

* **Subject Name and Code:** **ICT726 Web Development**
* **Tutor Name:** Touseef RANA
* **Assessment Title:** **PetWalkers Technical Documentation**

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| --- | --- | --- |
| **AI Tool Used (e.g. ChatGPT, GrammarlyGO)** | **How It Was Used (brief description)** | **Why We Chose to Use It** |
| **Anthropic Claude** | **for content generation and design consultation. (Mentioned in Assessment 2 file)** |  |

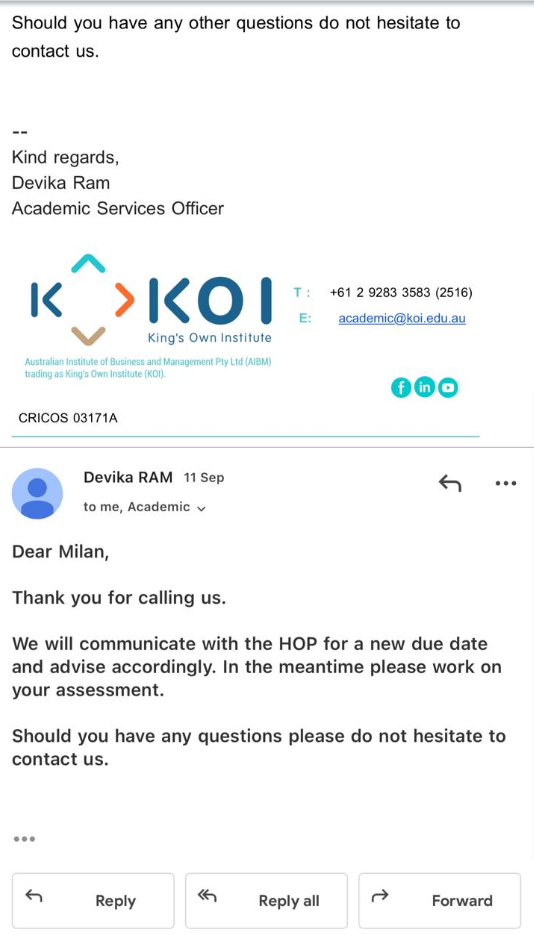
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****

**PetWalkers United**

**Documentation Report**

****

**ICT726 Web Development**

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GitHub link: [https://github.com/BijayLama11/petwalkers-united](https://github.com/BijayLama11/petwalkers-united%20)

clone repo:  
https://github.com/BijayLama11/petwalkers-united.git

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# 1. Introduction

PetWalkers United is a comprehensive web-based pet care service platform built with PHP, MySQL, HTML5, CSS3, and JavaScript. The system provides a complete solution for pet walking and sitting services, featuring user authentication, service management, contact handling, and administrative controls. This application demonstrates full-stack web development capabilities while adhering to modern web standards, security practices, and accessibility guidelines.

# 2. Website Structure

The website is dynamically designed with PHP as backend.

Overall Code Structure:

**petwalkers-united/**

├── **Frontend Layer**

│ ├── index.html **(Homepage with dynamic content)**

│ ├── about.html **(Company information)**

│ ├── contact.php **(Contact form with validation)**

│ ├── services.php **(Dynamic service listings)**

│ ├── gallery.php **(Photo gallery)**

│ ├── login.html **(Authentication interface)**

│ ├── register.html **(User registration)**

│ └── user-dashboard.php **(User account portal)**

│

├── **JavaScript Layer**

│ ├── js/main.js **(Core functionality and navigation)**

│ ├── js/auth.js **(Authentication handling)**

│ ├── js/form.js **(Form validation and submission)**

│ ├── js/gallery.js **(Gallery lightbox functionality)**

│ └── js/admin.js **(Administrative panel interactions)**

│

├── **Backend System**

│ ├── config/

│ │ └── db\_config.php **(Database configuration)**

│ │

│ ├── modules/

│ │ ├── auth/ **(Authentication system)**

│ │ ├── admin/ **(Administrative functions)**

│ │ ├── contact/ **(Contact form processing)**

│ │ └── services/ **(Service management)**

│ │

│ ├── check\_session.php (**Session validation)**

│ ├── logout.php **(Session** **termination)**

│ └── setup\_database.php **(Database initialization)**

│

└── **Assets**

├── css/ **(Styling and responsive design)**

├── img/ **(Images and media files)**

└── documentation/ **(Project documentation)**

# 3. Key Functionality Documentation

**Authentication Flow:**

1. User registration through public form
2. Admin approval or automatic user role assignment
3. Login with email/password validation
4. Session creation and role-based redirection
5. Secure logout with session cleanup

**Content Management:**

1. Dynamic service display from database
2. Gallery image management with admin controls
3. Contact form processing and admin review
4. User management with role-based permissions

