**GRUML Restaurant Management System**

**Introduction**

The GRUML Restaurant Management System is a sophisticated solution crafted to revolutionize restaurant operations, optimizing efficiency and elevating customer experiences. This comprehensive documentation provides insights into the system's extensive features, development methodologies, and integration procedures.

**Features Overview**

Authentication and Authorization

* Secure login for admins using ID and Password.
  + **Defaults**
  + admin 1234
  + user 1111
* Strict authentication protocols ensuring data security.
* Users required to sign in or sign up before adding items to the cart for enhanced security and personalized experiences.

**Dashboard**

* Intuitive dashboard facilitating seamless navigation across functionalities.
* Comprehensive overview of restaurant performance through dynamic Google Charts.
* Real-time notifications for new orders, inventory updates, and reservations.

Admin Panel

* Centralized management of admin accounts:
  + Addition, deletion, and updating of admin credentials.
  + Flexibility to modify admin information and change passwords.
  + Empowered admin privileges for streamlined control over system operations.

Online Orders Management

* Detailed display of order specifics and user details.
* Efficient tracking and management of payment statuses.
* Seamless order status updates facilitated by intuitive user interface.
* Comprehensive breakdown of ordered items enhancing order processing efficiency.

Eat In Orders Management (Hardware Integration)

* Seamless integration with restaurant hardware devices for streamlined order processing.
* Real-time display of order and table information for efficient management.
* Automated tracking of payment and order statuses for enhanced operational efficiency.
* Administrative capabilities to update and delete order details as necessary.

Category Management

* Dynamic addition, modification, and deletion of restaurant categories.
* Flexible menu categorization for effortless menu management and organization.
* Empowerment for administrators to adapt menu categories to evolving culinary trends and customer preferences dynamically.

Inventory Management

* Real-time inventory tracking and management.
* Proactive notifications for low stock items, ensuring timely replenishment.
* Comprehensive status system for efficient monitoring of stock levels and inventory utilization.
* Administrative control over inventory updates to maintain optimal stock levels and operational efficiency.

Checkout Process

* Secure and seamless checkout process for enhanced user experience.
* Multiple payment options to accommodate diverse customer preferences.
* Order summary and confirmation ensuring accuracy and transparency.
* Streamlined order completion process, minimizing transactional friction and enhancing customer satisfaction.

Dynamic Menu and Reservation Management

* Dynamic addition of menus and categories to reflect evolving culinary offerings.
* Effortless reservation management system accommodating varying dining preferences and party sizes.
* Real-time updates ensuring accuracy and availability of menu items and reservation slots.

**Development Integration Process**

Setting Up Development Environment

1. Installation of XAMPP to establish a local web server environment.
2. Creation and configuration of the MySQL database to accommodate system requirements.  
   CHECK READ ME FOLDER>

CREATE DATABASE WITH NAME **new-food-order**

1. Importation of SQL schema to define database structure and relationships.
2. Configuration of admin and user credentials for authentication purposes.

**Frontend Development**

* Utilization of HTML5, CSS3, and SCSS for visually appealing and responsive frontend design.
* Integration of JavaScript and Agile.js for dynamic content rendering and enhanced user interaction.
* Adoption of Bootstrap framework for consistent UI components and streamlined development process.

Backend Development

* Implementation of PHP for robust server-side scripting and backend logic execution.
* Integration of MySQL database for seamless data retrieval, manipulation, and storage.
* Adoption of agile development methodologies for iterative and efficient backend development.

Database Management

* Design and implementation of MySQL database schema adhering to normalization principles.
* Optimization of database performance and scalability for efficient data management.
* Regular backups and maintenance routines to ensure data integrity and system reliability.

**Technologies Used**

* HTML5/CSS3/SCSS for frontend development and styling.
* JavaScript with Agile.js for dynamic content rendering and client-side scripting.
* Bootstrap framework for responsive UI design and component standardization.
* XAMPP for local web server setup and development environment configuration.
* PHP for server-side scripting and backend logic implementation.
* MySQL for robust relational database management and data storage.

**Conclusion**

The GRUML Restaurant Management System epitomizes innovation and efficiency in restaurant operations, offering a plethora of features tailored to meet the evolving needs of modern establishments. By adhering to the outlined integration process and leveraging cutting-edge technologies, developers can seamlessly integrate the system into their establishments, paving the way for enhanced operational efficiency, customer satisfaction, and sustained growth.