Arab Academy for Science, Technology, and Maritime Transport
College of Computing and Information Technology

Smart Village

Project Title:

“Forno”

(Restuarant Reservation Website)

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♦ Brief:

This document presents the System Requirements Specification (SRS) for a Restaurant Reservation Website (Forno), a comprehensive solution aimed at facilitating the reservation process for both customers and restaurant staff. The system is designed to enhance the overall dining experience by providing a user-friendly platform for making and managing restaurant reservations.

The proposed Restaurant Reservation Website (Forno) will offer a range of features including user registration, browsing of available restaurants and reservation creation. The system aims to address the challenges associated with manual reservation processes by automating certain tasks, reducing errors and improving communication between customers and restaurant staff.

♦ Motivation:

In an era where digital solutions have become an integral part of our daily lives, the hospitality industry stands to benefit significantly from technology that enhances customer experiences. The motivation behind the development of the Restaurant Reservation Website project is rooted in bypassing the challenges faced by both customers and restaurant owners in the current reservation processes (manual reservations).

- **Enhancing Customer Convenience:** The traditional method of making restaurant reservations often involves time-consuming phone calls and potential errors. A digital reservation system will help empower customers with the convenience of making, modifying or canceling reservations at their fingertips.

- **Efficiency for Restaurant Owners:** Restaurant staff often face difficulties in managing reservations manually, leading to overbooking or underutilization of resources. The proposed system aims to facilitate the reservation process, providing real-time updates on table availability and reducing the workload of the restaurant's staff.

- **Feedback and Continuous Improvement:** The inclusion of a feedback mechanism within the system facilitates communication between customers and restaurant owners. This not only allows for immediate issue resolution but also provides valuable insights for continuous improvement in service quality.

- **Industry Relevance:** The project aligns with the current industry trend of adopting technology to enhance customer interactions and streamline business processes. As the hospitality sector evolves, the ability to incorporate digital solutions becomes increasingly critical for the success of restaurants.

- **Commitment to Modern Standards:** Forno is motivated by a commitment to modernize the reservation process, aligning with contemporary standards of accessibility, user experience, and security.

In conclusion, the motivation behind "Forno" lies in creating a solution that addresses practical challenges in the hospitality sector of restaurants.

♦ Problem Statement:

The traditional restaurant reservation process is plagued by inefficiencies, resulting in inconveniences for both customers and restaurant staff.

Manual reservation management is error-prone, leading to overbooking or underutilization of resources.

Communication barriers and the lack of a friendly system worsen the overall dining experience.

There is a need for a digital solution that addresses these challenges, offering a seamless and efficient reservation platform for customers while optimizing operations for restaurant owners.

♦ Objectives:

❖ **Efficient Reservation Management:**

- Develop a user-friendly system for customers to easily create, modify, and cancel reservations.
- Provide real-time updates on table availability to prevent overbooking or underutilization.

❖ **Enhanced Customer Experience:**

- Improve the overall dining experience by offering a convenient and intuitive reservation process.
- Implement a feedback mechanism to capture customer opinions and address concerns.

❖ **Streamlined Restaurant Operations:**

- Reduce the workload on restaurant staff by automating reservation processes.
- Enable restaurant owners to manage profiles, update menus, and monitor reservations efficiently.

♦ Constraints:

- **Budget Limitations:**

The project must operate within predefined budget constraints, considering potential resource limitations for development and maintenance.

- **Time Constraints:**

The development timeline is restricted to the academic semester, requiring efficient project management to meet deadlines.

- **Technological Constraints:**

The system must be compatible with commonly used web browsers and devices, ensuring accessibility for a diverse user base.

- **Data Security and Privacy:**

Sticking to strict data security standards to protect user information and payment details

♦ Standards:

- **User Interface Standards:**

Design the user interface following best practices for accessibility, responsiveness, and an intuitive user experience.

- **Payment Processing Standards:**

Implement secure payment processing in coordination with industry standards to secure customer financial information.

- **Data Interchange Standards:**

Utilize standard data interchange formats to ensure compatibility and seamless integration with external systems if needed.

- **Performance Standards:**

Establish performance metrics to ensure the system operates efficiently under varying user loads, providing a responsive experience.

- **Feedback Mechanism Standards:**

Design a feedback mechanism to encourage communication between customers and restaurant owners while adhering to ethical standards.

♦ Analysis:

- **Strengths:**

1. Experienced development team.
2. Real-time updates on table availability.

- **Weaknesses:**

1. Limited project timeline.
2. Budget constraints may impact on some features.

- **Opportunities:**

1. Integration with social media for marketing.
2. Potential for collaboration with local restaurants.
3. Expansion to mobile app development to reach a broader audience.

- **Threats:**

1. Competition from existing reservation platforms.
2. Data security vulnerabilities (Breach).

♦ Functional Requirements:

- **User Registration and Authentication:**

1. Users should be able to register accounts securely.
2. Login authentication for registered users.

- **Restaurant Profile Management:**

1. Restaurant owners should be able to create and manage profiles.
2. Ability to update menus, operating hours and special offers.