**Security Layers:**

1. Input validation and sanitization
2. SQL injection prevention
3. Session-based authentication
4. Role-based access control
5. Secure password handling

# 4. Key Functionality

## 4.1 User Authentication

### 4.1.1 Registration and Login Process

The application implements a robust authentication system with the following components:

**Registration Features:**

* Public user registration through register.html
* Comprehensive form validation (client and server-side)
* Automatic role assignment as 'user' for public registrations
* Email uniqueness verification
* Password strength requirements (minimum 6 characters)

**Login Features:**

* Secure login through login.html
* Session-based authentication using PHP sessions
* Password verification using password\_verify()
* Role-based redirection (admin to dashboard, users to user portal)

### 4.1.2 Multi-Level User Roles

The system implements three distinct access levels:

**Admin Role:**

* Full administrative access to dashboard (backend/modules/admin/dashboard.php)
* Manage users, services, gallery, and contact submissions
* Create additional admin and user accounts
* Access to all CRUD operations

**User Role:**

* Access to personal dashboard (user-dashboard.php)
* Booking and inquiry capabilities
* Profile information viewing
* Limited to user-specific operations

**Public Access:**

* Browse services and gallery without authentication
* Submit contact forms
* Access to informational pages

### 4.1.3 Secure Password Management

* Passwords hashed using PHP's password\_hash() with PASSWORD\_DEFAULT
* No plain text storage in database
* Secure verification using password\_verify()
* Session management with proper cleanup on logout

# 5. Database Design and Implementation

## 5.1 Database Schema

The application uses a well-structured MySQL database with four core tables:

**Users Table**

CREATE TABLE Users (

id INT(6) UNSIGNED AUTO\_INCREMENT PRIMARY KEY,

first\_name VARCHAR(50) NOT NULL,

last\_name VARCHAR(50) NOT NULL,

email VARCHAR(100) NOT NULL UNIQUE,

phone VARCHAR(20) NOT NULL,

password VARCHAR(255) NOT NULL,

role ENUM('user', 'admin') DEFAULT 'user',

reg\_date TIMESTAMP DEFAULT CURRENT\_TIMESTAMP

);

**Services Table**

CREATE TABLE Services (

id INT(6) UNSIGNED AUTO\_INCREMENT PRIMARY KEY,

service\_name VARCHAR(100) NOT NULL,

subtitle TEXT NOT NULL,

description TEXT NOT NULL,

price DECIMAL(10, 2) NOT NULL,

last\_updated TIMESTAMP DEFAULT CURRENT\_TIMESTAMP

);

**Contact\_Submissions Table**

CREATE TABLE contact\_submissions (

id INT(6) UNSIGNED AUTO\_INCREMENT PRIMARY KEY,

name VARCHAR(100) NOT NULL,

email VARCHAR(100) NOT NULL,

subject VARCHAR(255) NOT NULL,

message TEXT NOT NULL,

viewed TINYINT(1) DEFAULT 0,

submission\_date TIMESTAMP DEFAULT CURRENT\_TIMESTAMP

);

**Gallery\_Images Table**

CREATE TABLE gallery\_images (

id INT(6) UNSIGNED AUTO\_INCREMENT PRIMARY KEY,

image\_url VARCHAR(255) NOT NULL,

caption VARCHAR(255) NOT NULL,

upload\_date TIMESTAMP DEFAULT CURRENT\_TIMESTAMP

);

## 5.2 Database Relationships

* **Users to Contact\_Submissions**: Logical relationship via email field
* **Services**: Standalone table for dynamic service management
* **Gallery\_Images**: Independent image management system
* **Appropriate data types**: VARCHAR for text, DECIMAL for pricing, TIMESTAMP for dates

## 5.3 CRUD Operations Implementation

### Create Operations:

* User registration (backend/modules/auth/register.php)
* Service creation (backend/modules/admin/add\_service.php)
* Contact form submissions (backend/modules/contact/process\_contact\_form.php)
* Gallery image additions (backend/modules/admin/add\_gallery\_image.php)

### Read Operations:

* Dynamic service display (services.php)
* Gallery image retrieval (gallery.php)
* User authentication verification
* Admin dashboard data display

### Update Operations:

* Contact submission status tracking
* User session management
* Service information modifications

### Delete Operations:

* Service removal (backend/modules/admin/delete\_service.php)
* User account deletion (backend/modules/admin/delete\_user.php)
* Contact submission management (backend/modules/admin/delete\_contact.php)
* Gallery image removal (backend/modules/admin/delete\_gallery\_image.php)

## 5.4 Data Input Forms with Validation

### Form 1: Contact Form (contact.php)

**Validation Features:**

* Required field validation (name, email, service, date, time)
* Email format validation using regex
* Phone number format validation
* Date and time input validation
* Privacy consent requirement
* Server-side sanitization using real\_escape\_string

