
Software Requirements Specification

for

Pet's Paradise, Release 1.1

Version 1.1 approved

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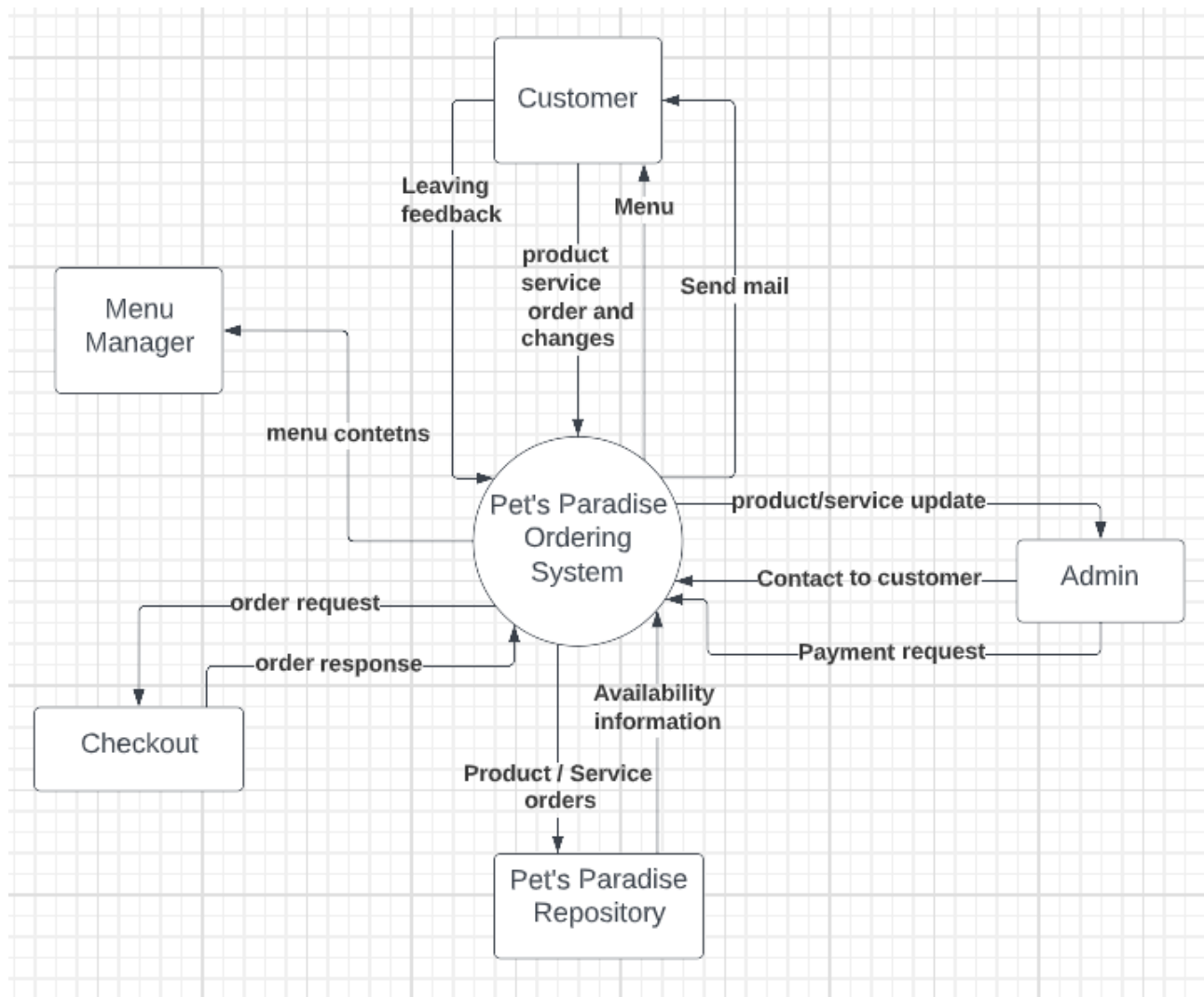
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Revision History

Name	Date	Reason For Changes	Version
Duc Thien, Dang Khoa	06/01/22	initial	1.1

1. Introduction



1.1 Purpose

Recently, the demand for using pet services has been rising sharply. Pet lovers who want to find a reliable and quality pet care center but at a low price for their long-term use of the pet's care services. In order that our pet's paradise services have been released.

