



FPT UNIVERSITY

FENG SHUI KOI CONSULTING Software Requirement Specification

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1 INTRODUCTION

1/ Product Background

The system helps users choose Koi fish and pond features that match their Feng Shui element. The home page provides information, news, and blogs about Feng Shui and Koi farming. Key features include advice on Koi breeds and numbers based on Feng Shui elements, advice on pond shape, location, and direction, checking compatibility scores between the user's Feng Shui element and the current pond setup, managing a database of Koi fish and pond features, and allowing users to post ads for Koi fish and Feng Shui pond decorations. A dashboard is also available to track statistics on listings and interactions for the admin to manage the system.

2/ Existing Systems

2.1 tracuuthansohoc.com

The Feng Shui Koi Consulting System has referenced the interfaces and structures from tracuuthansohoc.com. We considered the layout of each section on the main page, as well as features such as entering the year of birth to display the user's destiny. These factors helped shape the idea of building a system that is easy to use and intuitive, while also supporting users in finding Feng Shui-related information about Koi fish.

2.2 nenmoc.vn

We also consulted nenmoc.vn to develop the element lookup function of the Koi Feng Shui Consulting System. Specifically, we consulted the method of determining the user's element based on their year of birth. This method is presented in a clear and user-friendly form, which helped us design the element lookup feature for our system. By integrating the same method, we hope to provide users with an easy and effective way to determine their corresponding element in the Five Elements theory.

2.3 fptshop.com.vn

We consulted fptshop.com.vn to study how to display ads as well as filter and sort features. These methods helped us design the interface and user experience for the system, ensuring that users can easily search and interact with Koi fish ads and Feng Shui related products.

3/ Business Opportunities

With the growing popularity of Koi fish farming, the development of the Koi fish market and the growing interest from the community in Feng Shui, this system provides a platform for users to choose Koi fish breeds and design fish ponds that match the Feng Shui element of their destiny. This not only creates

value for users but also potential revenue thanks to the form of posting fish and pond ads (applicable to users who purchase Member accounts).

4/ Software Product Vision

The vision of the Feng Shui Koi Consulting System is to become the leading support tool for users in choosing and caring for Koi fish, and helping them optimize their living space according to Feng Shui principles. The system will provide detailed information and interactive features, making it easy for users to access and use Koi consulting and pond design services.

5/ Major Features

- + Koi breed and quantity advice based on Feng Shui elements
- + Pond shape, location and direction advice
- + Check compatibility points between Feng Shui elements and pond configuration
- + Manage Koi database and pond characteristics
- + Allow posting of Koi fish and Feng Shui pond decoration advertisements
- + Administrator dashboard to track statistics

6/ Limitations and Exclusions

The system does not provide direct advice from Feng Shui experts.

Some features may not be available for free accounts and require users to upgrade to a Member account.

7/ Prioritization of the Features

7.1 High Priority (Must-Have)

Koi breed and quantity advice based on Feng Shui elements

Pond shape, location and direction advice

Check compatibility points between Feng Shui elements and pond configuration

Manage Koi fish database and pond characteristics

Allow Koi fish and Feng Shui pond decoration ads to be posted

Admin dashboard to monitor statistics

7.2 Medium Priority (Nice-to-Have)

Advanced search for fish breeds and pond characteristics.

User comments and reviews on fish breeds and ponds.

User commenting on blog posts

7.3 Low Priority (Nice-to-Have but can be delayed)

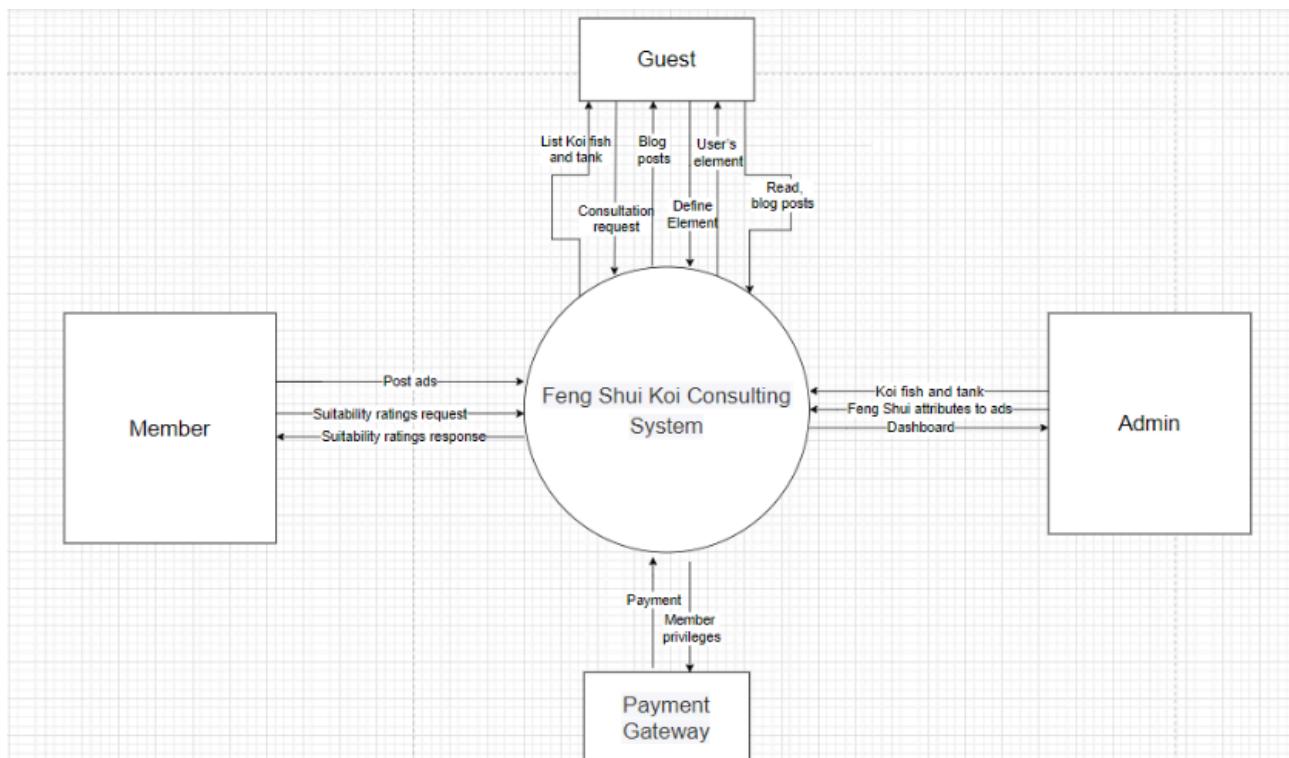
24/7 online support for users.

Email notifications for updates and news.

2 OVERALL DESCRIPTION

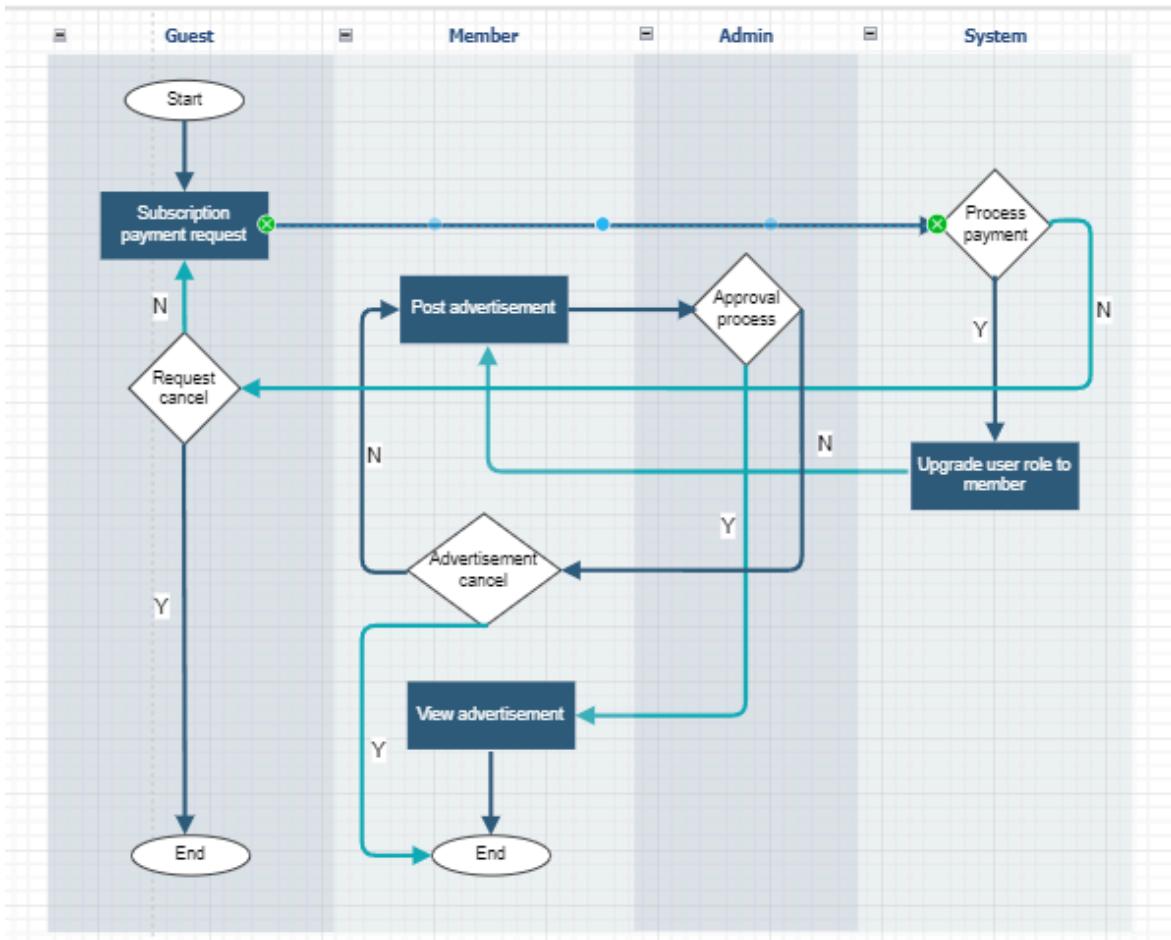
1. Product Overview

The **Feng Shui Koi Fish Consulting System** is a specialized software solution designed to assist users in selecting Koi fish and pond characteristics that align with their personal **Feng Shui** elements (e.g., Metal, Wood, Water, Fire, Earth). The system ensures that users make informed decisions based on their birth element, maximizing harmony and balance in their living environment. This system empowers users to create a balanced environment by aligning their Koi fish and pond features with **Feng Shui** principles, while also offering a platform to post advertisement for **Feng Shui**-related products.



2. Business Process

#	Process Step	Description
1	<i>Subscription payment request</i>	<i>Users pay to purchase a subscription package in the system to use advanced services. Then this request will be sent to the system for processing, if successful the user will be upgraded, otherwise a notification will be sent to the user.</i>
2	<i>Upgrade user role to member</i>	<i>When the payment process is successful, the system will upgrade the user's role and allow the user to use advanced services.</i>
3	<i>Post advertisement</i>	<i>Members can post advertisements about products related to feng shui and Koi fish. These advertisements will then be sent to the admin. If approved, they will be displayed in the system. If not, a notification will be sent to the member.</i>
4	<i>View advertisement</i>	<i>Once approved, the post will be displayed in the system. Members have full control over their posts such as adding, editing, and deleting.</i>

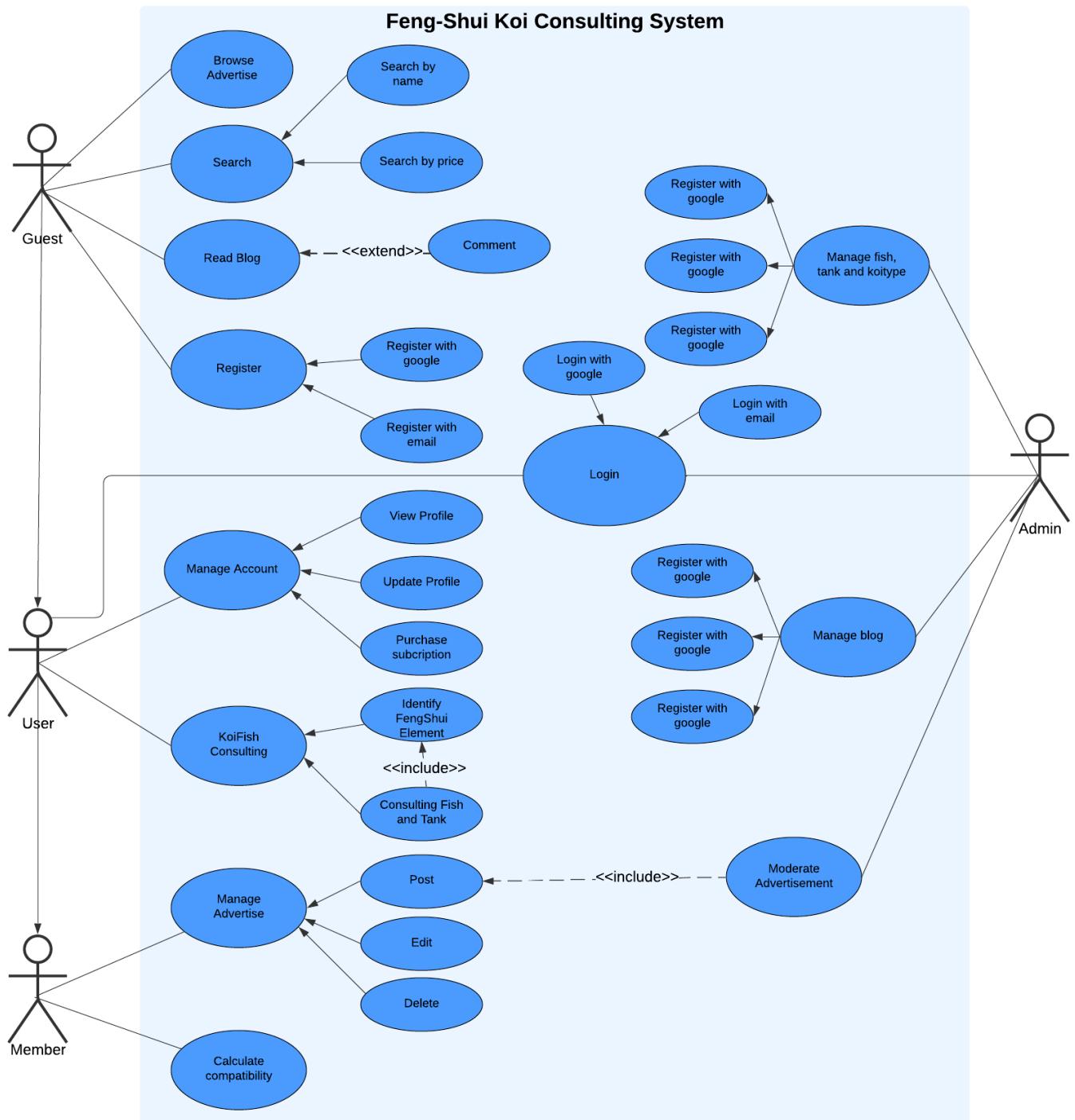


3 USER REQUIREMENT

3.1 Actor

#	Actor	Description
1	Guest	These are visitors who have not registered on the platform. They can browse through the site and view the blogs as well as advertisements but can not comment and use the mainflows of FengShuiKoi Consulting System (consulting, calculate compatibility,...).
2	User	Registered users are individuals who have signed up on the platform, they can comment on blogs, modify their profile, and find out what Koi fish and tank is compatible with their Feng Shui Element based on their date of birth.
3	Member	Members are registered users who buy description plans and get more benefits like posting advertisements, calculating compatibility scores, using open AI ,...
4	Admin	Admins have full control over the platform. They can manage koi fish, tanks,blog database; moderate advertisement; write and manage blog.