### Form 2: User Registration (register.html)

**Validation Features:**

* Password confirmation matching
* Email format and uniqueness checking
* Required field validation for all inputs
* Phone number format validation
* Client-side and server-side validation coordination

# 6. Dynamic Web Desing Implementation

## 6.1 HTML5 and Semantic Structure

### HTML5 Features

* Semantic elements (<header>, <nav>, <main>, <section>, <article>)
* Form input types (email, tel, date, time)
* ARIA roles and labels for accessibility
* Proper document structure and meta tags

### CSS3 Implementation

* Responsive grid layouts using CSS Grid and Flexbox
* Custom CSS variables for consistent theming
* Modern styling with transitions and hover effects
* Mobile-first responsive design approach

## 6.2 Error Handling and Validation

### Client-Side Validation

* Real-time form validation with JavaScript
* Visual feedback for validation errors
* Custom notification system with success/error messages
* Input sanitization and format checking

### Server-Side Validation

* Comprehensive PHP validation functions
* Database constraint handling
* Error response management with proper HTTP codes
* Input sanitization and SQL injection prevention

## 6.3 Responsiveness and Cross-Browser Compatibility

* Mobile-responsive design using CSS media queries
* Flexible layouts adapting to different screen sizes
* Cross-browser compatible CSS properties
* Progressive enhancement approach
* Touch-friendly navigation for mobile devices

# 7. Web Standards Compliance

## 7.1 Accessibility Implementation

PetWalkers United strictly adheres to accessibility standards to ensure all users can navigate and interact with the website effectively. Semantic HTML is used consistently, with proper heading hierarchies from <h1> to <h6> to organize content and enhance screen reader interpretation. All links contain descriptive text, and form labels are explicitly associated with their respective inputs, providing clarity and ease of use. Skip links are implemented to facilitate keyboard navigation, allowing users to bypass repetitive content. ARIA roles and attributes supplement the semantic structure, with role attributes applied to navigation and content sections, aria-label and aria-describedby for form elements, aria-current to indicate active navigation states, and aria-live regions for dynamic content updates, ensuring that users with assistive technologies receive timely information.

## 7.2 Usability Principles

The website’s usability is designed for intuitive navigation and clear interaction flows. Navigation is consistent across all pages, with a clear visual hierarchy guiding the user from landing pages to specific actions. Forms are user-friendly, providing helpful feedback and instructions for errors, ensuring smooth interaction. Dynamic navigation adapts based on user authentication status, presenting context-specific options. Additionally, confirmation dialogs are presented for any destructive actions to prevent accidental changes, while loading states and visual feedback enhance user awareness of system responses. These measures collectively create a seamless and accessible experience for all visitors, including both authenticated users and public access.

## 7.3 Performance Optimization

Performance optimization is integrated throughout the platform. Images are stored in appropriate formats and sizes to balance quality and loading speed, with lazy loading implemented to reduce initial load times. Galleries are optimized using thumbnails, and fallback mechanisms are provided for missing images. Code efficiency is achieved through minified CSS and JavaScript files, optimized database queries using prepared statements, and proper caching headers to reduce server load and improve response times. The file structure is organized to facilitate efficient resource retrieval, contributing to overall faster page rendering and enhanced user experience across devices.

# 8. Advanced SEO Implementation

**8.1 Keyword Research and Strategy**

The platform employs a targeted SEO strategy to improve discoverability and local search relevance. Primary keywords include "pet walking services Sydney," "professional pet sitting," "dog walking NSW," "reliable pet care," and "local pet services," while long-tail keywords such as "trusted pet walking services near me," "professional dog walking Sydney," and "reliable pet sitting services" capture specific search intents. These keywords are strategically integrated into content, headings, and meta descriptions to improve search engine visibility without compromising natural content flow.

**8.2 On-Page SEO Strategies**

On-page SEO is systematically applied to maximize search engine performance. Unique title tags are implemented for each page with relevant target keywords, while meta descriptions are concise, descriptive, and limited to under 160 characters. Meta viewport tags are used to optimize mobile display, and a favicon is included for brand recognition. HTML heading tags follow a proper H1-H6 hierarchy, incorporating keywords where appropriate. All images contain descriptive alt text, and schema.org markup is applied where relevant to provide structured data for local business searches. Internal linking is carefully structured to facilitate navigation and improve content discoverability. Service-specific landing pages, location-based content, and customer testimonials are also incorporated to strengthen relevance, trust, and authority in search rankings.

9. Privacy and Security Implementation9.1 Secure Data Handling Practices

The platform prioritizes secure handling of sensitive user data. Passwords are hashed using PHP’s password\_hash() function with the PASSWORD\_DEFAULT algorithm, ensuring that no plain text passwords are stored. Password verification is performed securely using password\_verify(). All user inputs undergo server-side validation, protecting against SQL injection through the use of prepared statements and mitigating XSS attacks with output escaping. CSRF considerations are also integrated to enhance security. Session management follows best practices, including secure configuration, proper cleanup upon logout, session timeout implementation, and enforcement of role-based access control, preventing unauthorized access to restricted areas.