1.2 Document Conventions

PSWA: Pet's Services Web Application

1.3 Project Scope and Product Features

The Pet's Paradise will provide customers with a pet care service at affordable prices for everyone, especially students. A detailed description is available in the Pet's Services Web Application Vision

and Scope Document [1], along with the features that are scheduled for full or partial implementation in this release.

1.4 References

1.  Vision and Scope

2. Overall Description

2.1 Product Perspective

The Pet's Service Web Application is an ordering system that aims to provide a reasonable price for everyone. The context diagram in Figure 1 illustrates the external entities and system interfaces for release 1.0. The system is expected to evolve over several releases, ultimately connecting to the Internet ordering services for several shop locations and to credit and debit card authorization services.

2.2 User Classes and Characteristics

Customer (favored)	A customer is a person who wants to use the website to book a service or buy a product or learn more about their pets by reading blogs. There are about 200 potential Customers, of which 50 are expected to use the PSWA an average of 3 times per week each. Customers will sometimes book a service or buy a product at the same time. An estimated 60 percent of orders will be placed using the corporate Internet, with 40 percent of orders being placed from home or by smartphone or tablet apps.
Administrator	The Administrator is a shop employee who establishes and maintains daily menus of the product available from the shop. Some menu items may not be available for purchase. The Administrator will also define the shop discount. The Administrator will need to edit existing blogs and menus periodically.

2.3 Operating Environment

- OE-1: The PSWA shall operate correctly with the following web browsers: Microsoft Edge (all versions); Firefox (all versions); Google Chrome (all versions); and Apple Safari (all versions)
- OE-2: The PSWA shall operate on a server running the current corporate-approved versions of Ubuntu and Tomcat Server.
- OE-3: The PSWA shall permit user access from the corporate Intranet, from a VPN Internet connection, and by Android, iOS, and Windows smartphones and tablets.

2.4 Design and Implementation Constraints

- CO-1: The system's design, code, and maintenance documentation shall conform to the *Process Impact Intranet Development Standard, Version 1.3* [2].

- CO-2: The system shall use the current corporate standard Oracle database engine (MySQL)
- CO-3: All HTML code shall conform to the HTML 5.0 standard.

2.5 Assumptions and Dependencies

- AS-1: The website is open for booking services, and buying products on business days.
- DE-1: The operation of the PSWA depends on changes being made in the Payroll System to accept payment requests for products, and services ordered with the PSWA.
- DE-2: The operation of the PSWA depends on changes being made in the Product Inventory System to update the availability of items as the PSWA accepts orders.

2.6 Business Rule

Business Rules Pet's Paradise and Customer Support System

<i>ID</i>	<i>Rule Definition</i>	<i>Type of Rule</i>	<i>Static or Dynamic</i>	<i>Source</i>
BR-1	Reply to the message of the customer as soon as we can to explain their problem and make a good impression.	Fact	Dynamic	Admin
BR-2	The Opening time of the store must be from 9:00 A.M. to 10:00 P.M. local time, inclusive.	Constraint	Static	Admin
BR-3	Let Customer leave feedback after using a service	Derivations	Dynamic	Customer
BR-4	All the changes must be noticed to Customer via email	Constraint	Dynamic	Admin
BR-5	Give an announcement before 1 week when the store has to be temporarily closed during the holidays.	Fact	Dynamic	Admin
BR-6	Only Admin can access the detail of customers and users	Constraint	Static	Information Security Policy
BR-7	Only Admin can modify existing data	Constraint	Static	Security Policy
BR-8	Only Admin can create new data	Constraint	Static	Admin
BR-9	Customer can create an order	Constraint	Static	Customer
BR-10	Customer can reset their password	Constraint	Static	Customer
BR-11	Blog must be written for optimistic advertising about the store, follow the policy and rule of business.	Fact	Dynamic	Admin
BR-12	Customers must have responsibility about payment of the product or service they have booked.	Constraint	Static	Customer