3.2 Use Case



a) Descriptions

ID	Use Case	Actors	Use Case Description
UC-01	Register	Guest	The guests can sign up and create an account to login to the Feng Shui Koi Consulting System. The new account will immediately gain User's role.
UC-02	Register with Google	Guest	The guests can sign up with Google/Facebook and the new account will immediately gain User's role.
UC-03	Login	Guest, User, Member, Admin	All users can login into the website with the account they have created
UC-04	Logout	Guest, User, Member, Admin	All users can logout off the website after they have completed their session and have their login token deleted.
UC-05	Read Blogs	Guest, User, Member	All users can read blogs and news about KoiFish and things related with it on the website.
UC-06	Search Blogs	Guest, User, Member	All users can search for the blogs by title
UC-07	Shopping	Guest, User, Member	All users can go to the Advertisement section and see the advertisements of Koi Fish and related items that the members post on the website.
UC-08	Modify Profile	User, Member	The users and members can modify their profile (change information, profile picture,username, password,..)
UC-09	Koi Fish Consulting	User, Member	The users and members can enter their name, birth year and then get the type of Koi Fish that suit their element, as well as what type of fish tank, quantity, direction, etc...

UC-10	Buy Description	User	The users can buy description plans and get upgraded to Member roles to get more benefits.
UC-11	Post advertisements	Member	The members can post advertisements of the items that are related to Koi Fish(fish, tank, food, decorations,...) and put their contact information so other users can contact and buy. Their advertisement will be moderate by Admin and decide if it is valid or not to put on the Advertisement site.
UC-12	Compatibility score	Member	The members can calculate the compatibility score between their Feng Shui Element and the Koi Fish/Tank they want to see.
UC-13	Open-AI	Member	The members can use AI-powered chat assistance for Koi Fish consulting and general inquiries.
UC-14	Manage Koi Fish and Tank database	Admin	The admins can interact and manage all of the koi fish and fish tanks in the database which may involve creating, editing, deleting, or suspending an account.
UC-15	Manage users and members	Admin	The admins can interact and manage all of the users and members in the database which may involve creating, editing or suspending an account.
UC-16	Manage Advertisements	Admin	The admins can interact and manage all of the advertisement posts of the members which may involve creating, editing, deleting.
UC-17	Moderate Advertisements	Admin	The admins will have to moderate the advertisement post of the members. If the advertisement is invalid, it will be rejected. If the advertisement is valid, it will be verified. And the advertisement hasn't been moderated, will be set to pending, and wait for the admin to change their status after moderate.
UC-18	Manage Blog	Admin	The admin can post and manage the Blogs on the website which may involve creating, editing, deleting.

UC-19	View Dashboard	Admin	The admin can see the dashboard to check the statistics of the users and website.
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b) Examples

ID and Name:	UC-01: Register		
Created By:	Nguyen	Date Created:	24/09/2024
Primary Actor:	Guest	Secondary Actors:	None
Description:	Guests can create a new account in the Feng Shui Koi Consulting System. Upon successful registration, they automatically receive User role privileges.		
Trigger:	Guest selects "Register" option		
Preconditions:	PRE-1: Guest has access to the website PRE-2: Guest has a valid email address		
Postconditions:	POST-1: New user account is created POST-2: User receives confirmation email POST-3: User gains basic access privileges		
Normal Flow:	<p>1.0 Register New Account</p> <ol style="list-style-type: none"> 1. Guest navigates to registration page 2. System displays registration form 3. Guest enters username 4. Guest enters email address 5. Guest enters password and confirms it 6. Guest accepts terms and conditions 7. System validates input information 8. System creates new account 9. System sends confirmation email 10. System redirects to login page 		
Alternative Flows:	<p>1.1 Email Verification Required</p> <ol style="list-style-type: none"> 1. After account creation, system requires email verification 2. User clicks verification link in email 		

	<ol style="list-style-type: none">3. System verifies email and activates account4. Return to step 10 of normal flow
Exceptions:	<p>1.0.E1 Username Already Exists</p> <ol style="list-style-type: none">1. System detects duplicate username2. System prompts for different username3. Return to step 3 of normal flow <p>1.0.E2 Invalid Email Format</p> <ol style="list-style-type: none">1. System detects invalid email format2. System requests valid email3. Return to step 4 of normal flow
Priority:	High
Frequency of Use:	20-30 registrations per day
Business Rules:	<p>BR-1: Usernames must be unique</p> <p>BR-2: Passwords must meet security requirements</p> <p>BR-3: Email verification required within 24 hours</p>

ID and Name:	UC-02: Register with Google		
Created By:	Nguyen	Date Created:	24/09/2024
Primary Actor:	Guest	Secondary Actors:	Google Authentication Service
Description:	Guests can create an account using their Google credentials for simplified registration.		
Trigger:	Guest selects "Register with Google" option		
Preconditions:	PRE-1: Guest has active Google account PRE-2: Guest has internet access		
Postconditions:	POST-1: New user account is created POST-2: User account is linked to Google credentials POST-3: User gains basic access privileges		
Normal Flow:	<p>1.0 Google Registration</p> <ol style="list-style-type: none"> 1. Guest clicks "Register with Google" 2. System redirects to Google authentication 3. Guest logs into Google (if not already) 4. Guest authorizes application access 5. Google returns authentication token 6. System creates new account 7. System links Google profile 8. System redirects to homepage 		
Alternative Flows:	<p>1.1 Existing Email Detection</p> <ol style="list-style-type: none"> 1. System detects email already registered 2. System offers login option 3. Return to login flow 		

Exceptions:	1.0.E1 Google Authentication Failure <ul style="list-style-type: none">1. Google authentication fails2. System displays error message3. Return to registration options
Priority:	High
Frequency of Use:	15-20 registrations per day
Business Rules:	BR-1: Must maintain Google OAuth compliance BR-2: Auto-generate username from Google profile BR-3: Preserve Google profile data privacy

ID and Name:	UC-03: Login		
Created By:	Nguyen	Date Created:	24/09/2024
Primary Actor:	Guest, User, Member, Admin	Secondary Actors:	Google Authentication Service
Description:	All users can access their accounts through the login system.		
Trigger:	User selects "Login" option		
Preconditions:	PRE-1: User has registered account PRE-2: Account is active		
Postconditions:	POST-1: User is authenticated POST-2: User session is created POST-3: User accesses appropriate privilege level		
Normal Flow:	<p>1.0 Standard Login</p> <ol style="list-style-type: none"> 1. User navigates to login page 2. System displays login form 3. User enters username/email 4. User enters password 5. System validates credentials 6. System creates session 7. System redirects to dashboard 		
Alternative Flows:	<p>1.1 Remember Me Option</p> <ol style="list-style-type: none"> 1. User checks "Remember Me" 2. System creates persistent cookie 3. Return to step 7 of normal flow 		

Exceptions:	1.0.E1 Invalid Credentials <ol style="list-style-type: none">1. System detects invalid login2. System displays error message3. Return to step 3 of normal flow
Priority:	High
Frequency of Use:	100+ logins per day
Business Rules:	BR-1: Lock account after 5 failed attempts BR-2: Session timeout after 30 minutes BR-3: Enforce password complexity

ID and Name:	UC-04: Logout		
Created By:	Nguyen	Date Created:	24/09/2024
Primary Actor:	User, Member, Admin	Secondary Actors:	None
Description:	Users can securely end their session and logout of the system.		
Trigger:	User selects "Logout" option		
Preconditions:	PRE-1: User is logged in PRE-2: Active session exists		
Postconditions:	POST-1: User session is terminated POST-2: Login tokens are deleted POST-3: User is redirected to home page		
Normal Flow:	1.0 Standard Logout <ol style="list-style-type: none"> 1. User clicks logout button 2. System terminates session 3. System clears cookies 4. System redirects to home page 		
Alternative Flows:	1.1 Automatic Logout <ol style="list-style-type: none"> 1. Session timeout occurs 2. System performs logout 3. System shows timeout message 4. Return to step 4 of normal flow 		

Exceptions:	1.0.E1 Session Already Expired <ol style="list-style-type: none">1. System detects expired session2. System shows notification3. Redirect to login page
Priority:	High
Frequency of Use:	100+ logouts per day

ID and Name:	UC-05: Read Blogs		
Created By:	Nguyen	Date Created:	24/09/2024
Primary Actor:	Guest, User, Member, Admin	Secondary Actors:	None
Description:	All Users can access and read blog posts about Koi Fish and related topics.		
Trigger:	User navigates to blog section		
Preconditions:	PRE-1: Blog content exists PRE-2: User has website access		
Postconditions:	POST-1: Blog content is displayed POST-2: View count is updated		
Normal Flow:	<p>1.0 Read Blog</p> <ol style="list-style-type: none"> 1. User navigates to blog section 2. System displays blog list 3. User selects blog post 4. System loads full content 5. System updates view count 6. User reads content 		
Alternative Flows:	<p>1.1 Share Blog Post</p> <ol style="list-style-type: none"> 1. User clicks share button 2. System displays sharing options 3. User selects sharing method 4. Return to step 6 of normal flow 		

Exceptions:	1.0.E1 Content Not Found <ol style="list-style-type: none">1. System cannot load content2. System displays error message3. Return to blog list
Priority:	Medium
Frequency of Use:	200+ views per day
Business Rules:	BR-1: Public access allowed BR-2: Track popularity metrics BR-3: Maintain content history

ID and Name:	UC-06: Search Blogs		
Created By:	Nguyen	Date Created:	24/09/2024
Primary Actor:	Guest, User, Member, Admin	Secondary Actors:	None
Description:	Users can search for blog posts using titles and keywords to find relevant content.		
Trigger:	User enters search term in blog search bar		
Preconditions:	PRE-1: Blog content exists in system PRE-2: Search functionality is operational		
Postconditions:	POST-1: Search results are displayed POST-2: Search query is logged		
Normal Flow:	1.0 Search Blogs <ol style="list-style-type: none"> 1. User enters search terms 2. System validates search input 3. System performs search 4. System retrieves matching posts 5. System displays results list 6. System orders by relevance 7. User views search results 8. User selects desired blog post 		
Alternative Flows:	1.1 Filter Search Results <ol style="list-style-type: none"> 1. User applies additional filters 2. System updates results 3. Return to step 5 of normal flow 		

Exceptions:	1.0.E1 No Results Found <ol style="list-style-type: none">1. System finds no matches2. System displays "No results" message3. System suggests related topics
Priority:	Medium
Frequency of Use:	100+ searches per day
Business Rules:	BR-1: Minimum search term length BR-2: Case-insensitive search BR-3: Support partial matching

ID and Name:	UC-07: Shopping		
Created By:	Nguyen	Date Created:	24/09/2024
Primary Actor:	Guest, User, Member, Admin	Secondary Actors:	None
Description:	Users can browse and view advertisements for Koi Fish and related items posted by members.		
Trigger:	User navigates to Advertisement section		
Preconditions:	PRE-1: Verified advertisements exist PRE-2: User has access to shopping section		
Postconditions:	POST-1: User views available items POST-2: View counts are updated		
Normal Flow:	<p>1.0 Browse Advertisements</p> <ol style="list-style-type: none"> 1. User accesses shopping section 2. System displays item categories 3. User selects category 4. System shows filtered items 5. User views item details 6. System displays seller contact info 7. User can save/bookmark items 		
Alternative Flows:	<p>1.1 Filter Items</p> <ol style="list-style-type: none"> 1. User applies price/category filters 2. System updates display 3. Return to step 4 of normal flow 		

Exceptions:	1.0.E1 No Items Available <ol style="list-style-type: none">1. System detects empty category2. System displays notification3. Suggests other categories
Priority:	Medium
Frequency of Use:	200+ views per day
Business Rules:	BR-1: Show only verified ads BR-2: Update availability status BR-3: Sort by posting date

ID and Name:	UC-08: Modify Profile		
Created By:	Nguyen	Date Created:	24/09/2024
Primary Actor:	User, Member	Secondary Actors:	None
Description:	Users can update their profile information, including personal details and account settings.		
Trigger:	User selects "Edit Profile" option		
Preconditions:	PRE-1: User is logged in PRE-2: User has active account		
Postconditions:	POST-1: Profile changes are saved POST-2: Update history is logged		
Normal Flow:	<p>1.0 Update Profile</p> <ol style="list-style-type: none"> 1. User navigates to profile settings 2. System displays current information 3. User modifies desired fields 4. User uploads new profile picture 5. User updates password if desired 6. System validates changes 7. User confirms updates 8. System saves changes 		
Alternative Flows:	<p>1.1 Password Change</p> <ol style="list-style-type: none"> 1. User selects password change 2. System requires current password 3. User enters new password 4. Return to step 6 of normal flow 		

Exceptions:	1.0.E1 Invalid Information <ol style="list-style-type: none">1. System detects invalid input2. System highlights errors3. Return to step 3 of normal flow
Priority:	Medium
Frequency of Use:	20+ modifications per day
Business Rules:	BR-1: Validate email format BR-2: Password complexity rules BR-3: Image size restrictions

ID and Name:	UC-09: Koi Fish Consulting		
Created By:	Nguyen	Date Created:	24/09/2024
Primary Actor:	User, Member	Secondary Actors:	None
Description:	A Registered User accesses the Koi Fish Consulting feature on the website, enters their name and birth year, and receives recommendations for the type of Koi Fish that suits their element, as well as suggestions for fish tank type, quantity, and direction.		
Trigger:	A User selects the Koi Fish Consulting option		
Preconditions:	PRE-1. Users are logged into their registered account. PRE-2. User has access to the Koi Fish Consulting feature.		
Postconditions:	POST-1. Users receive personalized Koi Fish recommendations. POST-2. Consultation results are stored in the user's profile for future reference.		
Normal Flow:	<p>1.0 Get Koi Fish Consultation</p> <ol style="list-style-type: none"> 1. User navigates to the Koi Fish Consulting section. 2. System prompts users to enter their name and birth year. 3. User enters required information. 4. System calculates the user's element based on birth year. 5. System generates recommendations for Koi Fish type based on the user's element. 6. System provides suggestions for fish tank type, quantity, and direction. 7. System displays all recommendations to the user. 8. User reviews the recommendations. 9. System offers the option to save recommendations to the user's profile. 10. User chooses to save or discard recommendations. 11. If saved, the system confirms that recommendations are stored in the user's profile. 		

