TEAM-1

Software Engineering Principles (L35+L36)

ASSESSMENT-1 WBS

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Project Title: Food Delivery Website

DESCRIPTION - To develop and launch a user-friendly and scalable online food delivery that enables restaurants to reach a wider customer base, facilitates convenient online ordering and table reservations for customers, and provides a seamless delivery experience while ensuring secure payment processing and efficient order.

Project Scope**:**

- Development and deployment of a functional online food delivery platform.
- Features:
    - User registration and login
    - Restaurant and item browsing/search
    - Online ordering and cart management
    - Table booking
    - Secure online payment integration
    - Order tracking and delivery management (if applicable)
    - Admin panel for restaurant and item management
- Target Audience**:** Restaurants, delivery partners, and end-users (customers).
- Platform**:** Web-based application with potential mobile app versions.

Impact of the Project:

- Business:
    - Increased revenue for restaurants.
    - New revenue streams for the platform operators.
    - Enhanced customer convenience and satisfaction.
    - Improved efficiency for restaurants in order management.
- Social**:**
    - Creation of employment opportunities for delivery partners.
    - Potential for community support and local business growth.
- Technological:
    - Adoption of online ordering and delivery technologies.
    - Innovation in food service industry.

1. Internal Stakeholders:

- Project Team**:**

    - Developers (Frontend, Backend)
    - Designers (UI/UX)
    - Project Manager
    - Testers
    - Database Administrators
    - DevOps Engineers
- Management:
    - CEO
    - CTO
    - Product Manager
    - Marketing Manager

2. External Stakeholders:

- Restaurants:
    - Restaurant Owners
    - Restaurant Managers
    - Chefs/Kitchen Staff
- Customers:
    - End-users (consumers)
    - Delivery Partners
- Investors:
    - Venture Capitalists
    - Angel Investors
- Technology Partners**:**
    - Payment Gateway Providers (e.g., Stripe, PayPal)
    - Mapping and Navigation Providers (e.g., Google Maps)
    - Cloud Service Providers (e.g., AWS, Azure)
- Regulatory Bodies**:**
    - Local Government Authorities
    - Food Safety and Standards Authority

WORK BREAKDOWN STRUCTURE (WBS)

Process-Based WBS:

1.1 Gather user requirements through surveys, interviews, and market research.

- 1.2 Analyze user needs and pain points.
- 1.3 Define system scope and functionalities.
- 1.4 Create user stories and acceptance criteria.
- 1.5 Develop system requirements specifications (SRS) document.
    - Objective**:** Clearly understand user needs, define system boundaries, and establish a foundation for the project.

2. Design & Prototyping

- 2.1 Design user interface (UI) and user experience (UX) for both customer and admin interfaces.
- 2.2 Create wireframes and prototypes for user interaction.
- 3.2 Define database schema and data models.
- 2.3 Design system architecture and workflows.
- 2.4 Develop API specifications.
    - Objective: Create a user-friendly and intuitive design, ensure system functionality, and guide development efforts.

3. Development

- 3.1 Frontend Development**:**
    - 3.1.1 HTML, CSS, JavaScript development for user interface.
    - 3.1.2 UI component library development and integration.
    - 3.1.3 Frontend testing and debugging.
    - Objective: Build a visually appealing and responsive user interface.
- 3.2 Backend Development:
    - 3.2.1 Server-side logic development (e.g., Node.js, Python, Java).
    - 3.2.2 API implementation and integration.
    - 3.2.3 Database interactions and data management.
    - Objective: Develop a robust and scalable backend to support the application's functionalities.

- 3.3 Database Development:
    - 3.3.1 Database schema design and implementation.
    - 3.3.2 Database population and data migration.
    - 3.3.3 Database performance optimization.
    - Objective: Create a well-structured and efficient database to store and retrieve data.
- 3.4 API Development:
    - 3.4.1 RESTful API design and implementation.
    - 3.4.2 API documentation and testing.
    - Objective: Develop a reliable and secure API for communication between frontend and backend.

4. Testing & Quality Assurance

- 4.1 Unit testing of individual components and modules.
- 4.2 Integration testing of different system components.
- 4.3 User acceptance testing (UAT) with real users.
- 4.4 Bug tracking and resolution.
- 4.5 Performance testing and load testing.
    - Objective: Ensure the system's functionality, reliability, and performance.

