

Restaurant Reservation and Ordering Process Specification

This document outlines the Restaurant Reservation and Ordering Process BPMN model, covering steps from reservation to departure. Errors in specific files indicate necessary corrections to ensure a smooth reservation and dining experience.

Process Steps and Details

Reservation Creation

Step Summary: Customers make reservations online or by phone. System checks availability and confirms booking.

Process Details: The system verifies availability, confirms booking, and generates a reservation.

Exit Criteria: Reservation confirmation sent to the customer.

Errors Identified:

Incorrect Link File: Direct link to "Order Placement" without verifying the reservation during check-in.

Check-in at Restaurant

Step Summary: Host verifies reservation upon arrival, creates a walk-in booking, or provides wait time if no reservation is found.

Process Details: Upon arrival, the host checks for reservations or accommodates walk-ins with wait time information.

Exit Criteria: Reservation or walk-in status confirmed.

Errors Identified:

End Start Error File: Missing start event, which may lead to an incomplete reservation process.

Order Placement

Step Summary: Seated customers place their orders, including special requests. System records and sends orders to the kitchen.

Process Details: Customer places an order, which is recorded in the system and communicated to the kitchen.

Exit Criteria: Order recorded and sent to the kitchen.

Errors Identified:

Task Error File: Missing or misnamed tasks, such as skipping "Order Preparation."

Logical Error File: Possible logical error, allowing an order to be served before it is prepared.

Order Preparation

Step Summary: Kitchen prepares the food per the order. Customers are notified of unavailable items and given options to modify their order.

Process Details: Kitchen staff prepare each order and communicate with the server if items are unavailable.

Exit Criteria: Orders completed and ready for serving.

Serving the Order

Step Summary: Server delivers food to the table and handles special requests or missing items.

Process Details: Server delivers all ordered items and ensures any missing items or special requests are addressed.

Exit Criteria: All ordered items are served to the customer.

Errors Identified:

Logical Error File: Incorrect logic that could allow an order to be served before it is prepared.

Payment and Billing

Step Summary: Customer receives the bill and makes payment by cash, card, or mobile.

Process Details: After the meal, the customer is presented with the bill, and payment is processed.

Exit Criteria: Payment confirmed, and order closed in the system.

Feedback and Departure

Step Summary: System prompts customer for feedback after payment. Feedback, if provided, is recorded.

Process Details: Customer provides feedback, which is logged by the system, and reservation/order is marked complete.

Exit Criteria: Reservation and order completion recorded.

Errors Identified:

End Start Error File: Missing end event, preventing the system from marking the order as complete.

Error Summary

Logical Error File: Possible logic allowing an order to be served before it is prepared.

End Start Error File: Missing start or end event, leading to incomplete reservation or order completion.

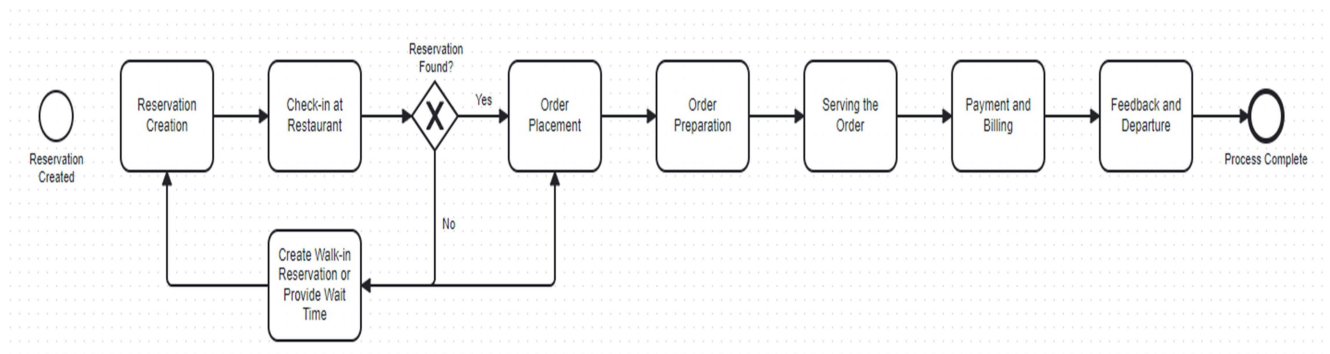
Incorrect Link File: Incorrectly linked events, such as direct linking from "Reservation Creation" to "Order Placement."

Task Error File: Missing or misnamed tasks, such as skipping "Order Preparation."

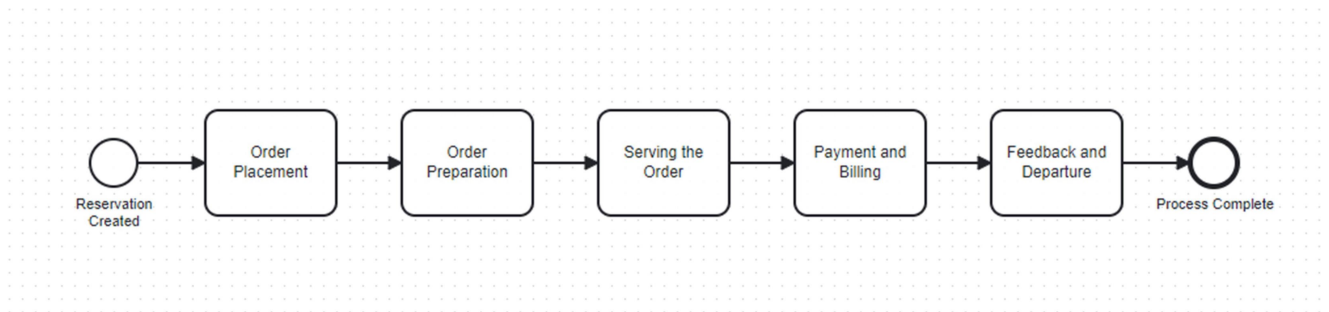
Ground Truth File: No errors detected; this serves as the correct model.