Alternative Flows:	<p>1.0 User requests additional information</p> <ol style="list-style-type: none">1. After step 8, the user requests more details about a specific recommendation.2. System provides a detailed explanation of the recommendation.3. Return to step 8 of normal flow.
Exceptions:	<p>1.0.E1 Invalid birth year entered</p> <ol style="list-style-type: none">1. System detects an invalid birth year entry.2. System prompts users to enter a valid birth year.3. Return to step 3 of normal flow.
Priority:	Medium
Frequency of Use:	Approximately 50 users per day.
Business Rules:	<p>BR-1: Birth year must be between 1900 and current year.</p> <p>BR-2: Element calculation must follow traditional Feng Shui principles.</p>

ID and Name:	UC-10: Buy Description Plan		
Created By:	Nguyen	Date Created:	24/09/2024
Primary Actor:	User	Secondary Actors:	Payment System
Description:	Users can purchase a description plan to upgrade their account to Member status and access additional features.		
Trigger:	User selects "Upgrade to Member" option		
Preconditions:	PRE-1: User is logged in PRE-2: User has basic account		
Postconditions:	POST-1: User account is upgraded POST-2: Payment is processed POST-3: New features are unlocked		
Normal Flow:	<p>1.0 Purchase Membership</p> <ol style="list-style-type: none"> 1. User selects membership plan 2. System displays plan details 3. User chooses payment method 4. System processes payment 5. System upgrades account 6. System sends confirmation 7. System activates new features 		
Alternative Flows:	<p>1.1 Promotional Code</p> <ol style="list-style-type: none"> 1. User enters promo code 2. System validates code 3. System adjusts price 		

	4. Return to step 3 of normal flow
Exceptions:	1.0.E1 Payment Failure <ol style="list-style-type: none">1. System detects payment issue2. System notifies user3. Return to step 3 of normal flow
Priority:	High
Frequency of Use:	5-10 purchases per day
Business Rules:	BR-1: Verify payment first BR-2: Immediate upgrade after payment BR-3: Promo code validation rules

ID and Name:	UC-11: Post Advertisements		
Created By:	Nguyen	Date Created:	24/09/2024
Primary Actor:	Member	Secondary Actors:	Admin
Description:	Members can create and post advertisements for Koi Fish-related items, including fish, tanks, food, and decorations. All advertisements require admin moderation before becoming visible.		
Trigger:	Member selects "Post Advertisement" option		
Preconditions:	PRE-1: User is logged in as a Member PRE-2: Member has posting privileges		
Postconditions:	POST-1: Advertisement is created and pending moderation POST-2: Advertisement is stored in system database		
Normal Flow:	<p>1.0 Create Advertisement</p> <ol style="list-style-type: none"> 1. Member navigates to "Post Advertisement" section 2. System displays advertisement form 3. Member enters advertisement title 4. Member selects item category 5. Member provides item description 6. Member enters price information 7. Member uploads item photos (optional) 8. Member provides contact information 9. System shows advertisement preview 10. Member reviews advertisement 11. Member submits advertisement 12. System validates content 13. System sets status to "pending moderation" 		

	14. System confirms submission to member
Alternative Flows:	<p>1.1 Edit Before Submission</p> <ol style="list-style-type: none"> 1. At preview stage, member chooses to edit 2. System enables editing of all fields 3. Return to step 9 of normal flow
Exceptions:	<p>1.0.E1 Invalid Information</p> <ol style="list-style-type: none"> 1. System detects missing/invalid information 2. System highlights problematic fields 3. Return to appropriate entry step <p>1.0.E2 Upload Failure</p> <ol style="list-style-type: none"> 1. Photo upload fails 2. System provides error message 3. Return to step 7 of normal flow
Priority:	Medium
Frequency of Use:	20-30 posts per day
Business Rules:	BR-1: All required fields must be completed BR-2: Photos must be in approved formats (JPG, PNG) BR-3: Price must be in valid currency format BR-4: All posts require admin moderation

ID and Name:	UC-12: Compatibility Score		
Created By:	Nguyen	Date Created:	24/09/2024
Primary Actor:	Member	Secondary Actors:	None
Description:	Members can calculate the compatibility score between their Feng Shui element and specific Koi Fish or tank options they're considering.		
Trigger:	Member selects "Calculate Compatibility" option		
Preconditions:	PRE-1: User is logged in as a Member PRE-2: Member's Feng Shui element is already determined PRE-3: Member has selected a specific Koi Fish or tank		
Postconditions:	POST-1: Compatibility score is calculated and displayed POST-2: Score and calculation details are available for review		
Normal Flow:	1.0 Calculate Compatibility <ol style="list-style-type: none"> Member navigates to compatibility calculator System displays member's Feng Shui element Member selects item type (Koi Fish or tank) Member selects specific item from database System calculates compatibility score System displays score with detailed breakdown System provides recommendations based on score Member can save results to profile 		

Alternative Flows:	1.1 Multiple Item Comparison <ol style="list-style-type: none">1. Member selects multiple items2. System calculates compatibility for each3. System displays comparative results4. Return to step 7 of normal flow
Exceptions:	1.0.E1 Invalid Selection <ol style="list-style-type: none">1. System detects invalid item selection2. System prompts for valid selection3. Return to step 3 of normal flow
Priority:	Medium
Frequency of Use:	20-30 calculations per day
Business Rules:	BR-1: Compatibility must be calculated using traditional Feng Shui principles BR-2: Scores must be on a scale of 0-100 BR-3: Detailed explanations must be provided for scores

ID and Name:	UC-13: Open-AI Integration		
Created By:	Nguyen	Date Created:	24/09/2024
Primary Actor:	Member	Secondary Actors:	OpenAI API
Description:	Members can use AI-powered chat assistance for Koi Fish consulting and general inquiries.		
Trigger:	Member accesses AI chat feature		
Preconditions:	PRE-1: Member has active account PRE-2: AI service is operational		
Postconditions:	POST-1: Chat session is recorded POST-2: Recommendations are saved		
Normal Flow:	1.0 Use AI Chat <ol style="list-style-type: none">Member opens AI chat interfaceSystem initializes chat sessionMember enters question/querySystem processes with OpenAISystem displays responseMember can continue dialogueSystem saves conversation		

Alternative Flows:	1.1 Save Specific Advice <ol style="list-style-type: none">1. Member marks advice as favorite2. System saves to profile3. Return to step 6 of normal flow
Exceptions:	1.0.E1 AI Service Unavailable <ol style="list-style-type: none">1. System detects service issue2. System offers alternative help3. Logs service interruption
Priority:	Medium
Frequency of Use:	200+ interactions per day
Business Rules:	BR-1: Response time limits BR-2: Content filtering rules BR-3: Usage quotas per member

ID and Name:	UC-14: Manage Koi Fish and Tank Database		
Created By:	Nguyen	Date Created:	24/09/2024
Primary Actor:	Admin	Secondary Actors:	None
Description:	Administrators can manage the database of Koi Fish and tanks, including adding, editing, and removing entries.		
Trigger:	Admin accesses database management interface		
Preconditions:	PRE-1: Admin is logged in PRE-2: Admin has database privileges		
Postconditions:	POST-1: Database changes are saved POST-2: Change log is updated POST-3: System cache is refreshed		
Normal Flow:	<p>1.0 Manage Database</p> <ol style="list-style-type: none"> 1. Admin accesses database management section 2. System displays database entries 3. Admin selects action (add/edit/delete) 4. System shows relevant form 5. Admin makes changes 6. System validates input 7. Admin confirms changes 8. System updates database 		

Alternative Flows:	1.1 Bulk Update <ol style="list-style-type: none">1. Admin uploads bulk update file2. System validates format3. System processes updates4. Return to step 8 of normal flow
Exceptions:	1.0.E1 Validation Error <ol style="list-style-type: none">1. System detects invalid data2. System highlights issues3. Return to step 5 of normal flow
Priority:	High
Frequency of Use:	20-30 updates per day
Business Rules:	BR-1: Maintain data integrity BR-2: Required field validation BR-3: Backup before changes

ID and Name:	UC-15: Manage Users and Members		
Created By:	Nguyen	Date Created:	24/09/2024
Primary Actor:	Admin	Secondary Actors:	None
Description:	Administrators can manage user accounts, including creation, modification, suspension, and deletion.		
Trigger:	Admin accesses user management interface		
Preconditions:	PRE-1: Admin is logged in PRE-2: Admin has user management rights		
Postconditions:	POST-1: User account changes are saved POST-2: Affected users are notified POST-3: Action is logged		
Normal Flow:	<p>1.0 Manage Users</p> <ol style="list-style-type: none"> 1. Admin accesses user management section 2. System displays user list 3. Admin selects user account 4. System shows user details 5. Admin selects action 6. System processes action 7. System updates user status 8. System sends notifications 		

Alternative Flows:	1.1 Bulk User Management <ol style="list-style-type: none">1. Admin selects multiple users2. Admin applies batch action3. System processes changes4. Return to step 7 of normal flow
Exceptions:	1.0.E1 Protected Account <ol style="list-style-type: none">1. System detects protected status2. System shows warning3. Requires additional confirmation
Priority:	High
Frequency of Use:	50+ actions per day
Business Rules:	BR-1: Maintain audit trail BR-2: Protection for admin accounts BR-3: Notification requirements

ID and Name:	UC-16: Manage Advertisements		
Created By:	Nguyen	Date Created:	24/09/2024
Primary Actor:	Admin	Secondary Actors:	None
Description:	Administrators can manage all advertisements, including editing, removing, and organizing posts.		
Trigger:	Admin accesses advertisement management interface		
Preconditions:	PRE-1: Admin is logged in PRE-2: Advertisements exist in system		
Postconditions:	POST-1: Advertisement changes are saved POST-2: Sellers are notified of changes POST-3: Changes are logged		
Normal Flow:	<p>1.0 Manage Advertisements</p> <ol style="list-style-type: none"> 1. Admin views advertisement list 2. System displays all ads 3. Admin selects advertisement 4. System shows full details 5. Admin makes changes 6. System validates changes 7. System updates advertisement 8. System notifies seller 		

Alternative Flows:	1.1 Bulk Advertisement Management <ol style="list-style-type: none">1. Admin selects multiple ads2. Admin applies batch action3. System processes changes4. Return to step 7 of normal flow
Exceptions:	1.0.E1 Invalid Changes <ol style="list-style-type: none">1. System detects invalid modification2. System shows error message3. Return to step 5 of normal flow
Priority:	High
Frequency of Use:	100+ actions per day
Business Rules:	BR-1: Content guidelines BR-2: Category requirements BR-3: Image restrictions

ID and Name:	UC-17: Moderate Advertisements		
Created By:	Nguyen	Date Created:	24/09/2024
Primary Actor:	Admin	Secondary Actors:	Member (Seller)
Description:	Administrators review and moderate new advertisements before they become visible on the platform.		
Trigger:	New advertisement submission or reported content		
Preconditions:	PRE-1: Admin is logged in PRE-2: Pending advertisements exist		
Postconditions:	POST-1: Moderation decision is recorded POST-2: Seller is notified POST-3: Advertisement status is updated		
Normal Flow:	<p>1.0 Moderate Advertisement</p> <ol style="list-style-type: none"> 1. Admin views moderation queue 2. System shows pending ads 3. Admin reviews advertisement 4. Admin checks compliance 5. Admin makes decision 6. System updates status 7. System notifies seller 8. System logs decision 		

Alternative Flows:	1.1 Request Changes <ol style="list-style-type: none">1. Admin requests modifications2. System notifies seller3. Advertisement marked for revision4. Return to pending queue
Exceptions:	1.0.E1 Content Violation <ol style="list-style-type: none">1. Admin identifies violation2. System flags account3. System sends warning
Priority:	High
Frequency of Use:	50+ moderations per day
Business Rules:	BR-1: 24-hour response time BR-2: Clear violation criteria BR-3: Appeal process rules

ID and Name:	UC-18: Manage Blog		
Created By:	Nguyen	Date Created:	24/09/2024
Primary Actor:	Admin	Secondary Actors:	None
Description:	Administrators can create, edit, and manage blog content on the website.		
Trigger:	Admin accesses blog management interface		
Preconditions:	PRE-1: Admin is logged in PRE-2: Admin has blog management rights		
Postconditions:	POST-1: Blog content is updated POST-2: Changes are published POST-3: RSS feed is updated		
Normal Flow:	1.0 Manage Blog Content <ol style="list-style-type: none">1. Admin accesses blog manager2. System displays blog list3. Admin selects action4. System loads editor5. Admin makes changes6. System previews content7. Admin confirms changes8. System publishes updates		

Alternative Flows:	1.1 Schedule Post <ol style="list-style-type: none">1. Admin sets publication date2. System schedules post3. Return to step 7 of normal flow
Exceptions:	1.0.E1 Media Upload Error <ol style="list-style-type: none">1. System detects upload issue2. System shows error3. Return to step 5 of normal flow
Priority:	Medium
Frequency of Use:	3-5 posts per week
Business Rules:	BR-1: Content guidelines BR-2: Image optimization BR-3: SEO requirements