## 9.2 Role-Based Access Control

Role-based access control ensures that users interact only with functions appropriate to their assigned role. Administrators are protected by session checks that verify both login status and role before granting access to sensitive functionalities. If an unauthorized user attempts access, they are redirected automatically to the login page. Standard users undergo similar session validation for protected pages, and any attempts to bypass access controls are mitigated by automatic redirection. Logout functionality is implemented thoroughly, destroying sessions to prevent lingering access tokens and unauthorized use.

**Admin Protection**

if (!isset($\_SESSION['loggedin']) ||

$\_SESSION['loggedin'] !== true ||

$\_SESSION['role'] !== 'admin') {

header("Location: /login.html");

exit;

}

## 9.3 Privacy Notice Implementation

PetWalkers United maintains transparency in data collection and processing. Users are informed clearly about the types of data collected and the purposes for which it will be used, with consent required for all form submissions. Privacy notices are linked within the contact form and throughout the website to ensure visibility. Data protection measures include secure database storage, limited retention policies, user-initiated data deletion, and secure transmission protocols. These practices collectively uphold user privacy and maintain compliance with standard web security and privacy expectations.

# 10. Ethical Considerations and Academic Integrity

## 10.1 Ethical Web Development Practices

Data Privacy  
The platform collects only the essential information required to provide services. Clear consent mechanisms are implemented for all forms, ensuring users understand what data is collected and how it is used. Privacy policies are transparent and accessible, and all data is stored securely to prevent unauthorized access.

User Rights  
Users have the right to request deletion of their personal data at any time. Terms of service are clearly communicated, with no deceptive practices employed. All services are represented honestly, reflecting the true functionality of the platform.

## 10.2 Academic Integrity Compliance

**Original Development**

* All code written specifically for this project
* No copying of existing commercial platforms
* Proper attribution of any external resources
* Original design and functionality concepts

**External Resources Used**

* Font Awesome 4.7.0 for icons (properly attributed)
* Standard web technologies (HTML5, CSS3, JavaScript, PHP)
* No proprietary code or copyrighted materials

## 10.3 Documentation of Guidelines Adherence

**Requirement Compliance**  
All specified functionalities were implemented. The database design follows relational principles. Security best practices, accessibility guidelines, and SEO techniques were properly applied.

**No Deviations**  
All project requirements were met as specified. There were no significant changes from the original guidelines. The implementation of requested features is complete.

# 11. Screenshots and Visuals

## Admin Panel (Server Side)

- View and delete customer enquiries

A screenshot of a computer

AI-generated content may be incorrect.

Figure 1 Admin Panel: Customer Enquries

- Add or delete service

A screenshot of a computer

AI-generated content may be incorrect.

Figure 2 Admin Panel:Manage Services

- Add or remove users/admin

A screenshot of a computer

AI-generated content may be incorrect.

Figure 3Admin Panel:Manage User

- Add or delete images to display in gallery

A screenshot of a computer

AI-generated content may be incorrect.

Figure 4 Admin Panel: Manage Gallery

## Client side (Dynamic Pages)

User dashboard:

- See owns personal and other information (Booking, Services etc)

