LKS SMK
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Soal

BIDANG LOMBA

IT-Software Application

Phase 3: Developing System

On the last phase of the information system development project, you have to finalize your design and implement all the business logic function of the system. Ensure your system **utilize the database developed on the first development phase**, and all the transaction processing function of the application is running properly, emphasizing these several key function of the system when developing your application:

Flight Scheduling Process

1. Make sure the flight number can uniquely identify each flight conducted by ESEMKA Airlines, and cannot be repeated.

2. Scheduling Department should be able to manage the airplane data such as airplane model and seat capacity.

3. Trip point should be identifies if the flight will be a direct flight or have a transit point(s). Make sure your system **can accommodate more than 1 transit point(s).**

4. Flight price calculation must follow these formula:

   (Total Plane Seat Capacity * 10000) + Random Value between 100000 ~ 300000

5. The system should allow the Scheduling Department to make any change in the flight schedule detail, for **any change to <u>departure schedule</u> or <u>arrival schedule</u> should bring up** information broadcast form automatically.

6. Information broadcast form should be able to **display complete passenger list** who already booked the corresponding flight, with their ticket number, email and phone number.

Flight Booking Process

1. Ensure the customer can check the available flight detail like: **the origin of flight**, **destination of the flight**, **the type of flight (one way or round trip), the date of departure**, **and also the date of return.**

2. Ensure the following details must be filled in the application: **origin of flight**, **destination of the flight**, the **type of flight (one way or round trip),** the **date of departure**, and also **the date of return** if the flight type is round trip. Please make sure that the date of return **is later** than the date of departure.

3. The customer should issuing **minimum 1 ticket for each transaction**.

4. The system should be able to display list of available flight schedule and time **only if it is already filled** by the Scheduling Department.

5. Make sure the **no. of available ticket to sold matched the plane seat capacity** that already defined by the Scheduling Department

6. The customer service must input **full name**, **address**, **e-mail** and **phone number** of passenger.

7. Transit place should be displayed correctly and can **accommodate more than 1 transit place**.

8. Calculation of flight duration should be **automatically calculated by the system**.

9. Ensure the application can display the available seats list for the selected flight; you may freely design how the application displays this information in Seat Availability form.

10. **MyDeluxeTreat** menu selection **should only display the menu offered** by Consumption Department that **already inputted in the system.**

11. Total flight fare that includes **flight price** and **MyDeluxeTreat** price should **calculated automatically** by the system.

12. Every reservation of flight for every customer should be noted in the system.

In-flight Service Process

1. Ensure the Consumption Department can manage the **MyDeluxeTreat menu** selection (including the price) and the **ordinary meals** served for every flight.

2. The system should be able to display **detailed** MyDeluxeTreat menu ordered and ordinary meals quantity needed for **every flight** in the selected date.

3. The system should be able to display **summary** of MyDeluxeTreat menu ordered and ordinary meals quantity needed for **all flight** in the selected date.

Passenger Boarding Process

1. Ensure the system **should be able to display the flight details and record the check-in** of the passenger when the Departure Department enters the ticket number.

2. The **system also display which boarding room** the passenger should wait for the flight.

Take notes that you should keep referring to the business process on the ESEMKA Airlines case study when developing the information system, not limited to the key function mentioned above to ensure all the business process can supported by your application!