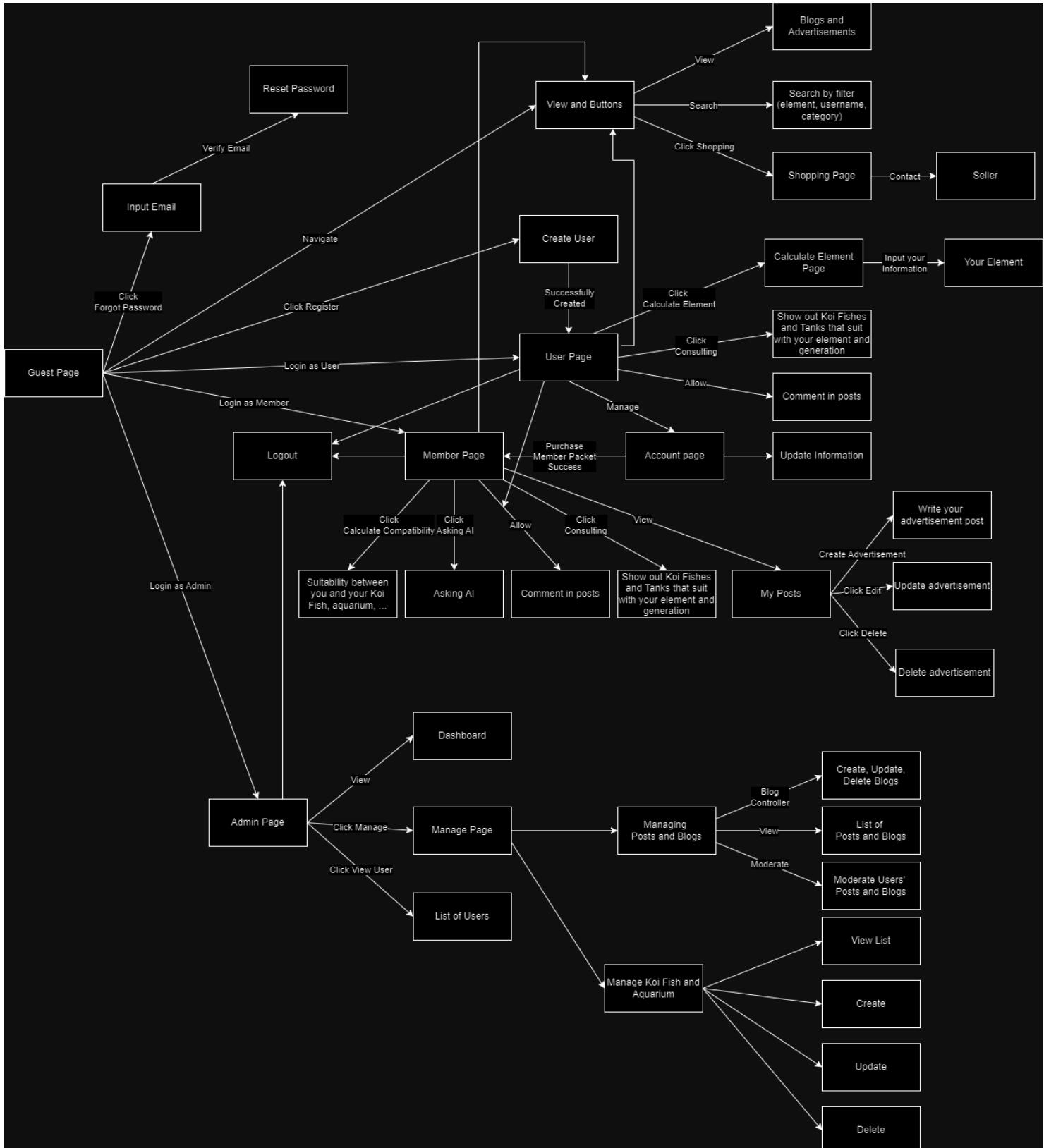
ID and Name:	UC-19 View Dashboard		
Created By:	Nguyen	Date Created:	24/09/2024
Primary Actor:	Admin	Secondary Actors:	None
Description:	Administrators can view comprehensive statistics and metrics about website usage and performance.		
Trigger:	Admin accesses dashboard interface		
Preconditions:	PRE-1: Admin is logged in PRE-2: Analytics data exists		
Postconditions:	POST-1: Statistics are displayed POST-2: View is logged		
Normal Flow:	1.0 View Dashboard <ol style="list-style-type: none">1. Admin opens dashboard2. System loads statistics3. System displays metrics4. Admin views data5. Admin can filter time periods6. System updates displays7. Admin can export reports		

Alternative Flows:	1.1 Custom Report <ol style="list-style-type: none">1. Admin selects metrics2. System generates custom view3. Return to step 6 of normal flow
Exceptions:	1.0.E1 Data Load Error <ol style="list-style-type: none">1. System detects loading issue2. System shows cached data3. Displays warning message
Priority:	Medium
Frequency of Use:	20-30 views per day
Business Rules:	BR-1: Real-time updates BR-2: Data retention policy BR-3: Export format standards

4 FUNCTIONAL REQUIREMENT

4.1 System Functional Overview

A Screen Flow



B Screen Descriptions

Guest Screen Description

#	Screen	Feature	Description
GS-01	Guest Screen	Guest View	<ul style="list-style-type: none"> • Blogs • Advertisements (Verified) • Can comment in posts and blogs
GS-02	Shopping Screen	Guest click on button "Shopping"	<p>The system will show advertisements that guest will need:</p> <ul style="list-style-type: none"> • Guest is viewing the advertisements. • Guest can contact to the seller for more information • Search by filter of category, element and username.
GS-03	Login Screen	Guest click on button "Login"	<p>System will show out the Login Screen to guest</p> <ul style="list-style-type: none"> • Login (using your email) • Login By Google (using your Google account)
GS-04	Register Screen	Guest click on button "Register"	<p>The system will allow guest to create user for more utilities</p> <ul style="list-style-type: none"> • Guest will first verify their email by input email for the system to send back a string of 6 numbers as otp. • Guest will input information to create user (Username, DOB, Email, Password, OTP to check verify) • Save guest as user and view the user screen
GS-05	Forgot Password Screen	Guest click on button "Forgot Password"	User will verify the email of his/her account to reset the password

User Screen Description

#	Screen	Feature	Description
US-01	User Screen	User view	<ul style="list-style-type: none"> • Blogs • Advertisements (Verified) • Can comment in posts and blogs
US-02	Shopping Screen	Guest click on button “Shopping”	The system will show advertisements that user will need: <ul style="list-style-type: none"> • User is viewing the advertisements. • User can contact the seller for more information. • Search by filter of category, element and username.
US-03	Profile Screen	Guest can manage their information	The system will show profile of user: <ul style="list-style-type: none"> • View User profile. • Update User profile.
US-04	Purchase Screen	Guest click on button “Purchase”	The system will allow user to buy the Member packet.
US-05	Consulting Screen	Guest click on button “Consulting”	System will calculate user's element show out the Koi Fishes and Tanks that fit with user's element and generation

Member Screen Description

#	Screen	Feature	Description
MS-01	Member Screen	Member view	<ul style="list-style-type: none"> • Blogs • Advertisements (Verified) • Can comment in posts and blogs

MS-02	Destiny Check Screen	Member click on button "Check Destiny"	The system will calculate member destiny: <ul style="list-style-type: none"> • Input member information(Name, DOB) • Show out member destiny and store the destiny in member information
MS-03	Shopping Screen	Member click on button "Shopping"	<ul style="list-style-type: none"> • Members are viewing the verified advertisements. • Member can contact to the seller for more information • Search by category, element and username • Create shopping posts
MS-04	Profile Screen	Member can manage their information	The system will show profile of member: <ul style="list-style-type: none"> • View Member profile • Update Member profile
MS-05	Calculate Compatibility Screen	Member click on button "Calculate Compatibility"	Member can choose Koi Fish, Tank and Element to calculate the compatibility between that element to the Koi Fish and Tank that member chooses.
MS-06	Shopping Screen	Member click on button "Shopping"	Member can view shopping page and manage their advertisements (view, create, update, delete)
MS-07	Asking AI Screen	Member click on button "Asking AI"	The AI will give advices for user about Koi Fishes, Tanks and Decorations that suitable with member's element
MS-08	Consulting Screen	Guest click on button "Consulting"	System will calculate user's element show out the Koi Fishes and Tanks that fit with member's element and generation

Admin Screen Description

#	Screen	Feature	Description
AS-01	Admin Screen	Admin view	Admin can view a dashboard of the system

AS-02	Manage Screen	Admin click on button "Manage"	The system will lead to Manage Screen to: <ul style="list-style-type: none"> • Managing Advertisements and Blogs: <ol style="list-style-type: none"> 1. List of all Advertisements (Verified, Pending, Rejected) 2. Moderate Advertisements 3. Manage Blogs (create, update, delete) • Managing Koi Fish and Aquarium (CRUD)
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C Screen Authorization

Screen	Guest	User	Member	Admin
Login	X	X	X	X
Register	X			
Forgot Password	X			
Logout		X	X	X
View Profile		X	X	X
Update Profile		X	X	X
Purchase Package		X	X	
Calculate Element		X	X	X

Calculate Compatibility			X	X
Consulting		X	X	X
Asking AI			X	X
View Dashboard				X
View Advertisements (Verified)	X	X	X	X
View Advertisements (All)				X
View My Advertisements			X	
Create Advertisements			X	
Update Advertisements			X	
Delete Advertisements			X	X
Moderate Advertisements				X
View Blogs	X	X	X	X
Create Blogs				X
Update Blogs				X
Delete Blogs				X
Comment		X	X	X

Manage Koi Fish (create, update, delete)				X
Create Tank (create, update, delete)				X
Create Decorations (create, update, delete)				X
View Koi Fishes	X	X	X	X
View Tanks	X	X	X	X
View Decorations	X	X	X	X
Manage Users (View list, update)				X

D Non-Screen Functions

#	System Function	Feature	Description
NS-01	OTP Verification	Send OTP to user's email	System will generate a 6-numbers OTP (One Time Password) and send it to the user's email to verify if that is a real email and truly user's email for next step (register, reset password)
NS-02	JWT (JSON Web Tokens)	Verify and Authorization	Ensuring the secure transmission of information between parties in a compact and self-contained format, this method utilizes JSON data that can be encoded and/or digitally signed. This allows for authentication and authorization without the need to access a database each time. JSON Web Tokens (JWT) are stateless tokens that encapsulate all the necessary information for authentication and authorization within the token itself.

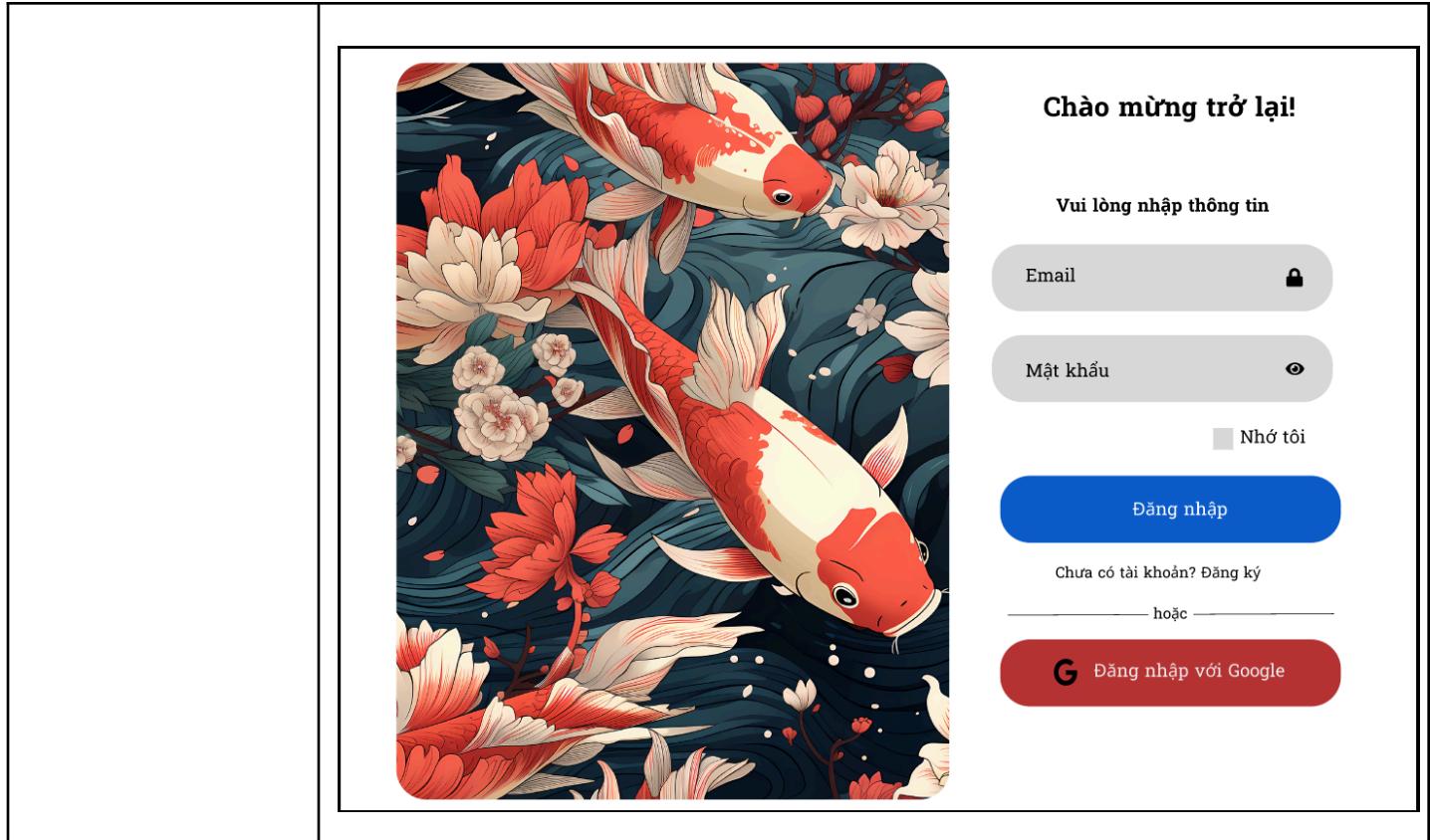
NS-03	Auto-Delete Rejected Advertisements	Scheduling to delete rejected advertisements	System will schedule every 7 days from the moment the user's advertisement is being rejected, find all the advertisements that fit the requirement and delete it from the database.
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E Modules

1. Login

Function trigger	Click the “Đăng nhập” button on the top right of the Homepage.			
Actor/Role	Guest, User, Member, Admin			
Function detail	Function	Description	Validation	Outcome
	Login By Email	Enter username or email, password	No	User is authenticated

Screen layout



2. Login By Google

Function trigger	Click the “Đăng nhập với Google” button on the login page.			
Actor/Role	Guest, User, Member, Admin			
Function detail	Function	Description	Validation	Outcome

	Login By Google	Using your Google Account	No	User is authenticated
Screen layout	 <p>The login screen features a vibrant, traditional-style illustration of two koi fish swimming in a pond filled with red and white lotus flowers. The background is a dark, textured blue. On the right side of the screen, there is a white login form area. At the top of this area, the text "Chào mừng trở lại!" (Welcome back!) is displayed in bold Vietnamese. Below this, the text "Vui lòng nhập thông tin" (Please enter information) is shown. There are two input fields: one for "Email" and one for "Mật khẩu" (Password). To the right of the password field is a small circular icon with an eye symbol, indicating it's a password field. Below the input fields is a checkbox labeled "Nhớ tôi" (Remember me). A large blue button with the text "Đăng nhập" (Login) is centered below the checkbox. Below this button, there is a link "Chưa có tài khoản? Đăng ký" (Don't have an account? Sign up) followed by a horizontal line and the word "hoặc" (or). At the bottom of the form is a red button with a white "G" icon and the text "Đăng nhập với Google" (Login with Google).</p>			

The screenshot shows the homepage of a website dedicated to koi fish. The header features a navigation bar with links to 'Trang chủ', 'Tra cứu', 'Dịch vụ', 'Shop', and 'User'. A search icon is also present. The main banner at the top has the text 'Trang web tư vấn cá Koi uy tín số 1 Việt Nam' and features a large, artistic illustration of two koi fish swimming in water.

