Airplane tickets

Requirements

Non-functional requirements:
- available 24/7
- flexible payment system (by cash or by card)

Functional requirements:
- allow customer to buy ticket
- allow customer to choose the best option from all available tickets by filter
- notify customer about the status of the order
- send the purchase confirmation and ticket to the customer by email
- notify system every time about customer actions

User cases

User case 1
Title: Buying tickets
Primary actor: Customer
Success scenario: The customer chooses a tickets by filter: departure date, ailline, fare conditions, arrival and departure airports, price. The system displays the total cost on the screen and offers to choose a payment method - by card or in cash. The customer chooses the payment method, pays for the ticket. The system accepts payment, displays on the screen that the payment was successful or not. The system send the purchase confirmation and ticket to the customer by email.

User case 2
Title: Information update
Primary actor: Administrator
Success scenario: Updating of information about the availability of tickets in the system should occur at every moment of time, for example, after the purchase of tickets by customers, after changes in departure times or cancellations of flights by airlines, after new tickets become available.

Extensions:
1. If the flight is canceled or changed, the customer must receive a notification by email and phone.
2. If the system does not have a connection for card payment, the system should display an appropriate message to the customer and notify the administrator of the problem.
3. If the system is broken, the system should display an appropriate message for the customer (if it is possible) and notify the administrator of the problem.

ER diagram

Customer	
Key	Customer_ID
Key	FirstName
Key	LastName
Key	DocumentType
Key	DocumentNumber
Key	BirthDay
Key	Phone
Key	Email

Order	
PK	BookingCode
Key	Customer_ID
Key	Customer_Name
Key	Phone
Key	Email
Key	From
Key	To
Key	TicketNumber
Key	RateType
Key	Airline
Key	DepartureDate
Key	FlightNumber
Key	Seat
Key	Exit
Key	OrderDate
Key	Price
Key	PaymentMethod

Product	
Key	Product_ID
Key	Airline
Key	FlightNumber
Key	DepartureDate
Key	From
Key	To