- **Reservation Creation and Modification:**

1. Customers should be able to create, modify and cancel reservations.
2. Real-time updates on table availability.

- **Payment Processing:**

1. Secure payment processing for optional reservation fees.
2. Integration with standard payment gateways.

- **Feedback Mechanism:**

1. Customers can provide feedback on their dining experience.
2. Restaurant owners can respond to and address customer feedback.

♦ Non-Functional Requirements:

- **Performance:**

1. System must handle concurrent user requests efficiently.
2. Response time for reservation creation and updates should be within acceptable limits.

- **Usability:**

1. The user interface should be intuitive and accessible.
2. Mobile responsiveness for on-the-go/take out users.

- **Security:**

1. Implementation of secure authentication mechanisms.
2. Encryption of sensitive user data, especially payment information.

- **Reliability:**

1. The system should be available and reliable during peak reservation times.
2. Regular backups and data recovery mechanisms.

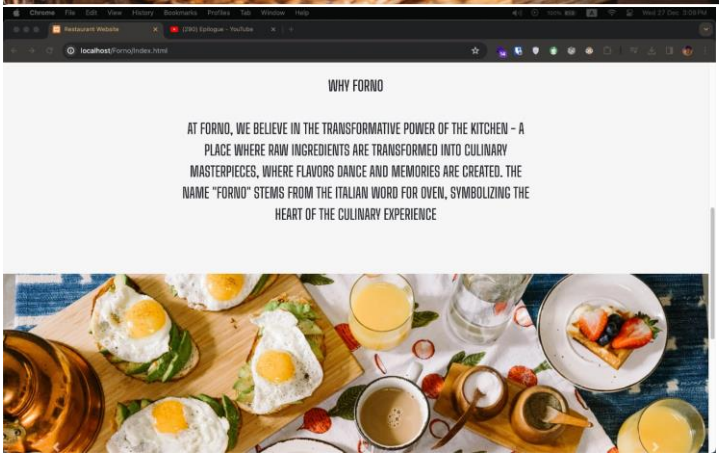
♦ Technology and Tools Used:

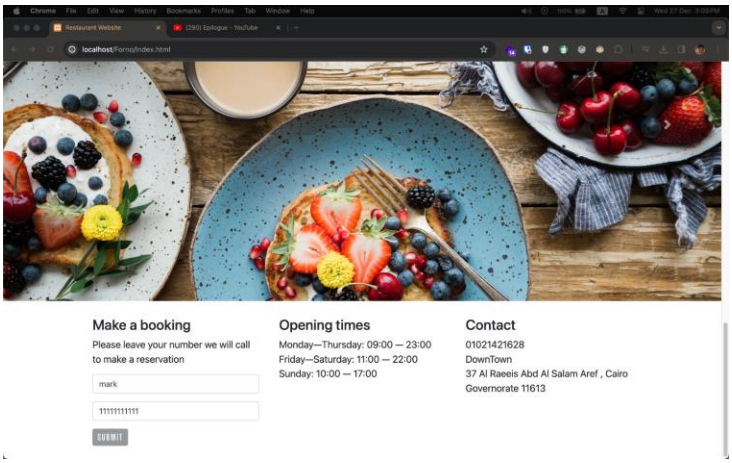
1. Html
2. CSS
3. JavaScript
4. jQuery
5. Ajax SQL
6. PHP

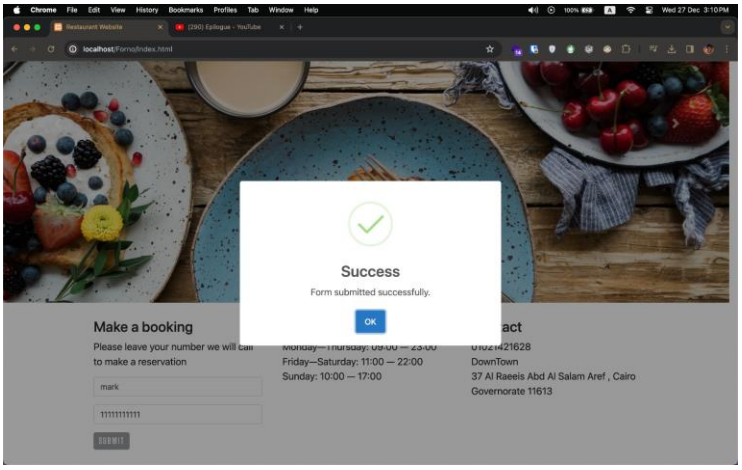
7. MySQL
8. Apache

♦ Prototype (Screenshots):

1. 

2. 