BPMN Diagram Images

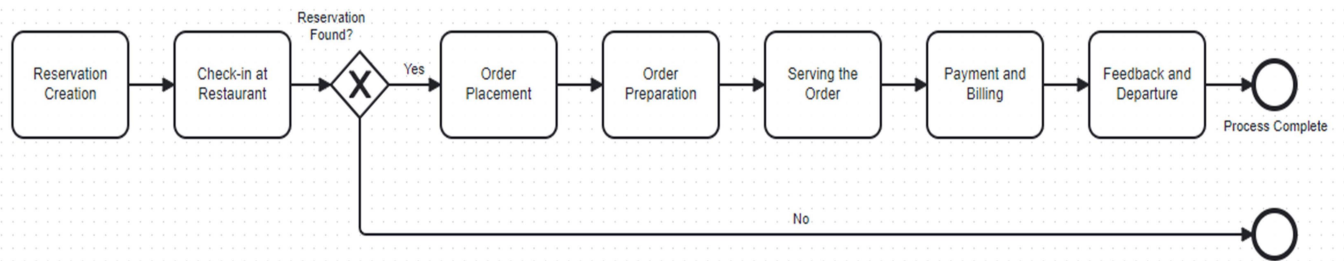
Ground Truth:-



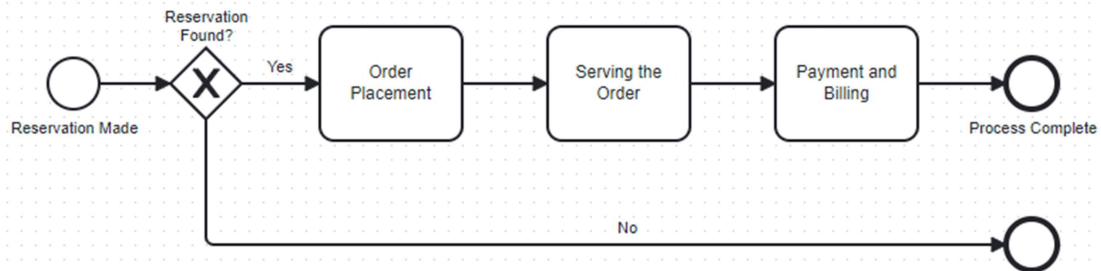
Incorrect Link File:-



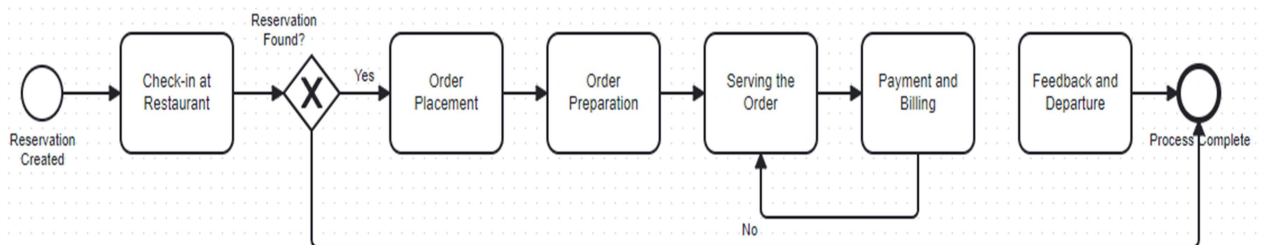
End/Start event error file:-



Task Error file:-



Logical Error file:-



Annotated Entity Table for Restaurant Reservation and Ordering Process

Entity Type	Entity	Description
Process	Restaurant Reservation and Ordering Process	Overall process from reservation to customer departure.
Step	Reservation Creation	Step where customers make reservations online or by phone.
Step	Check-in at Restaurant	Step where host verifies reservations or accommodates walk-ins upon arrival.
Step	Order Placement	Step where customers place their orders including any special requests.
Step	Order Preparation	Step where the kitchen prepares food according to the order.
Step	Serving the Order	Step where the server delivers the prepared food to the customer.
Step	Payment and Billing	Step where the customer receives the bill and makes payment.
Step	Feedback and Departure	Final step where the system prompts for feedback and marks the reservation as complete.
Error Type	Incorrect Link File	Errors due to incorrect links such as linking from "Reservation Creation" directly to "Order Placement."
Error Type	End Start Error File	Errors due to missing start or end events which may prevent proper process completion.
Error Type	Task Error File	Errors related to missing or misnamed tasks such as skipping "Order Preparation."
Error Type	Logical Error File	Errors in logic that could allow an order to be served before preparation.
Error Type	Ground Truth File	File representing the correct model without errors.
Criteria	Exit Criteria	Criteria for determining the completion of each step.
Criterion	Reservation confirmation sent to the customer	Exit criteria for Reservation Creation step.
Criterion	Reservation or walk-in status confirmed	Exit criteria for Check-in at Restaurant step.
Criterion	Order recorded and sent to the kitchen	Exit criteria for Order Placement step.
Criterion	Orders completed and ready for serving	Exit criteria for Order Preparation step.
Criterion	All ordered items served to the customer	Exit criteria for Serving the Order step.
Criterion	Payment confirmed and order closed in the system	Exit criteria for Payment and Billing step.
Criterion	Reservation and order completion recorded	Exit criteria for Feedback and Departure step.
System Component	Online Reservation System	System used to make reservations online.
System Component	Kitchen System	System component that handles orders sent to the kitchen for preparation.
System Component	Feedback System	System used to record customer feedback after payment.