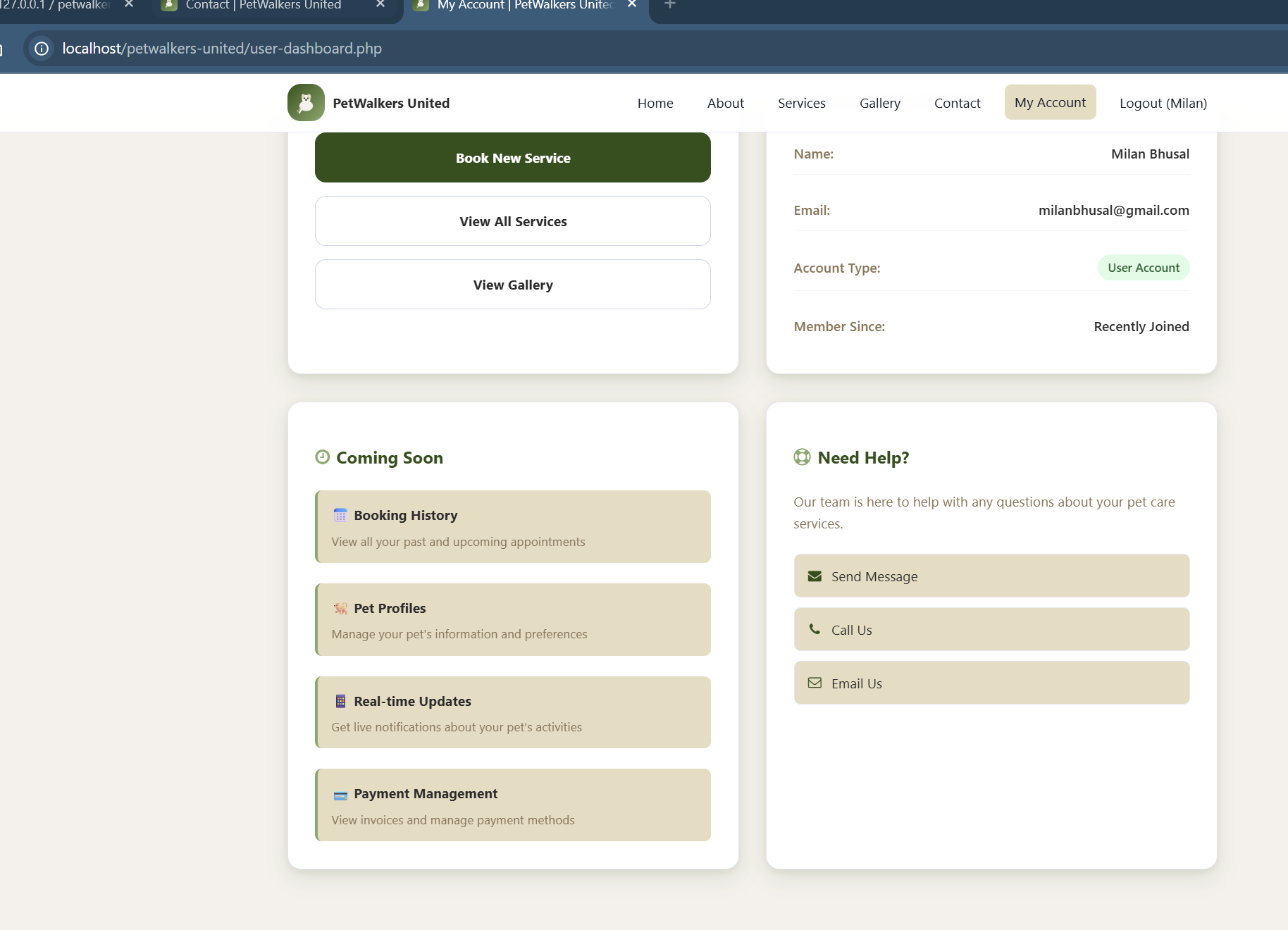


Figure 5 User Dashboard

Dynamic Gallery Page

- Display picture only added by admin (not hard coded picture)

A screenshot of a website

AI-generated content may be incorrect.

Figure 6 Dynamic Gallery

Contact Page  
- Display new service added by admin as well

A screenshot of a computer

AI-generated content may be incorrect.

Figure 7 Dynamic Contact Page

Services Page:  
- Show available service only (can be changed by admin)

A screenshot of a website

AI-generated content may be incorrect.

