**Restaurant system requirements**

**Functional Requirements**

**Must Have (M)**

1. **FR-01**: The system **must** allow customers to view the menu.  
   *Justification*: Customers need to see available food options to place orders.
2. **FR-02**: The system **must** support customer orders, including modifications and special requests.  
   *Justification*: Flexibility in ordering is essential for customer satisfaction.
3. **FR-03**: The system **must** record orders and send them to the kitchen for preparation.  
   *Justification*: Ensures a seamless flow of orders between customers and kitchen staff.
4. **FR-04**: The system **must** calculate the total bill, including tax and tips.  
   *Justification*: Proper billing is critical for both customers and restaurant operations.
5. **FR-05**: The system **must** manage table reservations.  
   *Justification*: Ensures efficient space management, reducing wait times and maximizing revenue.
6. **FR-06**: The system **must** allow for online ordering and delivery.  
   *Justification*: Expands customer reach and increases sales.
7. **FR-07**: The system **must** allow wait staff to modify or cancel orders.  
   *Justification*: Errors can happen, and the system needs flexibility to correct them.
8. **FR-08**: The system **must** store customer contact information for notifications (e.g., table ready, order status).  
   *Justification*: Enhances customer experience with real-time updates.
9. **FR-09**: The system **must** support multiple payment methods (cash, credit/debit cards, mobile payments).  
   *Justification*: Offers flexibility and convenience to customers during payment.
10. **FR-10**: The system **must** track inventory of ingredients.  
    *Justification*: Helps maintain stock levels and reduces wastage.

**Should Have (S)**

11. **FR-11**: The system **should** allow customers to split the bill among multiple people.  
*Justification*: Provides a convenient feature for groups dining together.

1. **FR-12**: The system **should** provide reporting tools for daily sales and inventory tracking.  
   *Justification*: Facilitates restaurant management and helps in decision-making.
2. **FR-13**: The system **should** allow loyalty programs and discount management.  
   *Justification*: Helps in customer retention and marketing.
3. **FR-14**: The system **should** support real-time feedback from customers.  
   *Justification*: Helps improve service quality by addressing customer concerns promptly.

**Could Have (C)**

15. **FR-15**: The system **could** allow customers to pre-order meals before arriving at the restaurant.  
*Justification*: Reduces wait times and improves customer satisfaction.

1. **FR-16**: The system **could** support integration with third-party delivery services.  
   *Justification*: Increases delivery options and order volume.
2. **FR-17**: The system **could** recommend menu items based on customer preferences.  
   *Justification*: Enhances the dining experience through personalization.

**Won’t Have (W)**

18. **FR-18**: The system **won’t** support table layout visualization in the first release.  
*Justification*: Not essential for the initial system, but may be added later.

1. **FR-19**: The system **won’t** support meal subscription services at this stage.  
   *Justification*: Not a priority in the current development phase.
2. **FR-20**: The system **won’t** integrate with external social media platforms initially.  
   *Justification*: Focus is on core restaurant functionality.

**Non-Functional Requirements**

**Must Have (M)**

1. **NFR-01**: The system **must** be secure, ensuring customer payment and personal data is protected.  
   *Justification*: Security is critical for customer trust and legal compliance.
2. **NFR-02**: The system **must** have high availability, with uptime of at least 99.9%.  
   *Justification*: Restaurants need the system operational during business hours to avoid service disruptions.

**Should Have (S)**

3. **NFR-03**: The system **should** be scalable to handle increased customer orders and restaurant branches.  
*Justification*: Anticipates future growth and expansion.

**Could Have (C)**

4. **NFR-04**: The system **could** support multi-language options for customers.  
*Justification*: Increases accessibility, especially in diverse markets.

**Won’t Have (W)**

5. **NFR-05**: The system **won’t** have real-time performance monitoring in the initial release.  
*Justification*: This is a feature for future releases, not critical for early-stage operations.