PROJECT DOCUMENTATION

RESTO – Online Restaurant Management Website

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1. Introduction

The **Resto Restaurant Website** is a web-based application developed using **PHP and MySQL**. This system allows restaurants to display their food menu online and provides an **admin panel** to manage food items, images, and customer messages.

The project demonstrates **database connectivity**, **CRUD operations**, **image upload**, and **session-based authentication**, making it suitable for academic submission.

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2. Objectives of the Project

- To develop a dynamic restaurant website
- To display food items with images and prices
- To allow admin to manage menu items
- To store customer contact messages
- To understand PHP–MySQL integration

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3. Scope of the Project

The project is suitable for **small and medium restaurants**.
Future enhancements can include:

- Online food ordering
- Payment gateway
- Customer login system

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4. Technology Used

Component	Technology
Frontend	HTML, CSS

Component	Technology
Backend	PHP
Database	MySQL
Server	XAMPP
Tools	VS Code, phpMyAdmin

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5. System Modules

5.1 User Module

- View home page
- View food menu with images
- Read about restaurant
- Send message through contact form

5.2 Admin Module

- Secure admin login
- Add food items with images
- Edit and delete food items
- View customer messages
- Logout functionality

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6. ER Diagram Explanation

The **Entity Relationship Diagram (ERD)** represents the database structure and relationships.

Entities

Admin

- admin_id (Primary Key)
- username
- password

Foods

- food_id (Primary Key)
- name
- description
- price

- image
- category

Contacts

- contact_id (Primary Key)
- name
- email
- message
- created_at

Relationships

- One admin can manage many food items
- Admin can view customer messages
- Users can submit contact messages

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7. Data Flow Diagram (DFD)

DFD Level 0 (Context Diagram)

- User interacts with the system to view menu and send messages
- Admin interacts with the system to manage food items and messages

DFD Level 1

- Admin Login Process
- Food Management Process
- Menu Display Process
- Contact Form Process

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8. Database Design

Database Name: `resto_db`

Tables

1. admin
2. foods
3. contacts

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9. SQL Code

```
CREATE DATABASE IF NOT EXISTS resto_db;
USE resto_db;

CREATE TABLE admin (
    id INT AUTO_INCREMENT PRIMARY KEY,
    username VARCHAR(50) NOT NULL,
    password VARCHAR(100) NOT NULL
);

CREATE TABLE foods (
    id INT AUTO_INCREMENT PRIMARY KEY,
    name VARCHAR(100) NOT NULL,
    description TEXT,
    price DECIMAL(6,2) NOT NULL,
    image VARCHAR(255),
    category VARCHAR(50)
);

CREATE TABLE contacts (
    id INT AUTO_INCREMENT PRIMARY KEY,
    name VARCHAR(100) NOT NULL,
    email VARCHAR(100) NOT NULL,
    message TEXT NOT NULL,
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);

INSERT INTO admin (username, password)
VALUES ('admin', 'admin123');
```

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10. Hardware & Software Requirements

Hardware

- Minimum 4 GB RAM
- Intel i3 or higher processor

Software

- Windows OS
- XAMPP Server
- Web Browser

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11. Advantages

- Easy to use interface
- Secure admin authentication
- Dynamic food management
- Image upload functionality
- Time-saving for restaurant owners

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12. Limitations

- No online payment
- No customer login
- Single admin support

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13. Future Enhancements

- Online ordering system
- Payment gateway integration
- Customer reviews & ratings
- Email notifications

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14. Conclusion

The **Resto Restaurant Website** successfully fulfills the objective of providing a dynamic and user-friendly restaurant management system.
It effectively demonstrates **PHP–MySQL integration**, **CRUD operations**, **image upload**, and **session management**, making it suitable for academic evaluation.