Figure 8 Dynamic Service Page

Register page

- Checks and register new people as users and add them to database

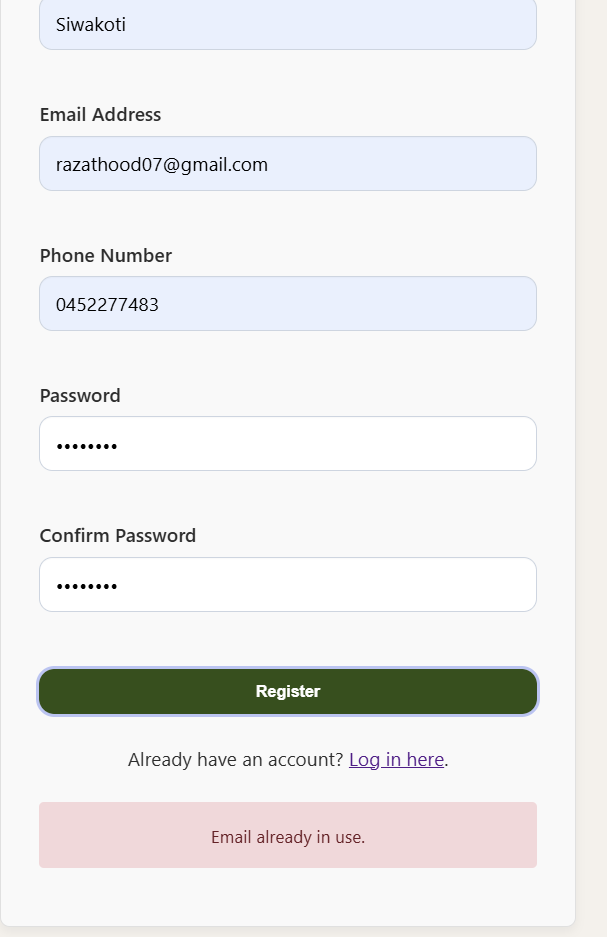


Figure 9 Adding new user form

# 12. Testing Logs

Table 1: Database Setup Testing

|  |  |  |  |
| --- | --- | --- | --- |
| **Test ID** | **Testing** | **Description** | **Result** |
| DB-001 | Database Creation | Run backend/setup\_database.php to create database and tables | A green check mark in a circle  AI-generated content may be incorrect. |
| DB-002 | Table Structure | Verify all tables (users, services, contact\_submissions, gallery\_images) exist | A green check mark in a circle  AI-generated content may be incorrect. |
| DB-003 | Default Admin Account | Check default admin account exists (20033379@students.koi.edu.au / admin123) | A green check mark in a circle  AI-generated content may be incorrect. |
| DB-004 | Database Connection | Run test\_db\_connection.php to verify connectivity | A green check mark in a circle  AI-generated content may be incorrect. |
| DB-005 | Services Table Update | Run update\_services\_table.php to add subtitle column | A green check mark in a circle  AI-generated content may be incorrect. |

Table 2: Authentication System Testing

|  |  |  |  |
| --- | --- | --- | --- |
| **Test ID** | **Testing** | **Description** | **Result** |
| AUTH-001 | User Registration - Valid Data | Register with all required fields filled correctly | A green check mark in a circle  AI-generated content may be incorrect. |
| AUTH-002 | User Registration - Duplicate Email | Try registering with existing email address | A green check mark in a circle  AI-generated content may be incorrect. |
| AUTH-003 | User Registration - Password Mismatch | Register with non-matching passwords | A green check mark in a circle  AI-generated content may be incorrect. |
| AUTH-004 | User Registration - Empty Fields | Submit registration form with missing required fields | A green check mark in a circle  AI-generated content may be incorrect. |
| AUTH-005 | User Registration - Database Check | Verify new user appears in database with 'user' role | A green check mark in a circle  AI-generated content may be incorrect. |
| AUTH-006 | Login - Valid Admin Credentials | Login with admin email/password | A green check mark in a circle  AI-generated content may be incorrect. |
| AUTH-007 | Login - Valid User Credentials | Login with regular user email/password | A green check mark in a circle  AI-generated content may be incorrect. |
| AUTH-008 | Login - Invalid Credentials | Login with wrong email/password combination | A green check mark in a circle  AI-generated content may be incorrect. |
| AUTH-009 | Login - Empty Fields | Submit login form with empty fields | A green check mark in a circle  AI-generated content may be incorrect. |
| AUTH-010 | Login - Role Redirection | Verify admin goes to dashboard, user goes to user-dashboard | A green check mark in a circle  AI-generated content may be incorrect. |
| AUTH-011 | Logout Functionality | Click logout and verify redirect to login page | A green check mark in a circle  AI-generated content may be incorrect. |
| AUTH-012 | Session Protection | Try accessing protected pages after logout | A green check mark in a circle  AI-generated content may be incorrect. |

|  |  |  |  |
| --- | --- | --- | --- |
| **Test ID** | **Testing** | **Description** | **Result** |
| ADM-001 | Admin Access Control | Access admin dashboard with admin credentials | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-002 | User Access Denied | Try accessing admin dashboard with user credentials | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-003 | Contact Submissions View | Submit contact form and verify it appears in admin dashboard | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-004 | Contact Submission Delete | Delete a contact submission from admin panel | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-005 | Services Management Access | Navigate to manage\_services.php | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-006 | Add New Service | Add service with all fields (name, subtitle, description, price) | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-007 | Service Validation | Try adding service with empty required fields | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-008 | Service Display | Verify new service appears in services table | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-009 | Delete Service | Remove a service and verify deletion | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-010 | User Management Access | Navigate to manage\_users.php | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-011 | Add New User - Regular | Add user with 'user' role | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-012 | Add New Admin | Add user with 'admin' role | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-013 | User Duplicate Email | Try adding user with existing email | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-014 | User Weak Password | Try adding user with password less than 6 characters | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-015 | Delete User | Delete a user (not current admin) | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-016 | Self-Delete Prevention | Try to delete own admin account | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-017 | Gallery Management Access | Navigate to manage\_gallery.php | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-018 | Add Gallery Image - Local | Add image with local path (img/gallery/...) | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-019 | Add Gallery Image - URL | Add image with external URL | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-020 | Gallery Image Validation | Try adding image with invalid URL format | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-021 | Delete Gallery Image | Remove an image from gallery | A green check mark in a circle  AI-generated content may be incorrect. |