Xác định mệnh của bạn

Nhập năm sinh của bạn

Tra cứu ngay

SẢN PHẨM PHONG THỦY

Bà Vua Ngày Trong
Tổ Ốc Cá Hồ Gi
Koi 200.000đ

Móng Rùa Xanh Rào
Hồ Trồng Tự Lành
Hòn Non Bộ 300.000đ

Cá Koi Nhật Lai F1 -
Doitsu Kohaku 500.000đ

Cá Koi F1 30-45cm
nhân tạo 600.000đ

Bể cá mèo Đặc Ưu
công 398x260cm 725.000đ

BLOG-TƯ VẤN PHONG THỦY

Cá Koi là cá gì? Ý nghĩa phong thủy đặc biệt của loài cá Koi.
Cá Koi là cá gì? Ý nghĩa phong thủy đặc biệt của loài cá Koi, Cá Koi là cá gì? Điều đặc biệt khác loài cá này ngày càng được chứng minh

XEM CHI TIẾT

Người mệnh Hỏa không nên xây hồ cá Koi có đúng không?
Xem chi tiết »

Vì sao hồ cá Koi không nên đặt quá gần nhà?
Xem chi tiết »

Lưu ý khi thường xuyên cho cá Koi ăn cá koi
Xem chi tiết »

Xem thêm

Thông tin chúng
Chính sách bảo hành
Điều khoản sử dụng

Liên hệ : 0987.654.321

Địa chỉ: Nhà văn hóa sinh viên, trường Đại học
Đội ngũ admin

2024 Tư Vấn Phong Thủy Koi

KOI FISH
TAGLINE HERE

3. Shopping

Function trigger	Click the "Shopping" button on the home page.			
Actor/Role	Guest, User, Member, Admin			
Function detail	Function	Description	Validation	Outcome
	View verified Advertisements	Show out the verified advertisements	No	Verified advertisement

Screen layout	
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4. Blog

Function trigger	Click the "Blog" button on the home page.			
Actor/Role	Guest, User, Member, Admin			
Function detail	Function	Description	Validation	Outcome
	View Blogs	Show out blogs	No	Blogs

Screen layout

The screenshot shows the homepage of a website dedicated to koi fish care. The header features a navigation bar with links to 'Trang chủ', 'Tra cứu', 'Dịch vụ', 'Shop', and 'User'. A search icon is also present. The main banner at the top reads 'Trang web tư vấn cá Koi uy tín số 1 Việt Nam' (The most trusted koi fish information website in Vietnam) and features a large, artistic illustration of two koi fish swimming in water.

The central content area displays a grid of nine cards, each containing a small image and a question about koi fish care:

- Người mua cá Koi không nên xây hồ cá Koi có dùng không? [Xem chi tiết >](#)
- Hồ cá Koi nên xây dựng hình tròn, vuông hay bán nguyệt? [Xem chi tiết >](#)
- Vì sao hồ cá Koi không nên đặt quá gần nhà? [Xem chi tiết >](#)
- Lưu ý hệ thống lọc nước khi thiết kế thi công hồ cá koi [Xem chi tiết >](#)
- Những vấn đề cần biết khi bổ sung vitamin cho cá Koi [Xem chi tiết >](#)
- Các thành phần có trong thức ăn cá Koi có tác dụng gì? [Xem chi tiết >](#)
- Hồ nuôi cá Koi có nên rải sỏi không? [Xem chi tiết >](#)
- Ý nghĩa thú vị đằng sau những biểu tượng cá Koi [Xem chi tiết >](#)
- Cá Koi sinh sản là mang lại điều lành và may mắn cho gia chủ [Xem chi tiết >](#)

At the bottom of the page, there is a large callout box with a black and white image of two koi fish. The text inside the box asks 'Cá Koi là cá gì? Ý nghĩa phong thủy đặc biệt của loài cá koi.' and provides a detailed explanation: 'Cá Koi là cá gì? Ý nghĩa phong thủy đặc biệt của loài cá koi. Cá Koi là cá gì? Điều đặc biệt khiến loại cá này ngày càng được chuộng'. A red 'XEM CHI TIẾT' button is located at the bottom right of this box.

The footer of the page includes a navigation menu with links labeled 1, 2, 3, ..., 5, ..., 10, ..., Kết.

Trang chủ **Tra cứu** **Dịch vụ** **Shop** **User**  

Trang web tư vấn cá Koi uy tín số 1 Việt Nam



lượt xem : 1.487

Trở lại **Cá Koi là cá gì?** **Ý nghĩa phong thủy đặc biệt của loài cá Koi ?**

1. Ý nghĩa phong thủy của cá koi trong không gian sống:

Cá Koi từ lâu đã được coi là biểu tượng của sự may mắn, thịnh vượng và tài lộc. Ngoài ra, cá Koi còn tượng trưng cho sự kiên trì đua, ý chí vươn lên vượt qua khó khăn, giống như câu chuyện "Cá chép vượt vũ điệu hóa rồng". Nuôi cá Koi trong hồ hay bể cá trong nhà không chỉ giúp làm đẹp không gian mà còn mang lại bình an, tài lộc cho gia chủ, chủ nhà.

Trong phong thủy, nuôi cá trong nhà hoặc sân vườn (thường là bể cá ngoài trời) sẽ giúp kích hoạt dòng năng lượng tích cực, mang lại sự sung túc, thịnh vượng cho gia đình cũng như sự phát triển trong công việc kinh doanh.



2. Chọn cá Koi theo mệnh:

Cá Koi mang ý nghĩa phong thủy, giúp thu hút tài lộc, may mắn. Chọn cá theo mệnh giúp điều hòa năng lượng trong không gian sống:

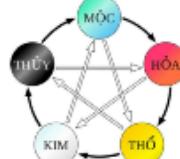
- Mệnh Kim:** Chọn cá màu trắng, bạc hoặc vàng để tăng vận may.
- Mệnh Mộc:** Thích hợp nuôi cá xanh đen để thăng tiến sự nghiệp
- Mệnh Thủy:** Chọn cá màu xanh và trắng để tăng cường sự ổn định và phà
- Mệnh Hỏa:** cá màu đỏ, cam, hồng giúp mang lại thành công và may mắn.
- Mệnh Thổ:** cá màu vàng, nâu, đốp giúp tạo sự vững chắc và hút may mắn

3. Vị trí đặt hồ cá Koi trong phong thủy:

Không chỉ chọn màu sắc cá theo mệnh mà vị trí đặt bể cá Koi cũng rất quan trọng trong phong thủy. Một số gợi ý về cách đặt bể cá Koi trong nhà hoặc ngoài vườn:

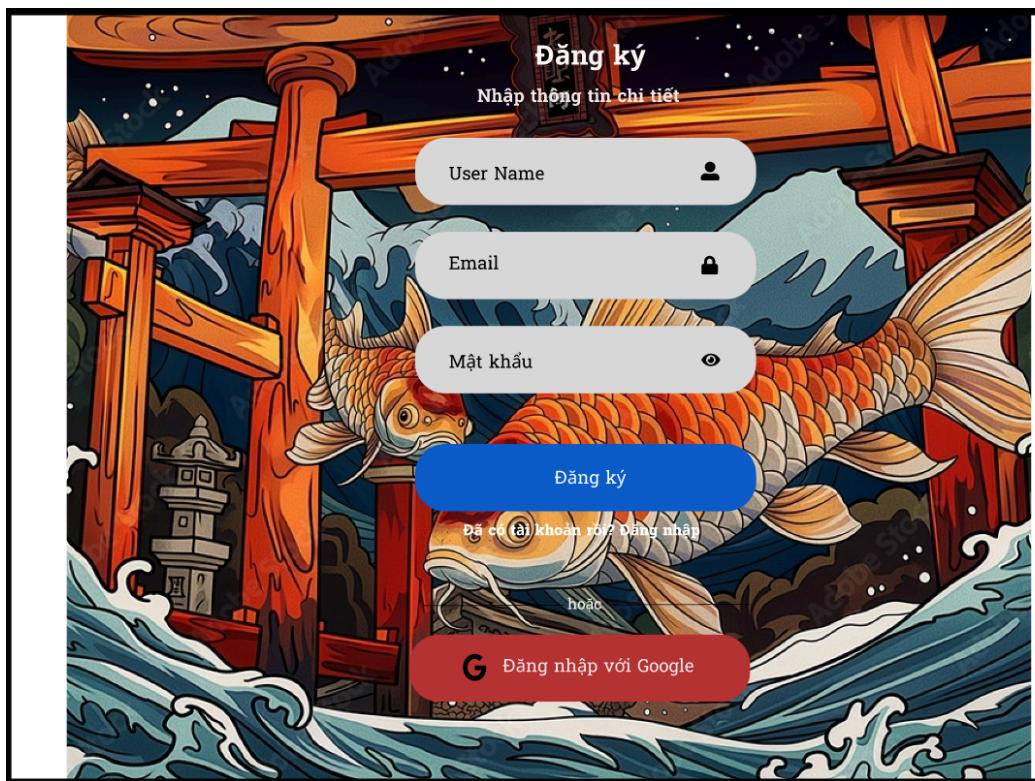
- Hướng đặt bể cá:** Bắc, Đông Nam hoặc Đông là những hướng phong thủy tốt để đặt bể cá, bởi đây là những hướng giúp kích hoạt dòng năng lượng tích cực, mang lại tài lộc và sức khỏe.
- Tránh đặt bể cá ở hướng Nam:** hướng Nam lửa, không nên đặt hồ ở đây vì động nước lửa cháy dữ dội, dễ gây xung đột, rối loạn năng lượng.
- Tránh đặt bể cá gần bếp hay phòng ngủ:** Nước thuộc Thủy nếu đặt ở những khu vực này, có thể gây mất cân bằng năng lượng, ảnh hưởng đến sức khỏe và hạnh phúc gia đình.

*Bình Luận



5. Register

Function trigger	Click the "Đăng kí" button on the login page.			
Actor/Role	Guest			
Function detail	Function	Description	Validation	Outcome
	Create new user	Input username, password, date of birth, email and otp for verify email	No	User is authenticated

Screen layout**6. Home Page**

Function trigger	View the Home Page			
Actor/Role	Guest, User, Member, Admin			
Function detail	Function	Description	Validation	Outcome

	View home page	Information about our system	No	Home Page
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Screen layout

Xác định mệnh của bạn

Nhập năm sinh của bạn

Tra cứu ngay

SẢN PHẨM PHONG THỦY

- Sỏi Võ Mây Trắng
- Rặng Ron Xanh Lá
- Cá Koi Nhật Lai F1 - Dotsu Kokku
- Cá Koi F1
- Bể cá mini thác nước

BLOG TƯ VẤN PHONG THỦY

- Cá Koi là cá gì? Ý nghĩa phong thủy đặc biệt của loài cá Koi.
- 100 cá Koi nào đây đang bình yên, vương bờ nguyệt?
- Hồ nuôi cá Koi có nên sải sỏi không?
- Những vấn đề cần biết khi bổ sung vitamin cho cá Koi
- Các thành phần có trong thức ăn cá Koi có tác dụng gì?

Xem chi tiết

Xem thêm

KOI FISH
TAGLINE HERE

Thông tin chúng

Chính sách của chúng tôi

Điều khoản sử dụng

Liên hệ : 0987.654.321

Địa chỉ: Nhà văn hóa sinh viên, làng Đại học

Đội ngũ admin

2024 Tư Vấn Phong Thủy Koi

7. Forgot Password

Function trigger	Click the “Quên mật khẩu” button on the login page.			
Actor/Role	Guest, User, Member			
Function detail	Function	Description	Validation	Outcome
	Reset password	Verify email if exist to reset password	Yes	Password has been reset
Screen layout				

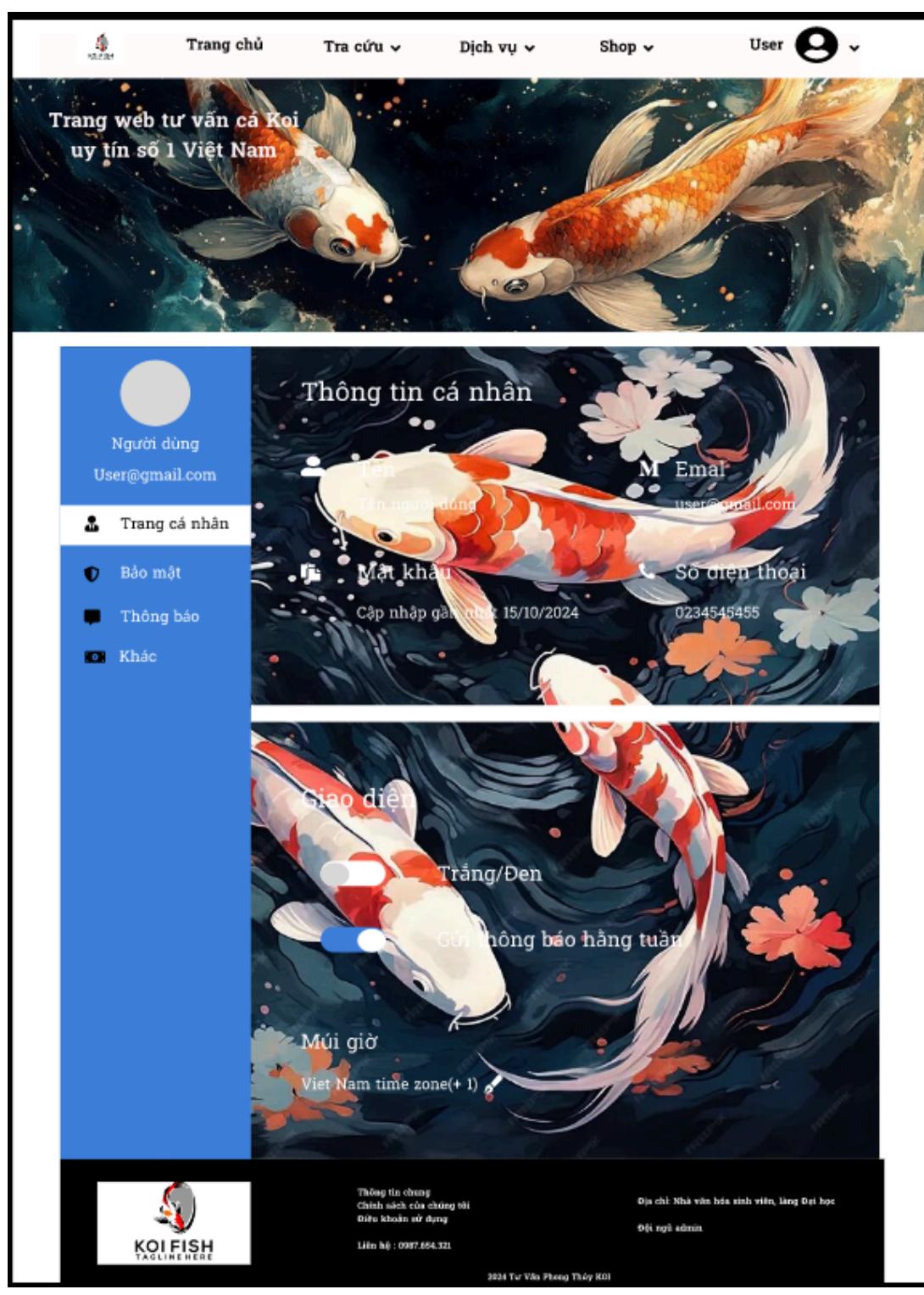
8. Logout

Function trigger	Click the “Đăng xuất” button on the home page.			
Actor/Role	User, Member, Admin			
Function detail	Function	Description	Validation	Outcome
	Logout account	Logout the account off the website	No	Return to guest page