3. System Features

3.1 Book a Service and buy a product from Pet's Paradise

3.1.1 Description

A Customer whose identity has been verified can book services or buy a product for a pet. A Customer may cancel or change the service or a product that they have ordered.
Priority = High.

3.1.2 Functional Requirements

Order.Placing: Placing an order

- | | |
|-----------|--|
| .Login | The PSWA will confirm Customer's account to login |
| .Error | If user enters an invalid account, the website shall display an error message |
| .Register | The PSWA shall confirm that the Customer is registered. If the Customer is not registered, the PSWA shall give the Customer options to register now and continue placing an order for booking a service or buy a product for a pet in the shop. |
| .Perform | <p>The PSWA shall prompt the Customer for the booking date, and pet's information if it's a service.</p> <p>If the booking date has been passed the current date, the PSWA shall inform the Customer that the booking date is not a valid date. The Customer can either change the booking date or cancel the order.</p> |
-

Order.Menu: Viewing the service list and product list

- | | |
|-------------|--|
| .Display: | The PSWA shall display a list of services and products each on its page for the Customer to choose. |
| .Available: | <p>The list for that specified pet shall display services that are available for the customer to place an order.</p> <p>The list for the specified pet shall display that pet product category for the Customer to place in the order.</p> |
-

Order.Ordering: Ordering multiple services and products

- | | |
|------------|--|
| .Multiple: | <p>The PSWA shall permit the user to order multiple identical services</p> <p>The PSWA shall permit the user to order multiple identical products, up to the fewest available units of any item in the list to place in the order.</p> |
|------------|--|
-

Order.Confirm: Confirming an order

- | | |
|------------|--|
| .Display: | The PSWA shall display the item that has been ordered, individual product prices and service prices, and the payment amount calculated per product items and services. |
| .Confirm: | The PSWA shall show the customer information about the order. |
| .Response: | The Customer can confirm, edit, or cancel the order. |
| .More: | The PSWA shall let the Customer order additional product or service for the same or for a different date. |
-

Order.Checkout: When the Customer has confirmed the order, the PSWA shall do the following as a single transaction.

- .Store: Assign the next available order id to the shop and store the order with status of "1".
- .Mail: Send an email message to the Customer with the order and Payment information.
- .Center: Send an email message to the Shop employees with the order information.
- .Failure: If any step of Order.Checkout fails, the PSWA shall roll back the transaction and notify the user that the order was unsuccessful, along with the reason for failure.

Order.Pay: Order payment

- .Method: When the Customer indicates that he is done placing orders, the PSWA shall ask the user to select a payment method.
-

3.2 Create, View, Modify and Delete service

3.2.1 Description

Admins with verified accounts can create, view, modify, delete services to suit each customer's pet.

3.2.2 Functional Requirements

Services.Login:

- .Login The PSWA will confirm Admin's account to login
 - .Error If Admin enters an invalid account, the website shall display an error message
 - .Register The PSWA shall confirm that the Admin is registered. If the Admin is not registered, the PSWA shall give the Admin options to register now and
-

Service.Create services

- .Display The PSWA will display the input place to add services for the Admin.
 - .Perform The PSWA shall permit the Admin to create a new service.
 - .Error If Admin enters an already existed service, the website shall display an error message.
 - .Error If Admin forget to enter a service's details, the website shall display an error message.
 - .Success The PSWA will display successful notification.
-

Service.View services

.Display	The PSWA will display the list of services on its page for the Admin.
.Review	The Admin can check all of the services that are currently available in the shop.
.Available	The list for that specified service shall display service's details of that service.