Table 3: Admin Dashboard Testing

Table 4: Public Pages Testing

|  |  |  |  |
| --- | --- | --- | --- |
| **Test ID** | **Testing** | **Description** | **Result** |
| ADM-001 | Admin Access Control | Access admin dashboard with admin credentials | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-002 | User Access Denied | Try accessing admin dashboard with user credentials | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-003 | Contact Submissions View | Submit contact form and verify it appears in admin dashboard | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-004 | Contact Submission Delete | Delete a contact submission from admin panel | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-005 | Services Management Access | Navigate to manage\_services.php | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-006 | Add New Service | Add service with all fields (name, subtitle, description, price) | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-007 | Service Validation | Try adding service with empty required fields | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-008 | Service Display | Verify new service appears in services table | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-009 | Delete Service | Remove a service and verify deletion | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-010 | User Management Access | Navigate to manage\_users.php | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-011 | Add New User - Regular | Add user with 'user' role | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-012 | Add New Admin | Add user with 'admin' role | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-013 | User Duplicate Email | Try adding user with existing email | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-014 | User Weak Password | Try adding user with password less than 6 characters | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-015 | Delete User | Delete a user (not current admin) | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-016 | Self-Delete Prevention | Try to delete own admin account | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-017 | Gallery Management Access | Navigate to manage\_gallery.php | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-018 | Add Gallery Image - Local | Add image with local path (img/gallery/...) | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-019 | Add Gallery Image - URL | Add image with external URL | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-020 | Gallery Image Validation | Try adding image with invalid URL format | A green check mark in a circle  AI-generated content may be incorrect. |
| ADM-021 | Delete Gallery Image | Remove an image from gallery | A green check mark in a circle  AI-generated content may be incorrect. |

Table 5: Contact Form testing

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| --- | --- | --- | --- |
| **Test ID** | **Testing** | **Description** | **Result** |
| FORM-001 | Contact Form Load | Access contact.php and verify form displays | A green check mark in a circle  AI-generated content may be incorrect. |
| FORM-002 | Service Dropdown Population | Verify services dropdown loads from database | A green check mark in a circle  AI-generated content may be incorrect. |
| FORM-003 | Required Field Validation | Submit form with missing required fields | A green check mark in a circle  AI-generated content may be incorrect. |
| FORM-004 | Email Format Validation | Submit form with invalid email format | A green check mark in a circle  AI-generated content may be incorrect. |
| FORM-005 | Phone Number Validation | Test phone number pattern validation | A green check mark in a circle  AI-generated content may be incorrect. |
| FORM-006 | Date/Time Selection | Test date and time input fields | A green check mark in a circle  AI-generated content may be incorrect. |
| FORM-007 | Successful Submission | Submit complete valid form | A green check mark in a circle  AI-generated content may be incorrect. |
| FORM-008 | Success Message Display | Verify success notification appears | A green check mark in a circle  AI-generated content may be incorrect. |
| FORM-009 | Admin Dashboard Integration | Check submission appears in admin panel | A green check mark in a circle  AI-generated content may be incorrect. |
| FORM-010 | Form Reset | Test reset button functionality | A green check mark in a circle  AI-generated content may be incorrect. |
| FORM-011 | Character Limits | Test message field maximum length | A green check mark in a circle  AI-generated content may be incorrect. |
| FORM-012 | Special Characters | Submit form with special characters in fields | A green check mark in a circle  AI-generated content may be incorrect. |

Table 6: User Dashboard Testing

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| --- | --- | --- | --- |
| **Test ID** | **Testing** | **Description** | **Result** |
| USER-001 | User Dashboard Access | Login as user and access user-dashboard.php | A green check mark in a circle  AI-generated content may be incorrect. |
| USER-002 | User Info Display | Verify user's name and email display correctly | A green check mark in a circle  AI-generated content may be incorrect. |
| USER-003 | Quick Action Links | Test all quick action buttons/links | A green check mark in a circle  AI-generated content may be incorrect. |
| USER-004 | Support Contact Options | Test support contact links | A green check mark in a circle  AI-generated content may be incorrect. |
| USER-005 | Admin Access Block | Verify admin can't access user dashboard inappropriately | A green check mark in a circle  AI-generated content may be incorrect. |
| USER-006 | Coming Soon Features | Verify coming soon section displays | A green check mark in a circle  AI-generated content may be incorrect. |