Screen layout

9. View Profile

Function trigger	Click the "Thông tin cá nhân" button on the home page.			
Actor/Role	User, Member, Admin			
Function detail	Function	Description	Validation	Outcome
	View Profile	See account profile	No	Your profile

Screen layout

10. Update Profile

Function trigger	Click the “Cập nhật thông tin” button on the profile page.			
Actor/Role	User, Member, Admin			
Function detail	Function	Description	Validation	Outcome
	Update Profile	Update your information	No	Your updated profile
Screen layout				

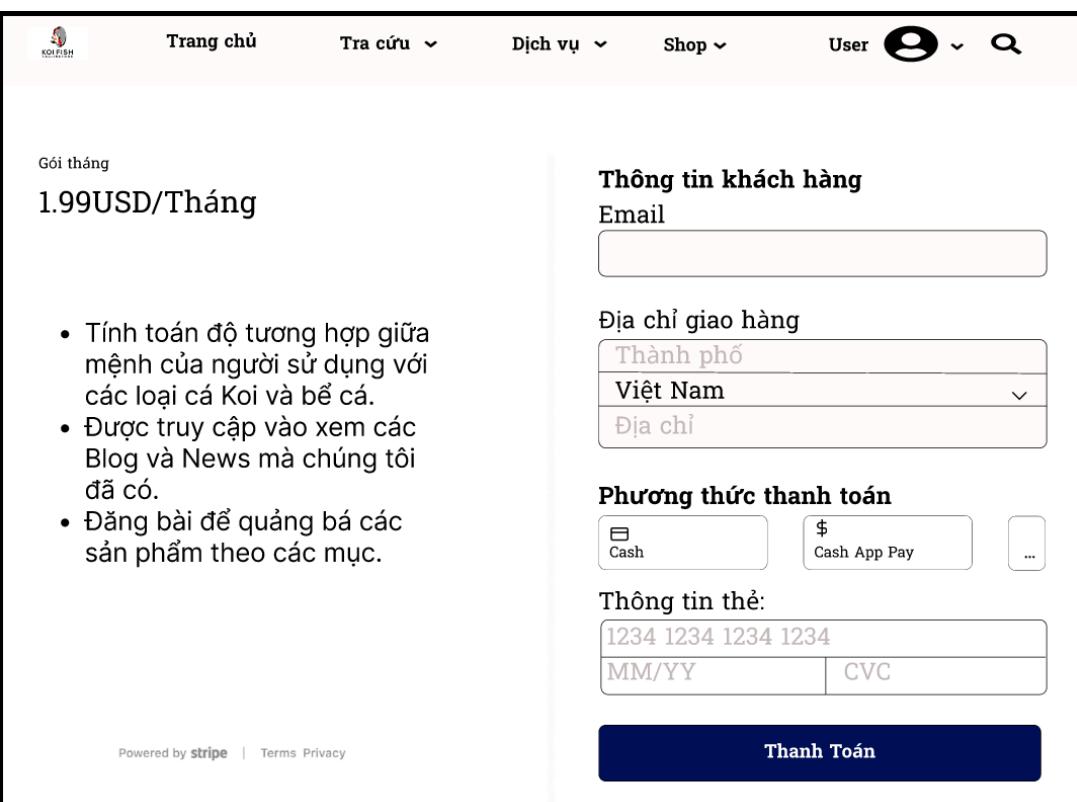
11. Purchase Package

Function trigger	Click the “Dịch vụ” button on the profile page.			
Actor/Role	User, Member			
Function detail	Function	Description	Validation	Outcome
	Buying Member's package or Extend the package	For user, they will deposit to purchase the member package for more utilities. For member, they will deposit to extend the package.	No	Purchase Page

Screen layout	<p>ĐĂNG KÍ THEO GÓI</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Tháng</p> <ul style="list-style-type: none"> Tính toán độ tương hợp giữa mệnh của người sử dụng với các loại cá Koi và bể cá. Được truy cập vào xem các Blog và News mà chúng tôi đã có. Đăng bài để quảng bá các sản phẩm theo các mục. <p>1.99 \$/Tháng</p> <p>MUA</p> </div> <div style="text-align: center;"> <p>Năm</p> <ul style="list-style-type: none"> Tính toán độ tương hợp giữa mệnh của người sử dụng với các loại cá Koi và bể cá. Được truy cập vào xem các Blog và News mà chúng tôi đã có. Đăng bài để quảng bá các sản phẩm theo các mục. <p>19.99 \$/Năm</p> <p>MUA</p> </div> </div>
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12. Purchase Result

Function trigger	Click the "Mua" button on the purchase page.			
Actor/Role	User			
Function detail	Function	Description	Validation	Outcome

	Update Role	User role will become Member	Yes	Role as member
Screen layout				

Gói tháng
1.99USD/Tháng

Thanh toán thành công!
Cảm ơn bạn đã sử dụng
dịch vụ!

Trở về

Thông tin khách hàng

Email
Nguyen Van A

Địa chỉ giao hàng:

Hồ Chí Minh

Việt Nam

Số 21 Nguyễn văn Cừ , ...

Phương thức thanh toán

Tiền mặt \$ Thanh toán app ...

Thông tin thẻ:

1234 1234 1234 1234

17/06 555

Thanh Toán

Powered by stripe | Terms Privacy

13. Consulting

Function trigger	Click the “Tra cứu” button and choose “Mệnh” button on the Homepage or “Tra cứu ngay” in the middle of the Homepage.
Actor/Role	User, Member, Admin

Function detail	Function	Description	Validation	Outcome
	Calculate Element	Input your date of birth to calculate element	No	Element

Screen layout

Trang chủ Tra cứu v... Mệnh
Dịch vụ v... Shop v... User v...

Trang web tư vấn cá Koi uy tín số 1 Việt Nam

Xác định mệnh của bạn

Nhập năm sinh của bạn

Tra cứu ngay

SẢN PHẨM PHONG THỦY

- Bà Vân Mây Trắng
- Bể cá Koi
- Hòn non bộ
- Hòn non bộ
- Cá Koi Nhật Lai F1 - Deltoid Kohaku
- Cá Koi F1 40-50cm
- nhiều màu
- Bể cá mini Bể ướp
- công 30x20x20cm

BLOG TƯ VẤN PHONG THỦY

Cá Koi là gì? Ý nghĩa phong thủy đặc biệt của loài cá koi.

Cá Koi là cá gì? Ý nghĩa phong thủy đặc biệt của loài cá koi, Cá Koi là cá gì? Đặc điểm đặc biệt khác biệt của cá này ngày càng được chứng

XEM CHI TIẾT

Người mệnh Hỏa không nên xây hồ cá Koi có đúng không?

Xem chi tiết

Vì sao hồ cá Koi không nên đặt quá gần nhà?

Xem chi tiết

Lưu ý hệ thống lọc nước khi thiết kế thi công hồ cá koi

Xem chi tiết

Xem thêm

Thông tin chúng tôi

Địa chỉ Nhà văn hóa sinh viên, Học Đai học

Đội ngũ admin

Liên hệ : 0987.664.321

2024 Tư Vấn Phong Thủy KOI

14. Consulting result

Function trigger	Fill in the information and click the "Xác nhận" button on the consulting page.			
Actor/Role	User, Member, Admin			
Function detail	Function	Description	Validation	Outcome
	Consulting Koi Fish and Tank	Get consulted Koi Fishes and Tanks that suit with your element	No	Information of Koi Fishes and Tanks that suit with your element

Screen layout

The screenshot shows a web application interface. At the top, there is a navigation bar with links: Trang chủ, Tra cứu, Dịch vụ, Shop, Đăng nhập, and a search icon. Below the navigation bar, the title "TRANG TÍNH TOÁN MỆNH" is displayed. A large orange rectangular overlay covers the central area. Inside this overlay, there are two input fields: one for "Họ và Tên" (Name) and another for "Ngày Sinh" (Date of Birth). To the right of each input field is a small icon: a person for the name and a calendar for the date. Below these fields is a green button labeled "Xác Nhận" (Confirm). In the bottom right corner of the orange overlay, there is a green button labeled "Trở về Home Page" (Return to Home Page). The background of the page features a decorative image of a koi fish.

The screenshot shows a user interface for calculating Meng Li (命理). At the top, there is a navigation bar with links for 'Trang chủ' (Home), 'Tra cứu' (Search), 'Dịch vụ' (Services), 'Shop', 'Đăng nhập' (Login), and a search icon. The main title 'TRANG TÍNH TOÁN MỆNH' (Meng Li Calculation Page) is centered at the top.

The central part of the page contains a form titled 'Điền thông tin để tính toán mệnh' (Enter information to calculate Meng Li). It includes fields for 'Họ và Tên' (Name) with the value 'Trần Hoàng Định' and a placeholder icon, and 'Ngày Sinh' (Birth Date) with the value '19/6/2004' and a calendar icon. A green button labeled 'Xác Nhận' (Confirm) is located below these fields.

On the left side, there is a box containing the text 'Mệnh của bạn là:' (Your Meng Li is:) followed by '<Hình ảnh và tên mệnh của bạn>' (Image and name of your Meng Li). On the right side, there is a box containing the text '<Mô tả về mệnh của bạn>' (Description of your Meng Li). At the bottom right, there is a green button labeled 'Trở về Home Page' (Return to Home Page).

15. Calculate Compatibility

Function trigger	Click the "Tra cứu" button and choose "Độ tương hợp" button on the Homepage			
Actor/Role	Member			
Function detail	Function	Description	Validation	Outcome
	Calculate compatibility	Member will choose the Koi Fish, Tank and Element that he/she want to know the compatibility	No	Koi Fish, Tank and Element selected

Screen layout

Trang chủ Tra cứu ↘
Mệnh
Độ tương hợp

Dịch vụ ↘
Shop ↘

User ↘

Xác định mệnh của bạn

Nhập năm sinh của bạn

Tra cứu ngày

SẢN PHẨM PHONG THỦY

- Bé Võn Mây Trang Trí Hồ Cá Hồ Gi 5kg
- Bé Võn Xanh Sâu Hồ Trang Trí Sân Hòn Non Bộ
- Cá Koi Nhật Lai F1 - Doraku Kohaku
- Cá Koi F1 Đỏ-Ánh Nhung
- Bé cát mài Đặc Sản Cát Bà 5kg

BLOG TƯ VẤN PHONG THỦY

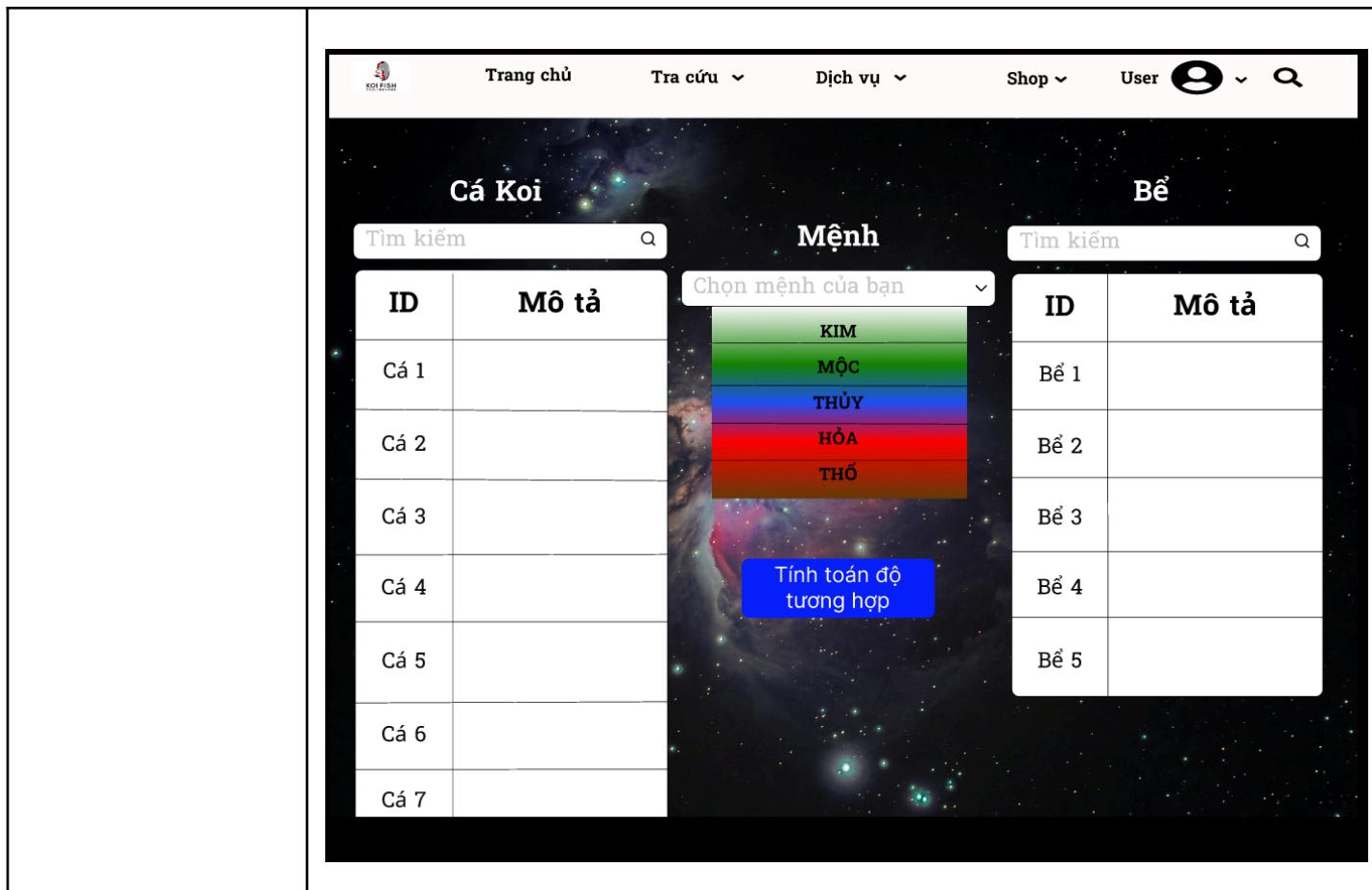
- Cá Koi là cá gì? Ý nghĩa phong thủy đặc biệt của loài cá Koi.
- 100+ cá Koi nước ngọt đẹp nhất, khỏe, vương hung hắc nguyệt?
- Hồ bơi cá Koi có nên xây nhà bên trên?
- Những vấn đề cần biết khi bố trí và trang trí cho hồ cá Koi
- Các thành phần có trong thức ăn cá Koi có tác dụng gì?