Service.Modify services

.Display	The PSWA will display the list of services on its page for the Admin to edit.
.Perform	The PSWA shall permit the Admin to modify the information of all of the already existed services.
.Success	The PSWA will display successful notification.

3.3 Create, View, Modify and Delete product**3.3.1 Description**

An admin whose identity has been verified can add, modify and delete products.

3.3.2 Functional Requirements**Manage Products.Login**

.Login	The PSWA will confirm admin's account to login
.Error	If admin enters an invalid account, the website shall display an error message or in case admins forget their password they can reset their passwords.

Manage Products.Add

.Display	The PSWA shall display a form of products that admins added in order easy to manage.
.Perform	Admin may add more products.
.Success	A system will display successful notification
.Fail	A system will display unsuccessful notification due to that product can be out of stock

Manage Products.View

.Display:	System will display all the products that have been added.
.Review	Admin can review all products that have been added in the form to manage all .

Manage Products. Modify

.Display:	System will display all the products that have been added.
.Review	Admin can review all products that have been added in the form to manage all .
.Perform	Admin may update the products in the form management.
.Success:	A system will display successful notification
.Fail	System will display error message

Manage Products. Delete

.Display:	System will display all the products that have been added.
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.Review	Admin can review all products that have been added in the form to manage all .
.Perform:	Products are no longer available and will be removed from the admin dashboard.
.Success:	A system will display successful notification.
.Fail	System will display an error message maybe the products are out of stock.

3.4 Create, View, Modify and Delete blog

3.4.1 Description

Admin with verified personal accounts can create, modify, and delete blog content.

Customers can view the blog through the landing page.

3.4.2 Functional Requirements

Create.Create a blog information:

.Login:	The system will confirm the admin's account to log in.
.Perform:	Admin will input the blog content after their first injection
.Submit:	Admin will submit the information into admin blog page

.Edit: View and edit blog's content:

.Choose:	Admin will choose the Edit function
.Review:	Admin will input the blog's ID
.Perform:	Admin will update the blog's content by replace the old content or add new content
.Submit:	Admin will submit the content into blog management

.Delete: Delete blog content

.Choose	Admin will choose the Delete function
.Perform	Admin will input the blog's ID
.Choose	Function will show a confirm message
.Fail	Homepage will be shown

.Success	blog will be deleted, a success message will be shown
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3.5 Leave feedback

3.5.1 Description

The user who has ordered the product or service can leave feedback about these.

3.5.2 Functional Requirements

Manage.Login

.Success	The PSWA will confirm the user account to login.
.Error	If the user enters an invalid account, the website shall display an error message or in case the user forgets their password they can reset their passwords.

Order.Ordering: Ordering multiple services and products.

.Multiple	The PSWA shall permit the user to order multiple identical products, up to the fewest available units of any item in the list to place in the order.
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Order.Checkout: When the Customer has confirmed the order, the PSWA shall do the following as a single transaction.

.Store	Assign the next available order id to the shop and store the order with status of "1".
.Mail	If the user enters an invalid account, the website shall display an error message or in case the user forgets their password they can reset their passwords.
.Center	Send an email message to the Shop employees with the order information.
.Error	If any step of Order.Checkout fails, the PSWA shall roll back the transaction and notify the user that the order was unsuccessful, along with the reason for failure.

Order.Feedback: After users have ordered products or services they can give feedback on these products or services.