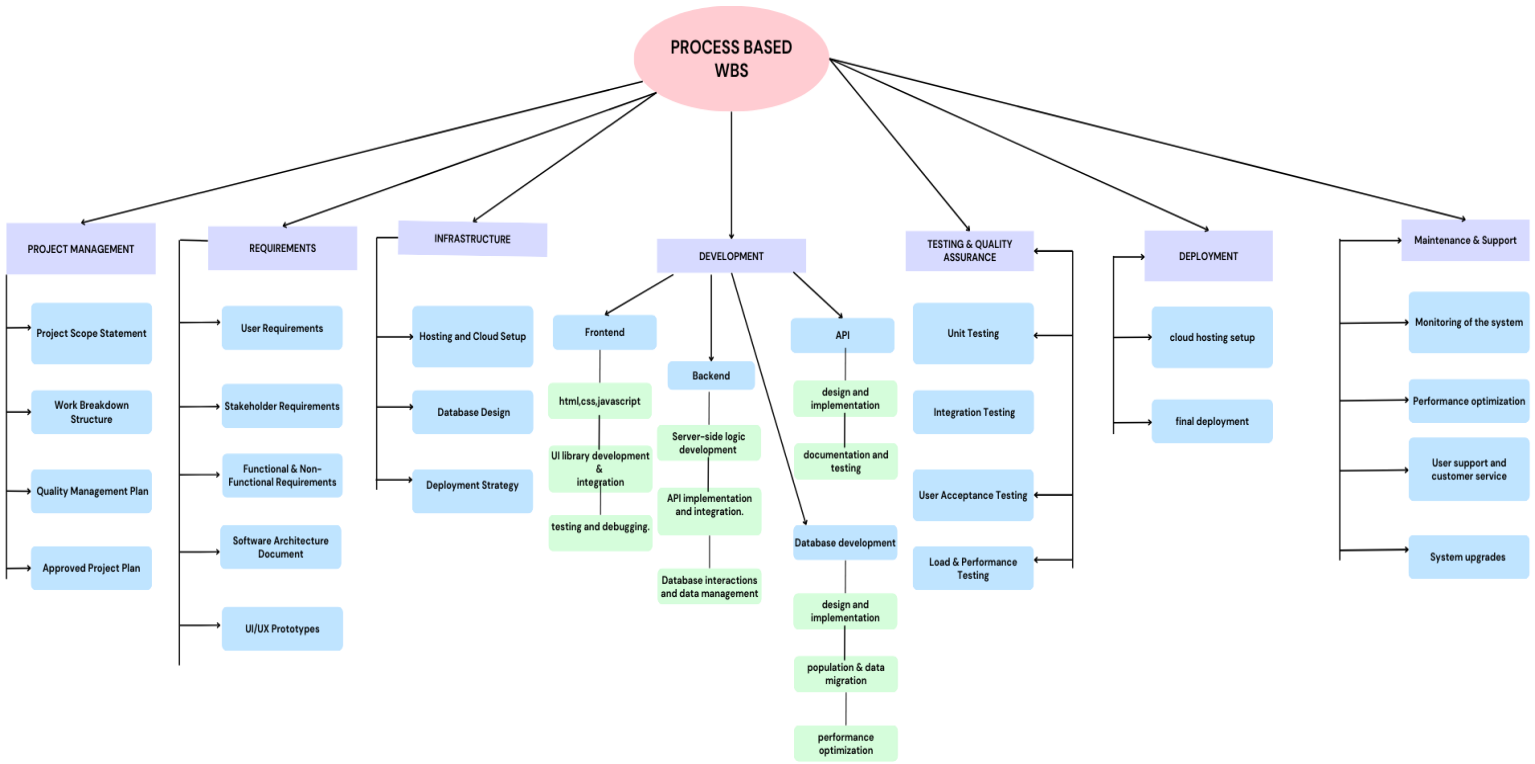
5. Deployment & Release

- 5.1 Server setup and configuration.
- 5.2 Deployment of application code and databases.
- 5.3 Integration with payment gateways and delivery partners.
- 5.4 Release management and version control.
    - Objective: Successfully deploy the application to the production environment and ensure smooth operation.

6. Maintenance & Support

- 6.1 Ongoing monitoring and maintenance of the application.
- 6.2 Bug fixes and security updates.
- 6.3 System performance optimization.
- 6.4 User support and customer service.
- 6.5 System upgrades and new feature development.

Objective: Ensure the long-term stability, performance, and security of the application, and provide ongoing support to users.



Product-Based WBS:

