 3. The customer is shown with related info and chooses whether to make a booking or not.
Subflow:	3.1 If the customer selects suites or food info, show further division among dogs, cats or others.
Alternate Flow	
Pre-condition:	No.
Post-condition:	The customer is informed about our service content and ready to book orders.

Use Case Name:	Make a booking
ID:	3

Importance Level:	High
Primary Actor:	Customers
Stakeholders:	Customers, Pet Hotel
Brief Description	The client makes a booking depending on their pets type and special requests and is ready to pay.
Trigger:	Customer clicks on the book now button.
Association:	Customer, Pet Hotel
Include:	Display details
Extend:	
Generalisation:	
Normal Flow:	1. The Customer enters the booking page. 2. The customer fills out the details. 3. The order is booked.
Subflow:	2.1. The customer fills out the pet details. 2.2. The customer fills out the service details.

	2.3. The customer fills out the billing details.
	2.4. The customer fills out the banking details.
Alternate Flow	2.4.1. If the banking details are invalid, give a notice to the customer that the payment failed, but the order will be kept for 15 mins. Within the 15 mins, the payment should be finalized otherwise the order will be cancelled.
Pre-condition:	The user has logged in and has chosen a service.
Post-condition:	After finishing the payment, the customer can send their pets to the store at the booking date.

Group Reflection:

Our group consists of four people which are Tisha Jhabak, Ketong Qiao (Gavin), Taranpreet Singh Walia and Jack. Each person has a different role in designing this system prototype.

Gavin's reflection:

Tisha is the technical lead of our team. She designed the overall structure and style of our website and spent quite a lot of time debugging the site files. She also integrated my pages with hers and created a consistent, user-friendly style.

Meanwhile, I am responsible for the report part and also helped Tisha with the implementation of the websites. I personally created the Service Content pages and several other pages such as privacy policy and contact us. I created a draft report from which we can all edit and give our ideas.

Taran is responsible for the video recording and presentation of the system. He looked over the design of the website and created a comprehensive presentation video of it. Jack participated during the late phase of the project when everything was almost done. As a result, he helped with limited content including proof checking our work. Things would be much better if he had participated from the beginning of the project instead of several days before submission.

Tisha's Reflection:

All the tasks done towards the completion of this project involved four phases starting from requirement gathering, analysis, design to prototyping. Gavin and I started off with the first phase of this project which is requirement gathering by setting the questionnaire and collecting over 20 responses mostly from the targeted users for our particular use case. …

Taran's reflection:

Throughout the project all members were responsible for their own tasks, Tisha the website, Gavin the report and myself the video presentation.

Tisha created and designed the website and was in turn head of the technical aspect of the site. Gavin assisted with the website as well and was also responsible for creating the report. I in turn was responsible for creating the presentation video as well looking over the design of the website.

Jack Reflection:

During the whole project, Tisha, Gavin, Taran and I discussed many things from the basic ideas to the website designing, Tisha and Gavin are more responsible for the web site designing and implementation. After finishing basic structure, we kept updating the basic version.   Then in the report part, we clearly have our own jobs to do. I am responsible for the use case diagram creation and 2 use cases description. Also, we are creating the functional and nonfunctional requirements together. After finishing the first version of the use case diagram, other teammates helped to improve and made it more clear. Last, Taran helped to make the video which shows all the design of our website. All in all, all members are responsible and doing a great job.

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