.Display	Show a rich text editor to users so that they can formate text their feedback and there is a bar that ranged from 1 to 5 that users can click on to rating for the product or services.
.Perform	When the submit button is clicked the feedback will be sent to the server.
.Error	If the server return error a text will be shown on the top of the text editor to show that the feedback is not valid
.Success	If feedback success the user's feedback will be immediately pushed into the feedback section

3.6 Reset password

3.6.1 Description

- Reset password is the action of invalidating the current password for an account on a website and then creating a new one. Passwords can be reset by entering username and pressing the “Reset my password” button. Users will be emailed a new password.

3.6.2 Functional Requirements

ResetPassword.Reset

.Display: The PSWA will display the input place to insert for the User

.Perform: User will type their username and then submit.

.Success: Move to success page, this page will display a notice that an new password has been sent via email

.Unsuccess: The PSWA will display the message "Username is incorrect or does not exist".

ResetPassword.Send

.Display: In the email, The PSWA will display email confirmation with a new password.



Use case Specification

ID and Name:	UC-1 Book a service		
Created By:	Dieu Anh	Date Created:	10/07/2022
Primary Actor:	User	Secondary Actors:	PSWA
Description:	A customer want to book a service		
Trigger:			
Preconditions:	PRE-1. The customer must have account		
Postconditions:	POST-1. The customer logged in successfully.		
Normal Flow:	1.0 Book a single service <ol style="list-style-type: none"> 1. Users login to the system to book a service. 2. User will go to the service page. 3. System will display all the services that are available. 4. Users will select one service. 5. The system will require users to add all the pet's information and description in the form. 6. PSWA confirms order . 7. Users will go to the checkout page. 8. PSWA specifies payment methods. 9. User will select the payment method. 10. User will click finish if he wants to finish 11. PSWA confirms the order and stores it in the database. 12. PSWA sends an email message confirming order details, price. 		
Alternative Flows:	1.1 Order multiple identical services <ol style="list-style-type: none"> 1. PSWA requests a specified number of identical services. 2. Return to normal flow. 1.2 Order multiple services <ol style="list-style-type: none"> 1. PSWA allows users to book multiple services at a time. 2. Return to step 1 of normal flow. 		
Exceptions:			
Priority:	High		
Frequency of Use:	Approximately 300 users, average of one usage per day. Peak usage load for this use case is between 9:00 A.M. and 06:00 P.M. local time.		
Business Rules:	BR-9		
Other Information:	<ol style="list-style-type: none"> 1. PSWA shall be able to cancel the booking service process at any time . 2. PSWA system shall be able to view all orders users ordered within the previous six months . 		
Assumptions:			

ID and Name:	UC-2 Reset Password		
Created By:	Thành tân	Date Created:	7/18/2022
Primary Actor:	User	Secondary Actors:	PSWA

Description:	Customers who use the PSWA and forgot their password and wish to reset their password.
Trigger:	Customer requests to reset their password.
Preconditions:	PRE-1. Customer forgot their password.
Postconditions:	POST-2. User password is reset.
Normal Flow:	2.0 Reset Customer Password <ol style="list-style-type: none"> 1. Users press the forgot password button from the login page to reset their password. 2. The PSWA will display a text box to input their username . 3. After finishing input they will press the reset password. 4. The PSWA will send a new password to their registered email. 5. The PSWA will redirect the user to a page that displays a message that “ A new password has been sent to your email”l . 6. The User can login with the new password that has been sent to their email.
Alternative Flows:	None
Exceptions:	2.0 E1 If the User doesn't exist the PSWA will display a message “Username does not exist!”
Priority:	High
Business Rules:	BR-10, BR-4
Other Information:	-Users can request admin to help them with reset their password.