Thông tin chúng
Chính sách của chúng tôi
Điều khoản sử dụng
Liên hệ : 0987 654 321

Địa chỉ Nhà văn hóa sinh viên, trường đại học
Đội ngũ admin

2024 Tư Vấn Phong Thủy KOI

KOI FISH
TAGLINE HERE



16. Calculate Compatibility Result

Function trigger	Choose element, Koi fish and tank Click the "Tính toán độ tương hợp" button on the compatibility page.			
Actor/Role	Member			
Function detail	Function	Description	Validation	Outcome

	Show compatibility	<p>System will calculate and show out the result of the compatibility between the chosen element, Koi Fish and Tank</p> <p>Show more advice with AI consultant</p>	No	Compatibility result
Screen layout	<p>Điểm tương thích:</p> <ul style="list-style-type: none"> Điểm tương thích cá: 50% Điểm tương thích hồ: 50% Điểm tổng hợp: 25% <p>Lời khuyên: Chào bạn, với người thuộc mệnh Thủy, dưới đây là gợi ý về việc chọn cá Koi và thiết kế bể cá từ tôi:</p> <ol style="list-style-type: none"> 1. Giống cá Koi: Bạn nên chọn các giống cá Koi có nguồn gốc từ Nhật Bản như Kohaku, Showa, Sanke. Đặc biệt, cá Koi Showa có màu đỏ, đen và trắng rất thích hợp với mệnh Thủy của bạn. 2. Mẫu sắc cá: Mẫu xanh dương và màu đen của cá Koi giúp hấp thụ năng lượng âm, mang lại cân bằng cho mệnh Thủy của bạn. 3. Số lượng cá: Số lượng cá Koi lý tưởng cho người mệnh Thủy là 1, 6 hoặc 8 con. 4. Hình dáng hồ: Bể cá nên có hình dáng tự nhiên, lệch tám và không đối xứng để tăng cảm quan và tạo ra dòng nước chảy không đồng đều, tạo ra âm thanh dịu dàng, thư thái. 5. Hướng đặt hồ: Hồ cá Koi nên đặt hướng Bắc hoặc Đông để thúc đẩy tài chính, sức khỏe và quan hệ xã hội. 6. Vị trí đặt hồ: Hồ cá Koi nên đặt ở phía trước nhà hoặc trong sân vườn, tránh đặt trong nhà. Lưu ý, bạn cũng nên thận trọng trong việc chăm sóc cá Koi và duy trì bể cá của mình để đảm bảo sức khỏe và sự phát triển tốt nhất của chúng. <p>Chúc bạn có một bể cá Koi đẹp tuyệt vời và hài hòa!</p> <p style="text-align: right;">Đóng</p>			

17. Manage Advertisement

Function trigger	Click the "Shop" button on the Home page.
-------------------------	---

Actor/Role	Member			
Function detail	Function	Description	Validation	Outcome
	Create, Read, Update, Delete member's advertisements	Member can create, update or delete their advertisement	No	Member's advertisements
Screen layout				

18. Moderate Advertisement

Function trigger	Click the “Phê duyệt” button on the consulting page.			
Actor/Role	Admin			
Function detail	Function	Description	Validation	Outcome
	Verify Advertisements	Admin can verify the advertisements that member created to show out for guests and users	No	Advertisements have been verified

PHÊ DUYỆT ADVERTISEMENT						
DUYỆT		Số bài chưa duyệt: 5				
AD-001	Tiêu đề Ad1	Hình ảnh	Pending	Koi Fish	XEM	
DUYỆT						
AD-002	Tiêu đề Ad2	Hình ảnh	Pending	Koi Fish	XEM	
DUYỆT						
AD-003	Tiêu đề Ad3	Hình ảnh	Pending	Aquarium Supplies	XEM	
DUYỆT						
AD-004	Tiêu đề Ad4	Hình ảnh	Pending	Aquarium Supplies	XEM	
DUYỆT						
AD-005	Tiêu đề Ad5	Hình ảnh	Pending	Feng Shui Items	XEM	
1 2 3 ... 10						

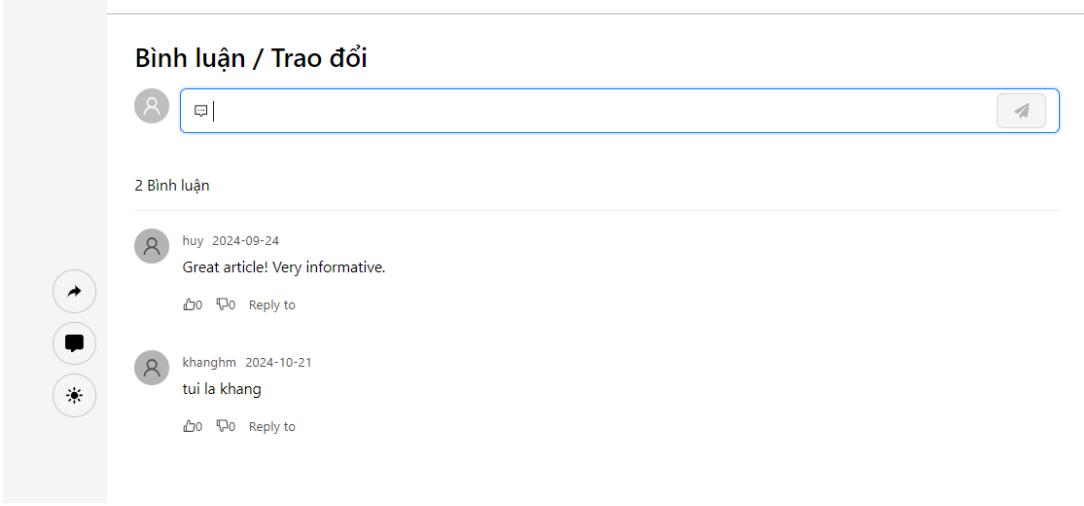
19. Manage Blog

Function trigger	Click the "Blog" button on the Home page.			
Actor/Role	Admin			
Function detail	Function	Description	Validation	Outcome
	Create, Read, Update, Delete admin's advertisements	Admin can create, update or delete their blogs	No	Blog has been created, updated or deleted

Screen layout	
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20. Comment

Function trigger	Click the “Bình luận” button on the Post or Blog.
-------------------------	---

Actor/Role	User, Member, Admin			
Function detail	Function	Description	Validation	Outcome
	Comment in Post or Blog	They can leave out comments under the Posts and Blogs for the later customers	No	Comment on Posts and Blogs
Screen layout	 <p>The screenshot shows a comment section titled "Bình luận / Trao đổi". It displays two comments:</p> <ul style="list-style-type: none"> Comment by user "huy" (2024-09-24): Great article! Very informative. Comment by user "khanghm" (2024-10-21): tui la khang <p>Each comment has a "Reply to" button below it.</p>			

21. Manage User

Function trigger	Click the "Quản Lý Người Dùng" button on the Admin Page.
Actor/Role	Admin

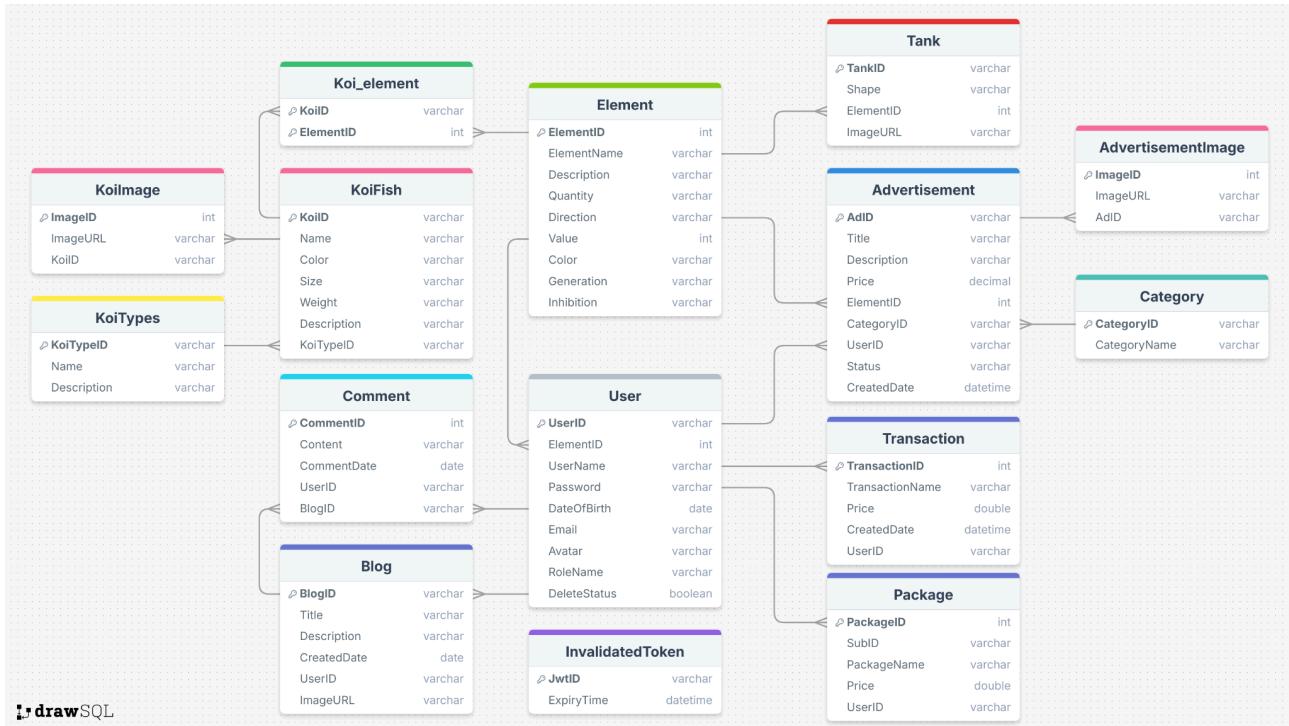
Function detail	Function	Description	Validation	Outcome
	View List of users and update Status of user's account	Admin can view the List of users that login to the system and updating the delete status of users' accounts	No	List of users and account delete status
Screen layout				

22. Dashboard

Function trigger	Click the “Bảng thống kê” button on the Admin Page.			
Actor/Role	Admin			
Function detail	Function	Description	Validation	Outcome

	View Dashboard	Admin can view the Dashboard of total users, total members and monthly revenue	No	Dashboard
Screen layout				

4.2 ERD Diagram



+ Data dictionary

1. User Table

Attribute Name	Data Type	Description	Values
UserID	VARCHAR(10) (PK)	Unique identifier for the user	Random alphanumeric string
UserName	VARCHAR(50)	User's display name in the system	Alphanumeric characters
Password	VARCHAR(255)	Encrypted user password	Encoded password string
DateOfBirth	DATE	User's birth date in	Date (e.g.,

		the format YYYY-MM-DD.	2024-02-15)
Email	VARCHAR(100) (UNIQUE)	User's email address, must be unique	Valid email (e.g., example@gmail.com)
Avatar	VARCHAR(255)	Link to the user's profile picture	URL (e.g., Firebase link)
RoleName	VARCHAR(255)	Role assigned to the user in the system	Amin, User, Member
DeleteStatus	BOOLEAN	Indicates whether the user is marked as deleted	true / false
ElementID	INT (FK)	Foreign key that links the user to an element	Random integer value

2. Element Table

Attribute Name	Data Type	Description	Values
ElementID	INT (PK)	Unique identifier for the element	Random integer value
ElementName	VARCHAR(50)	Name of the element (e.g., Wood, Water, Fire)	Water, Fire, Wood, Metal, Earth
Description	NVARCHAR(255)	Description of the element	Alphanumeric characters string
Quantity	NVARCHAR(255)	The amount of Koi fish associated with the element	Numeric / alphanumeric characters
Direction	NVARCHAR(255)	Feng Shui directional property associated	North, South, East, West

		with the element (e.g., North, East)	
Value	INT	A score indicating compatibility/incompatibility with other elements.	integer value
Color	NVARCHAR(255)	The primary color associated with the element.	Alphabetic characters (e.g., Red, Blue)
Generation	NVARCHAR(255)	Describes how this element supports or is compatible with other elements	Alphabetic (compatible elements)
Inhibition	NVARCHAR(255)	Describes how this element is incompatible with other elements.	Alphabetic (incompatible elements)

3. Category Table

Attribute Name	Data Type	Description	Values
CategoryID	VARCHAR(50) (PK)	Unique identifier for the category	Alphanumeric string
CategoryName	NVARCHAR(255)	Name of the category	Alphanumeric characters

4. KoiTypes Table

Attribute Name	Data Type	Description	Values
KoiTypeID	VARCHAR(50) (PK)	Unique identifier for the Koi type	Alphanumeric string
Name	NVARCHAR(50)	Name of the koi type	Alphanumeric characters
Description	NVARCHAR(500)	Description of the koi type	Alphanumeric characters

5. KoiFish Table

Attribute Name	Data Type	Description	Values
KoiID	VARCHAR(50) (PK)	Unique identifier for the Koi fish.	Alphanumeric characters
Name	NVARCHAR(50)	Name of the Koi fish	Alphanumeric characters
Size	NVARCHAR(255)	Size of the Koi fish	Alphanumeric characters (e.g. 40-60cm, > 80cm)
Weight	NVARCHAR(255)	Weight of the Koi fish	Alphanumeric characters (e.g. 3-5kg, > 9kg)
Color	NVARCHAR(255)	Color of the Koi fish	Alphabetic (e.g., Red, Blue)