Table 7: Navigation & Security Testing

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| --- | --- | --- | --- |
| **Test ID** | **Testing** | **Description** | **Result** |
| NAV-001 | Dynamic Navigation - Logged Out | Check navigation shows Login link when not logged in | A green check mark in a circle  AI-generated content may be incorrect. |
| NAV-002 | Dynamic Navigation - User | Check navigation shows My Account when logged in as user | A green check mark in a circle  AI-generated content may be incorrect. |
| NAV-003 | Dynamic Navigation - Admin | Check navigation shows Admin Panel when logged in as admin | A green check mark in a circle  AI-generated content may be incorrect. |
| NAV-004 | Mobile Menu Toggle | Test hamburger menu functionality on mobile | A green check mark in a circle  AI-generated content may be incorrect. |
| NAV-005 | Breadcrumb Navigation | Test aria-current="page" indicators | A green check mark in a circle  AI-generated content may be incorrect. |
| SEC-001 | Admin URL Protection | Try accessing admin URLs without login | A green check mark in a circle  AI-generated content may be incorrect. |
| SEC-002 | User Role Enforcement | Try accessing admin features as regular user | A green check mark in a circle  AI-generated content may be incorrect. |
| SEC-003 | Session Timeout | Test behaviour when session expires | A green check mark in a circle  AI-generated content may be incorrect. |
| SEC-004 | SQL Injection Prevention | Test login forms with SQL injection attempts | A green check mark in a circle  AI-generated content may be incorrect. |
| SEC-005 | XSS Prevention | Test forms with JavaScript injection attempts | A green check mark in a circle  AI-generated content may be incorrect. |
| SEC-006 | Password Hashing | Verify passwords are hashed in database | A green check mark in a circle  AI-generated content may be incorrect. |

Table 8: Cross-Browser & Device Testing

|  |  |  |  |
| --- | --- | --- | --- |
| **Test ID** | **Testing** | **Description** | **Result** |
| CROSS-001 | Chrome Desktop | Test all functionality in Chrome | A green check mark in a circle  AI-generated content may be incorrect. |
| CROSS-002 | Firefox Desktop | Test all functionality in Firefox | A green check mark in a circle  AI-generated content may be incorrect. |
| CROSS-003 | Safari Desktop | Test all functionality in Safari | A green check mark in a circle  AI-generated content may be incorrect. |
| CROSS-004 | Edge Desktop | Test all functionality in Edge | A green check mark in a circle  AI-generated content may be incorrect. |
| CROSS-005 | iOS Safari Mobile | Test responsive design on iPhone Safari | A green check mark in a circle  AI-generated content may be incorrect. |
| CROSS-006 | Android Chrome Mobile | Test responsive design on Android Chrome | A green check mark in a circle  AI-generated content may be incorrect. |
| CROSS-007 | Tablet Layout | Test layout on iPad/Android tablet | A green check mark in a circle  AI-generated content may be incorrect. |
| CROSS-008 | Mobile Form Input | Test form inputs on mobile devices | A green check mark in a circle  AI-generated content may be incorrect. |

Table 9: Integration and Dynamic Content Testing

|  |  |  |  |
| --- | --- | --- | --- |
| **Test ID** | **Testing** | **Description** | **Result** |
| INT-001 | Service Add → Contact Form | Add service in admin, check appears in contact dropdown | A green check mark in a circle  AI-generated content may be incorrect. |
| INT-002 | Service Delete → Contact Form | Delete service, verify removal from contact dropdown | A green check mark in a circle  AI-generated content may be incorrect. |
| INT-003 | Gallery Add → Public Page | Add image in admin, check appears on gallery.php | A green check mark in a circle  AI-generated content may be incorrect. |
| INT-004 | Gallery Delete → Public Page | Delete image, verify removal from gallery.php | A green check mark in a circle  AI-generated content may be incorrect. |
| INT-005 | Contact Submit → Admin View | Submit contact form, verify in admin dashboard | A green check mark in a circle  AI-generated content may be incorrect. |
| INT-006 | User Add → User Table | Add user in admin, verify appears in user management | A green check mark in a circle  AI-generated content may be incorrect. |
| INT-007 | Services → Public Display | Add service, verify correct display on services.php | A green check mark in a circle  AI-generated content may be incorrect. |
| INT-008 | Real-time Updates | Test multiple admin actions and verify frontend updates | A green check mark in a circle  AI-generated content may be incorrect. |

Table 10: Error Handling and Edge cases

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| --- | --- | --- | --- |
| **Test ID** | **Testing** | **Description** | **Result** |
| ERR-001 | Database Connection Loss | Test behavior when database connection fails | A green check mark in a circle  AI-generated content may be incorrect. |
| ERR-002 | Missing Image Files | Test gallery with broken image paths | A green check mark in a circle  AI-generated content may be incorrect. |
| ERR-003 | Large File Uploads | Test image uploads with very large files | A green check mark in a circle  AI-generated content may be incorrect. |
| ERR-004 | Long Text Input | Test with very long descriptions/messages | A green check mark in a circle  AI-generated content may be incorrect. |
| ERR-005 | Special Character Handling | Test with emojis and special characters | A green check mark in a circle  AI-generated content may be incorrect. |
| ERR-006 | Network Timeout | Test form submissions with slow network | A green check mark in a circle  AI-generated content may be incorrect. |
| ERR-007 | JavaScript Disabled | Test basic functionality with JS disabled | A green check mark in a circle  AI-generated content may be incorrect. |
| ERR-008 | CSS Loading Failure | Test page usability when CSS fails to load | A green check mark in a circle  AI-generated content may be incorrect. |