ID and Name:	UC-3 Leave Feedback		
Created By:	Diệu Anh	Date Created:	7/18/2022
Primary Actor:	User	Secondary Actors:	PSWA
Description:	User want to leave a feedback after using a service		
Trigger:	Click Feedback button in User's order page		
Preconditions:	PRE-1. The customer must have an account. PRE-2. The customer has used the service.		
Postconditions:	POST-1. The customer login successfully.		
Normal Flow:	3.0 Write a single Feedback <ol style="list-style-type: none"> 1. Users login to the system first. 2. User will go to the Order section in User page. 3. Click the feedback button. 4. The system will require users to write feedback content . 5. PSWA will confirm that feedback. 		
Alternative Flows:	None		
Exceptions:	Approximately 300 users, average of one usage per day. Peak usage load for this use case is between 9:00 A.M. and 10:00 A.M. local time.		
Priority:	Low		
Business Rules:	BR-2, BR-3		
Other Information:	PSWA can refuse Feedback if it violates the rule.		

ID and Name:	UC-4 Write Blog		
Created By:	Diệu Anh	Date Created:	7/18/2022

Primary Actor:	Admin	Secondary Actors:	PSWA
Description:	Blog will showed to customer can approach with PSWA brand		
Trigger:			
Preconditions:	PRE-1. Admin is login into PSWA		
Postconditions:	PRE-1. Admin is logged successfully into PSWA with admin role		
Normal Flow:	4.0 Write a blog <ol style="list-style-type: none"> 1. Login with Admin role 1. Admin go to blog section in Admin page 2. System will display data grid view blog and Create blog button 3. System will show the format of blog after being accessed. 4. Fill all the information and write the content of the blog before adding. 5. Show a box : “Adding Successful”. 6. PSWA confirms the blog and store in database. 		
Alternative Flows:	None		
Exceptions:	The blog already existed		
Priority:	High		
Business Rules:	BR-11, BR-3		
Other Information:	PSWA will be introduced widely by blog.		

ID and Name:	UC-5 Buy a product		
Created By:	Diệu Anh	Date Created:	7/18/2022
Primary Actor:	User	Secondary Actors:	PSWA
Description:	Buying product		
Trigger:			
Preconditions:	PRE-1. User logged into PSWA		
Postconditions:	POST-2. User need to buy minimum 1 product		
Normal Flow:	5.0 Buying product <ol style="list-style-type: none"> 1. Login into PSWA 2. Go to Shopping page 3. Take product into Cart 4. Checkout product in Cart Page 5. Choose Payment method 6. Click Finish to confirm checkout 7. PSWA confirms the order and store in database 8. PSWA sends an email message confirming order details, price. 		
Alternative Flows:	1.1 Buying product before login <ol style="list-style-type: none"> 1. Go to shopping page 2. Choose product 3. PSWA will direct access to Login page 4. Return Normal flow 		
Exceptions:	Fail in storing database.		

Priority:	High
Business Rules:	BR-4, BR-9
Other Information:	Customer can contact with store to cancel their order