3. 
Make a booking
Please leave your number we will call to make a reservation
mark
11111111111
SUBMIT
Opening times
Monday—Thursday: 09:00 — 23:00
Friday—Saturday: 11:00 — 22:00
Sunday: 10:00 — 17:00
Contact
01021421628
DownTown
37 Al Raeeis Abd Al Salam Aref , Cairo
Governorate 11613

4. 
Success
Form submitted successfully.
OK
Make a booking
Please leave your number we will call to make a reservation
mark
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37 Al Raeeis Abd Al Salam Aref , Cairo
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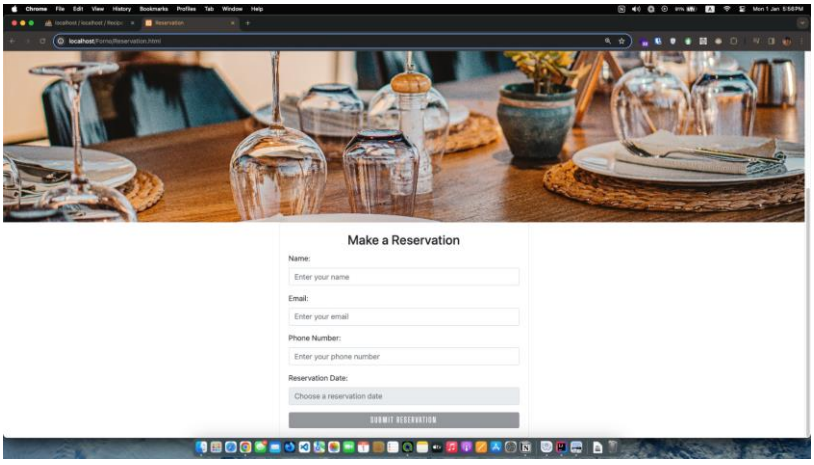
5. 
Make a Reservation
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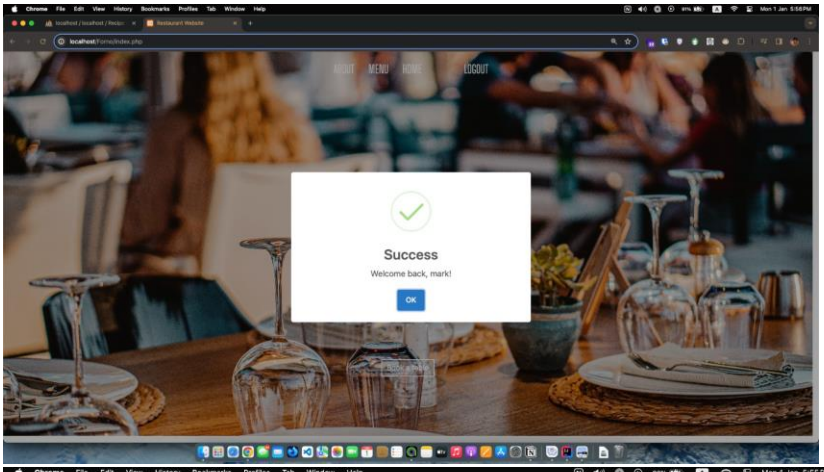
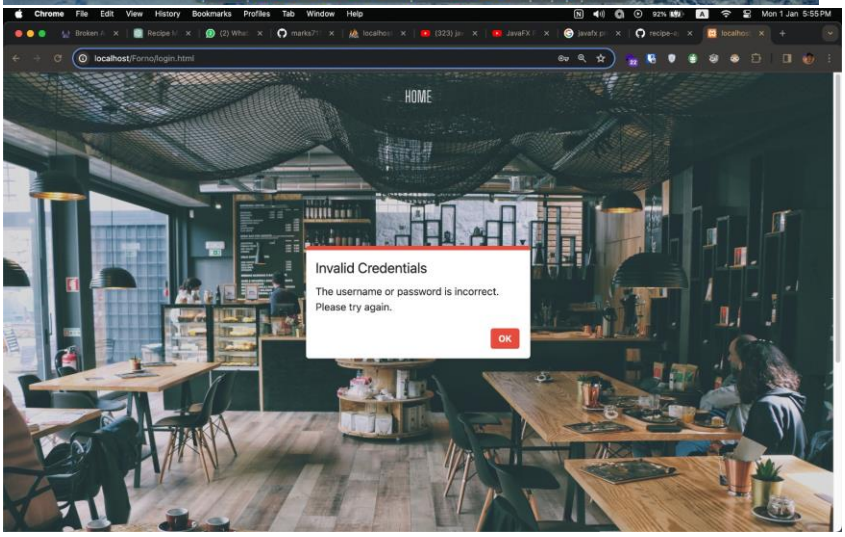
Enter your name
Email:
Enter your email
Phone Number:
Enter your phone number
Reservation Date:
Choose a reservation date
SUBMIT RESERVATION

6. 

7. 

♦ Conclusion:

In conclusion, the “Forno” (Restaurant Reservation Website) System Requirements Specification (SRS) outlines a modern solution to streamline restaurant reservations, enhancing the customer experience and operational efficiency.

The analysis provides a comprehensive understanding of stakeholders, challenges, and opportunities.

The specified objectives, constraints, and standards offer a clear framework for development while focusing on key features and performance criteria.

Acknowledging constraints as opportunities for innovation, the project aims to deliver benefits such as improved customer satisfaction, increased restaurant revenue, and valuable educational experiences.

The SRS encapsulates a vision aligned with industry trends focusing on adaptability for ongoing success.