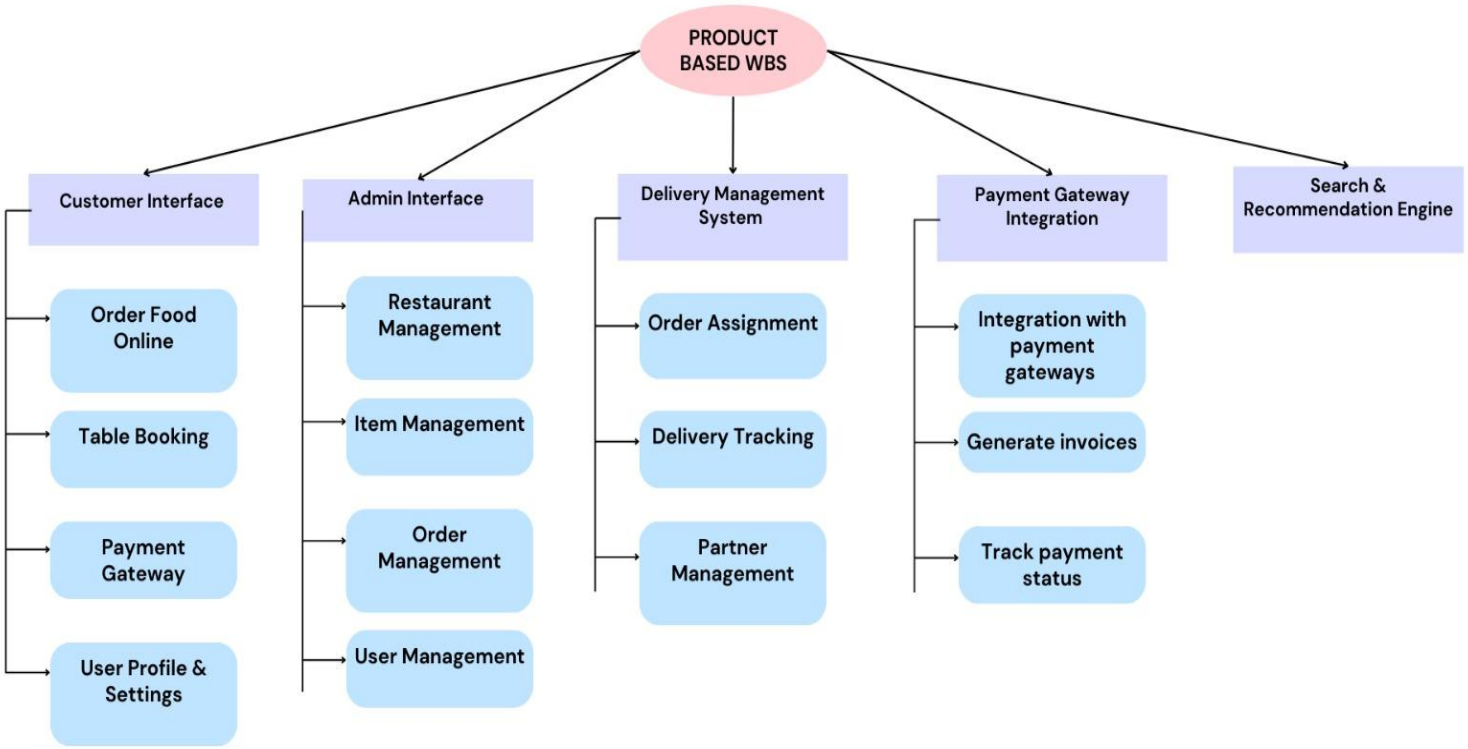
1. Customer Interface
    - Order Food Online
    - Table Booking
    - Payment Gateway
    - User Profile & Settings
2. Admin Interface
    - Restaurant Management
    - Item Management

- Order Management
- User Management

3. Delivery Management System
    - Order Assignment
    - Delivery Tracking
    - Partner Management
4. Payment Gateway Integration

    o 4.1 Integration with payment gateways
    o 4.2 Generate invoices
    o 4.3 Track payment status

5. Search & Recommendation Engine

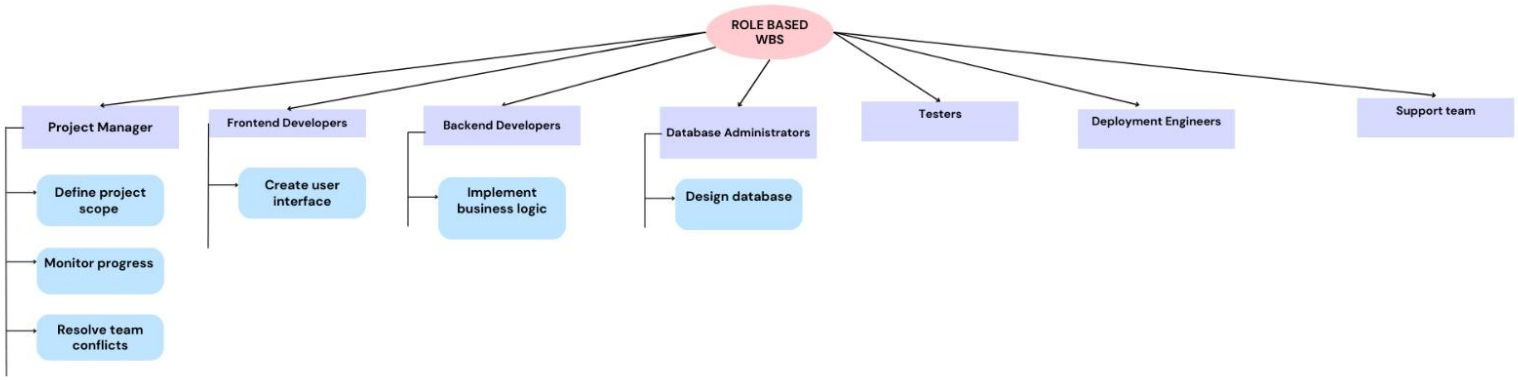


Role-Based WBS:

1. Frontend Developers-Create user interface
2. Backend Developers-Implement business logic
3. Database Administrators-Design database
4. Testers
5. Project Manager

   5.1 Define project scope
   5.2 Monitor progress
   5.3 Resolve team conflicts

6. Deployment Engineers
7. Support Team



Geography-Based WBS (if applicable)

1. Development Team (Location 1)
2. Design Team (Location 2)
3. Testing Team (Location 3)
4. Support Team (Multiple Locations)