4. Non-functional requirements

4.1 External Interfaces

4.1.1 User Interfaces

- UI will be displayed in English

4.1.2 Communication Interfaces

- All requests to the server must be using HTTPS

5. Data Requirements

5.1 Logical Data Model

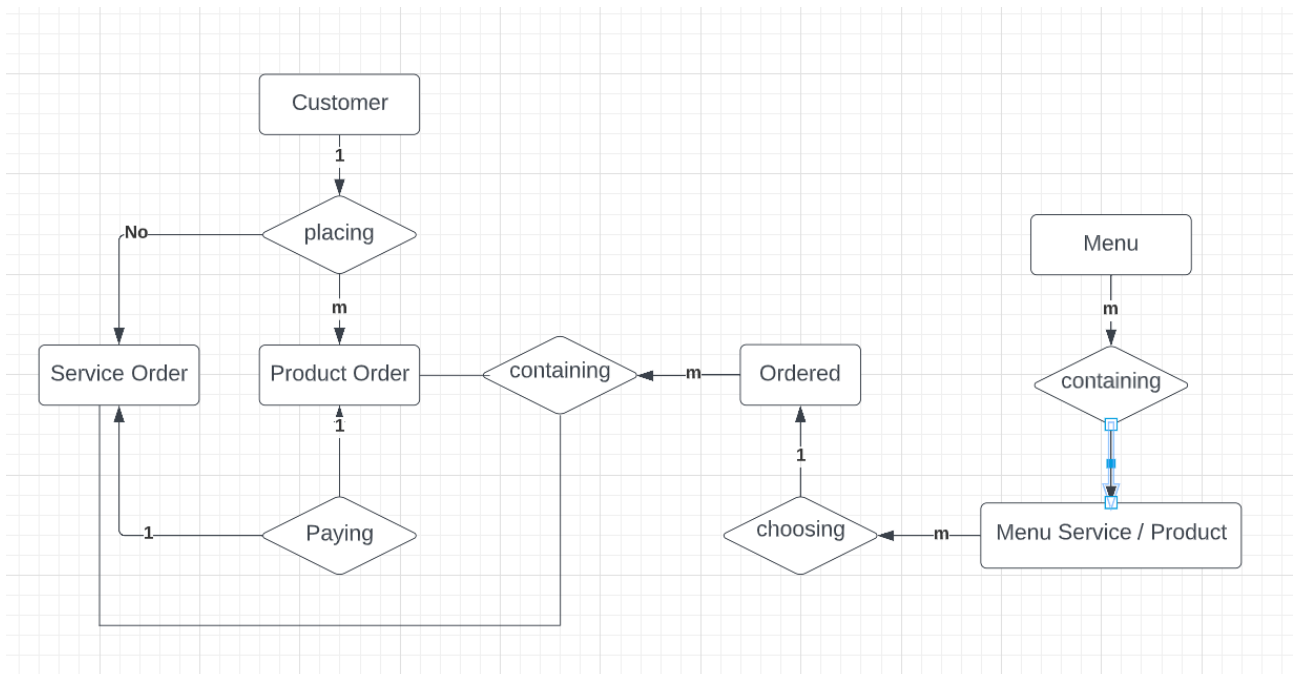


Figure . Partial data model for release 1.0 of the PSWA.

5.2 Data Dictionary

Data Element	Description	Editable	Mandatory	Composition or Data Type	Length	Values
username	the name that use to login	No	Yes	string	3-16	N/A

password	user's password to login to server	Yes	Yes	string	8-24	N/A
name	name of user use to create account	Yes	Yes	character	24	N/A
email	email address of the customer who book a service	Yes	No	string		N/A
phone	telephone number of the customer use our service	Yes	Yes	integer	10	N/A
services	all the services that are available on the website	Yes	Yes	+ services' id + service's name + service's price		N/A
services' id	unique id to identify each service	No	No	string		N/A
service's name	each service has name	No	No	character		N/A
service's price	a price that fits for each service	No	No	float, int		N/A
booking services	details that customers book to use services	Yes	Yes	+ booking's time + services' name + pet's info		N/A
booking time	time that user book the service	Yes	Yes	Date		N/A
services's name	the service type user book for their pet	Yes	Yes	String		N/A
pet's info	information belongs to that pet	Yes	Yes	String		N/A
products	all the categories that available in our pet's care	Yes	Yes	+ product's name + product's categories + product's prices + product's id		N/A
products's name	product name user buy	No	No	String		N/A
product's categories	product type that user choose	No	No	String		N/A
products' prices	prices that fit for products	No	No	int, float		N/A
product's id	each price for product has unique id	No	No	String		N/A
blogs	blogs for pets	Yes	No	+ blog's id + blog's name + author + author's avatar + public date + blog's content		N/A
blogs's id	each blog for product has unique id	No	No	String		N/A

blogs' name	name of the blog	No	No	String		N/A
author	who writes the blog	No	No	character		N/A
public date	the date the blogs are posted to forum	No	No	String		N/A
blogs's content	content of blog	No	No	String		N/A
payment amount	total price of an order in VND	No	Yes	numeric, VND		N/A
payment method	how the Customer paying for the order	Yes	Yes	alphabetic	16	payroll deduction, cash, credit card, debit card
quantity ordered	the number of units of each product/service that the Customer is ordering in a single order	Yes	Yes	integer	4	default = 1; maximum = quantity presently in inventory

5.3 Data Integrity, Retention, and Disposal

- DI-1: The PSWA shall retain Individual Patron service and product orders for 6 months following the service's booking date.
- DI-2: The PSWA shall retain menus for one year following the menu date.