Description	NVARCHAR(500)	Description of the Koi fish	Alphanumeric characters string
KoiTypeID	VARCHAR(50) (FK)	Foreign key identifying the type of Koi.	Alphanumeric (links to KoiType)

6. Koi_Element Table

Attribute Name	Data Type	Description	Values
KoiID	VARCHAR(50) (PK, FK)	Foreign key identifying the Koi fish.	Alphanumeric (links to KoiFish)
ElementID	INT (PK, FK)	Foreign key identifying the element associated with the Koi fish	Integer (links to Element)

7. Blog Table

Attribute Name	Data Type	Description	Values
BlogID	VARCHAR(20) (PK)	Unique identifier for the blog post.	Alphanumeric string
Title	NVARCHAR(255)	Title of the blog	Alphanumeric string

Description	NVARCHAR(1000)	Detailed description of the blog	Alphanumeric string
CreatedDate	DATE	Created date of the blog format YYYY-MM-DD	Date (e.g., 2023-10-22)
UserID	VARCHAR(10) (FK)	Foreign key identifying the author of the blog	Alphanumeric (links to User)
ImageURL	VARCHAR(255)	Link to the blog's thumbnail image	URL (e.g., image link from firebase)

8. Comment Table

Attribute Name	Data Type	Description	Values
CommentID	INT (PK)	Unique identifier for the comment.	Integer value
UserID	VARCHAR(255) (FK)	Foreign key identifying the user who made the comment.	Alphanumeric (links to User)
CommentDate	DATE	Date when the comment was posted format YYYY-MM-DD	Date (e.g., 2024-10-24)
Content	NVARCHAR(1000)	Content of the comment	Alphanumeric string
BlogID	VARCHAR(20) (FK)	Foreign key identifying the blog	Alphanumeric (links to Blog)

		associated with the comment.	
--	--	------------------------------	--

9. Tank Table

Attribute Name	Data Type	Description	Values
TankID	NVARCHAR(50) (PK)	Unique identifier for the tank.	Alphanumeric characters
Shape	NVARCHAR(50)	Shape of the tank (e.g., rectangular, circular)	Alphanumeric characters
ImageURL	VARCHAR(255)	Link to the image of the tank	URL (e.g., image link from firebase)
ElementID	INT (FK)	Foreign key identifying the element associated with the tank	Integer (links to Element)

10. Advertisement Table

Attribute Name	Data Type	Description	Values
AdID	VARCHAR(255) (PK)	Unique identifier for the advertisement	Alphanumeric characters
Title	NVARCHAR(255)	Title of the advertisement	Alphanumeric string

Description	NVARCHAR(1000)	Detailed description of the advertisement	Alphanumeric string
Price	DECIMAL(19, 2)	Price of the advertisement in VND	Numeric value (e.g., 100.000VND)
ElementID	INT (FK)	Foreign key identifying the associated element.	Integer (links to Element)
CategoryID	VARCHAR(50) (FK)	Foreign key identifying the category of the advertisement	Alphanumeric (links to Category)
UserID	VARCHAR(10) (FK)	Foreign key identifying the user who posted the advertisement.	Alphanumeric (links to User)
Status	VARCHAR(20)	Status of the advertisement	Declined, pending, approved
CreatedDate	DATETIME	The date and time when the advertisement was created format YYYY-MM-DD, hh:mm	Date and time value (e.g., 2024-10-22 12:30)

11. Koilmage Table

Attribute Name	Data Type	Description	Values

ImageID	INT (PK)	Unique identifier for the Koi image	Integer value
ImageLink	VARCHAR(255)	URL link to the Koi image	URL (e.g., image link from firebase)
KoiID	VARCHAR(20) (FK)	Foreign key identifying the Koi fish associated with the image	Alphanumeric (links to KoiFish)

12. InvalidatedToken Table

Attribute Name	Data Type	Description	Values
JwtID	VARCHAR(100) (PK)	Unique identifier for the invalidated JWT token	Alphanumeric characters
ExpiryTime	DATETIME	The expiration date and time of the token format YYYY-MM-DD hh:mm	Date and time value (e.g., 2024-10-22 12:30)

13. Transaction Table

Attribute Name	Data Type	Description	Values
TransactionID	INT (PK)	Unique identifier for the transaction	Integer value (Auto increment)
TransactionName	VARCHAR(50)	Transaction name	Alphanumeric string

Price	DOUBLE	Price or amount associated with the transaction (VND)	Numeric value (e.g., 100.000VND)
CreatedDate	DATETIME	The date and time when the transaction was created format YYYY-MM-DD hh:mm	Date and time value (e.g., 2024-10-22 14:30)
Status	VARCHAR(50)	Status of transaction after payment(Succeeded or Failed)	Alphanumeric string
UserID	VARCHAR(255)	Foreign key identifying the user associated with the transaction	Alphanumeric (links to User)

14. Package Table

Attribute Name	Data Type	Description	Values
PackageID	INT (PK)	Identify package	Integer value (Auto increment)
SubID	VARCHAR(100)	Used to check if the package has expired or not	Alphanumeric characters
PackageName	VARCHAR(50)	Name of the package.	Alphanumeric string
Price	DOUBLE	Price of the package	Numeric value (e.g., 100.000VND)

UserID	VARCHAR(255)	Foreign key identifying the user associated with the package	Alphanumeric (links to User)
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15. AdvertisementImage Table

Attribute Name	Data Type	Description	Values
ImageID	INT (PK)	Unique identifier for the advertisement image	Integer value
ImageLink	VARCHAR(255)	URL link to the advertisement image	URL (e.g., image link from firebase)
AdID	VARCHAR(20) (FK)	Foreign key identifying the advertisement associated with the image	Alphanumeric (links to Advertisement)

V. Non-Functional Requirements and Requirement Appendix

1. External Interface Requirements

1.1 User Interfaces

- *UI-1: The system shall support responsive web design, with screen compatibility from 320px to 2560px width*

- *UI-2: The interface shall be accessible on both desktop and mobile browsers following WCAG 2.1 Level AA guidelines*
- *UI-3: The system shall provide visual representations of Feng Shui elements and Koi Fish compatibility*
- *UI-4: The interface shall maintain consistent traditional Asian design elements and color schemes*
- *UI-5: Color schemes shall maintain a minimum contrast ratio of 4.5:1 for normal text*
- *UI-6: The system shall provide multilingual support for English and Vietnamese*
- *UI-7: The system shall support complete keyboard navigation for accessibility purposes*

1.2 Software Interfaces

SI-1: Backend Framework Requirements

- *Spring Boot 3.x or higher*
- *Java 17 or higher*
- *Spring Security for authentication*
- *Spring Data JPA for database operations*
- *OpenAI API integration for AI consulting*

SI-2: Frontend Requirements

- *React 18.x or higher*
- *Support for major browsers (Chrome, Firefox, Safari, Edge)*
- *Integration with Google Authentication*

SI-3: Database Requirements

- *MySQL 8.0 or higher*
- *Integration with Spring Data JPA*
- *Support for storing complex Feng Shui calculations*

SI-4: Integration Requirements

- *OpenAI API for AI consulting*
- *Google OAuth integration*
- *Payment gateway integration for membership plans*
- *Image storage and processing system*

1.3 Hardware Interfaces

HI-1: Server Configuration

- *Application Server:*
 - *CPU: Minimum 4 cores*
 - *RAM: Minimum 8GB*
 - *Storage: Minimum 100GB SSD*
 - *Operating System: Linux/Windows Server*

HI-2: Client Requirements

- *Support for modern web browsers*
- *Minimum screen resolution: 320px width*

- *Support for touch interfaces on mobile devices*

1.4 Communications Interfaces

CI-1: Network Protocol Requirements

- *HTTP/HTTPS for web communications*
- *WebSocket support for real-time AI chat*
- *SSL/TLS encryption for data transmission*

CI-2: Network Requirements

- *Minimum bandwidth: 5 Mbps*
- *Maximum latency tolerance: 200ms*
- *SMTP support for email notifications*

2. Quality Attributes

2.1 Usability

- *USE-1: First-time users shall be able to complete basic Feng Shui consultation within 5 minutes*
- *USE-2: The system shall provide interactive tutorials for new users*
- *USE-3: All Feng Shui terms shall include explanatory tooltips*
- *USE-4: Navigation between major features shall require no more than 3 clicks*

2.2 Performance

PER-1: Response Time Requirements

- *Page load time: < 3 seconds on 4G networks*
- *Feng Shui calculations: < 2 seconds*
- *AI response time: < 5 seconds*
- *Image loading: < 2 seconds*

PER-2: Capacity Requirements

- *Concurrent users: Minimum 200*
- *Maximum file upload size: 5MB*
- *Maximum images per advertisement: 10*
- *AI chat messages per minute: 20*

2.3 Security

SEC-1: Authentication and Authorization

- *Role-based access control (RBAC)*
 - *Password requirements: Minimum 8 characters with combination of types*
 - *Maximum 5 failed login attempts before temporary lockout*
 - *Session timeout after 30 minutes of inactivity*
-

SEC-2: Data Protection

- *Encryption of personal and payment information*
- *GDPR and PDPA compliance*
- *Regular security audits*
- *Secure storage of Feng Shui consultation history*

2.4 Reliability*REL-1: System Reliability Metrics*

- *System uptime: 99.9%*
- *Maximum planned downtime: 4 hours per month*
- *Maximum unplanned downtime: 1 hour per month*
- *Database backup frequency: Daily*

2.5 Scalability*SCA-1: System Scalability*

- *Support for 100% increase in user base within 6 months*
- *Horizontal scaling capability*
- *CDN integration for global access*
- *Caching system for frequently accessed data*

3. Business Rules**3.1 Feng Shui Consultation Rules (BR-01 -> BR-20)**

ID	Rule Definition
BR-01	Birth year must be between 1930 and current year
BR-02	Element calculations must follow traditional Feng Shui principles.
BR-03	Compatibility scores must be between 0 and 100 (%)
BR-04	Each element must have at least 3 recommended Koi Fish types

BR-05	Tank placement recommendations must consider directions.
BR-06	The element associated with each user must be based on their birth year according to the Chinese zodiac cycle
BR-07	Koi fish with clashing colors (based on element associations) should not be recommended for users.
BR-08	Users must receive a minimum of 2 suggestions for Koi fish and 1 tank placement to optimize energy flow.
...	...

3.2 Membership and Payment Rules (BR-21 -> BR-40)

ID	Rule Definition
BR-21	Membership prices must be in VND
BR-22	Members must verify email before posting advertisements
BR-23	Membership payments must be processed through secure payment gateways.
BR-24	Members must renew their membership within 30 days of expiration to avoid loss of privileges.
BR-25	Members with unpaid dues will have their account temporarily suspended until payment is completed.
BR-26	Members must maintain a valid and up-to-date payment method to prevent service interruptions.

BR-27	All payment information must be securely stored and compliant with relevant data protection regulations.
...	...

3.3 Advertisement Rules (BR-41 -> BR-60)

ID	Rule Definition
BR-41	Advertisements must include at least one image
BR-42	Price must be specified in VND
BR-43	Contact information must be verified
BR-44	Maximum advertisement duration: 30 days
BR-45	Automatic removal of expired advertisements
BR-46	Advertisements must be categorized into specific categories (e.g., Koi Fish, Aquarium Supplies, Feng Shui Items).
BR-47	Advertisements cannot include offensive or inappropriate content.
BR-48	Advertisements must not contain external links unless explicitly approved by an administrator.
BR-49	Duplicate advertisements for the same item or service are prohibited.
BR-50	Admins reserve the right to reject or remove advertisements that violate platform policies.

BR-51	Advertisements cannot promote illegal or restricted items.
...	...

3.4 User Conduct and Moderation Rules (BR-61 -> BR-80)

ID	Rule Definition
BR-61	Users who post inappropriate content (violence, adult content, hate speech) will receive an immediate 30-day account suspension for the first offense and permanent ban for the second offense.
BR-62	Spamming (posting the same content repeatedly or posting excessive advertisements) will result in: <ul style="list-style-type: none"> • First offense: Warning • Second offense: 7-day suspension • Third offense: 30-day suspension • Fourth offense: Permanent ban
BR-63	Accounts created solely for promotional purposes or showing patterns of automated behavior will be permanently banned without warning.
BR-64	Users attempting to bypass the payment system or promoting unauthorized transactions will receive an immediate permanent ban.
BR-65	Users engaging in harassment or threatening behavior towards other users will receive: <ul style="list-style-type: none"> • First offense: 30-day suspension • Second offense: Permanent ban
BR-66	Spreading misinformation about Feng Shui principles or making false claims about products will result in: <ul style="list-style-type: none"> • First offense: Content removal and warning • Second offense: 14-day suspension

	<ul style="list-style-type: none"> Third offense: Permanent ban
BR-67	Administrators must document all moderation actions with specific reasons and evidence for future reference and appeal processes.
...	...

4. System Messages

4.1 Success Messages (MSG-S-001 -> MSG-S-011)

ID	Message
MSG-S-001	"Feng Shui consultation completed successfully"
MSG-S-002	"Advertisement posted and pending approval"
MSG-S-003	"Membership upgraded successfully"
MSG-S-004	Compatibility score calculated successfully"
MSG-S-005	"Advertisement approved and now live"
MSG-S-006	"Payment processed successfully"
MSG-S-007	"Advertisement edited successfully"
MSG-S-008	"Membership renewed successfully"
MSG-S-009	"Image uploaded successfully"
MSG-S-010	"Advertisement removed successfully"
MSG-S-011	"Password changed successfully"

4.2 Error Messages (MSG-E-001 -> MSG-E-011)

ID	Message

MSG-E-001	"Invalid birth year entered"
MSG-E-002	Advertisement approval failed: {reason}"
MSG-E-003	"Payment processing failed"
MSG-E-004	"AI service temporarily unavailable"
MSG-E-005	""Image upload failed: {reason}"
MSG-E-006	"Email verification failed: Please check your inbox or spam folder."
MSG-E-007	"Advertisement posting failed: Please ensure all required fields are filled out."
MSG-E-008	"Membership upgrade failed: {reason}"
MSG-E-009	"Invalid payment method selected: Please choose a valid option."
MSG-E-010	"Compatibility score calculation failed: Please try again later."
MSG-E-011	"Duplicate advertisement detected: Please modify your entry."

4.3 Validation Messages (MSG-V-001 -> MSG-V-005)

ID	Message
MSG-V-001	"Please enter a valid birth year"
MSG-V-002	"Price must be between 1,000 and 1,000,000,000 VND"
MSG-V-003	"Advertisement title must be between 10 and 100 characters"
MSG-V-004	"Koi fish and tank selection is required for compatibility assessment"
MSG-V-005	"Email address is required for verification"
MSG-V-006	"Please select at least one image for the advertisement"
MSG-V-007	"Please enter a valid payment method"
MSG-V-008	"Please provide a valid email address"