6. External Interface Requirements

6.1 User Interfaces

- UI-1: The page should warn users about cookies usage privacy.
- UI-2: Page must have a base font size of 16px, the primary color of the page should be #68A7AD and the base font family for the page is Raleway. The brand logo should be related to pets
- UI-3: The page should be working correctly on any screen size eg. - mobile, pc, tablet. The Navbar should be minimized on tablets and mobiles. The max-width of the page should be 1400px on wide-screen(pc) and fill the page on any smaller devices.
- UI-4: The landing page should have to link to every other page such as services, blog, shopping, about, and contact.
- UI-5: When the user scrolls the page every item should slowly appear.
- UI-6: Modals should be shown at the center of the screen. There is a close button in the modal. The modal should be closed if the user clicks outside of the modal

6.2 Software Interfaces

- SI-1: Customer Inventory System
 - SI-1.1: The PSWA shall transmit the quantities of products and services ordered to the Customer Inventory System through a programmatic interface.
 - SI-1.2: The PSWA shall poll the Customer Inventory System to determine whether a requested product and service item is available.
 - SI-1.3: When the Customer Inventory System notifies the PSWA that a specific product and service are no longer available, the PSWA shall remove that product and service from the menu for the current date.

6.3 Hardware Interfaces

No hardware interfaces have been identified.

6.4 Communications Interfaces

- CI-1: The PSWA shall send an OTP to the user's email or phone every time user wants to change the password or create an account.
- CI-2: The PSWA shall send an email or text message (based on user account settings) to the mailbox to confirm any booking, orders, services, price, and time.
- CI-3: There should be a notification if the users' action is a success or failure.
- CI-4: Feedback, blog posts, and comments shouldn't be accepted in any file except image files. And image files' size shouldn't be bigger than 5MB.
- CI-5: The blog post, feedback, or comments should be valid carefully to make sure that there are no security issues.
- CI-6: There page should use HTTPS instead of HTTP to guarantee security.

7. Quality Attributes

7.1 Usability Requirements

- USE-1: 99% of new users shall be able to successfully order a product or a service without errors on their first try.

7.2 Performance Requirements

- PER-1: The system shall accommodate a total of 400 users and a maximum of 100 concurrent users during the peak usage time window of 8:00 A.M. to 10:00 PM. local time, with an estimated average session duration of 10 minutes.
- PER-2: 95% of webpages generated by the PSWP shall download completely within 4 seconds from the time the user requests the page over a 20 Mbps or faster Internet connection.
- PER-3: The system shall display confirmation messages to users within an average of 3 seconds and a maximum of 6 seconds after the user submits information to the system.

7.3 Security Requirements

- SEC-1: Users shall be required to log on to the PSWP for all operations except viewing services, products, and blogs.
- SEC-2: Only authorized administrators shall be permitted to work with menus.
- SEC-3: The system shall permit customers to view only orders that they placed.

7.4 Safety Requirements

7.5 Availability Requirements

AVL-1: The PSWA shall be available at least 98% of the time between 5:00 A.M. and midnight local time and at least 90% of the time between midnight and 5:00 A.M. local time, excluding scheduled maintenance windows.

7.6 Robustness Requirements

ROB-1: If the connection between the user and the PSWA is broken prior to a new order being either confirmed or terminated, the PSWA shall enable the user to recover an incomplete order and continue working on it.