Project Proposal

For

Airline Management System

Airline Management System enables the admin to handle and manage flights.

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**Project Category: (**Select the major domain of proposed project**)**

* **A-**Desktop Application/Information System

# Abstract

Airline Management System is a user-friendly system that hold information regarding flights. As the technology is evolving, it’s a smarter choice to use reliable ways to store the data and provide ease to the user. A system that’s available to all, containing information that user needs regarding airlines, with better user-interface.

# Introduction

The purpose of this project “Airline Management System” is to provide user-friendly interface for its user. The need for this system is high as everything is just a touch away for the user. Admin will have access to all the details, regarding crew passengers etc. This project will save time and will provide reliability. User will be able to check journey details, flight details, book and cancel ticket or to check payment and reservations. Furthermore, system will provide the sector information to pilot regarding the plane, number of passengers, capacity etc. The system will help me have better understanding of database, schemas and how to put this all together with better user interface.

# Proposed System

In today’s world, everyone wants ease and reliability in minimum time. This is the main purpose of the project. Rather than spending times making calls for information, everything will be provided on the system just a click away. User will have access to all the information regarding flights. User will be able to book, reserve and cancel the ticket. Similarly, the employee and pilot will be able to check information and have access to the system.

# Advantages/Benefits of Proposed System

* System is available 24/7.
* User will be able to book and cancel the flight or make reservations.
* User will be able to check journey details, flight details and payments.
* Employee will be able to check reservations and payments.
* Pilot will be able to check plane details, capacity etc.
* System provides ease and saves users time.

# Scope

Admin will be able to type in the username and password. Once they’re into the system, admin will be able to add passenger, employee and pilot. Admin manages journey details and flight details. Passenger will be able to check the journey and flight details and to book or cancel the ticket. Furthermore, passenger will also be able to make reservations and check payment. Employee will be able to check the details regarding booking. Pilot will be able to check the details regarding plane, number of passengers and capacity etc.

# Modules

## Module 1: Employees Manage

Employees are managed by admin, their information etc. Data of employees are handled here.

## Module 2: Passenger Manage

Passenger’s information, all data regarding them is managed here.

## Module 3: Payment

The payment when passengers buy, reserve of cancel’s a ticket is managed here.

## Module 4: Journey Details

This module contains information regarding all the flights from a specific source to a particular destination. User will be able to enter a source and destination which will give the information regarding all the flights with their journey dates and flight number.

## Module 6: Flight Details

User will enter a flight code and the module will show the flight information corresponding to that code. Details regarding source, destination and flight capacity and number of classes.

## Module 7: Admin

Admin adds passenger, employee and pilot etc. It’ll manage data, add or delete.

# System Limitations/Constraints

* Everything has to be done through admin.
* Employee will only be able to check the cancellation and reservations.

# Tools and Technologies

Table 1 Tools and Technologies for Proposed Project

|  |  |  |  |
| --- | --- | --- | --- |
| **Tools**  **And**  **Technologies** | **Tools** | **Version** | **Rationale** |
| Java Eclipse | 2015 | IDE |
| MS SQL Server | 2015 | DBMS |
| Adobe Photoshop | CSC 6 | Design Work |
| MS Word | 2015 | Documentation |
| **Technology** | **Version** | **Rationale** |
| Java | 6.0 | Programming language |
| SQL | 2013 | Query Language |

# User Manual:

Airline Management System is an easy system to use. Following are some steps involved:

1. First login as admin (Only admin has the authority to login into the system)
2. Admin adds the customer by clicking on “Add Customer” button. Here a special id is given provided, which is unique for every customer.
3. You can also search and update the customer, both options are provided.

**Steps to book a ticket:**

1. First make sure there is flight present for which you’ve to book the ticket for. Incase if there’s no flight, go to Flight module and click on Add Flight. Fill the information and a flight id will be provided.
2. Now to book a ticket, go to ticket module and click on Book Tickets.
3. Select a source and destination and click on Search button. This will check if there’s any flight from this particular source and destination.
4. Now click on that particular search result, that’ll autofill the flight Info box.
5. Enter your customer id and search, if you’re already a customer your information will be loaded.
6. Lastly, select the date and number of seats that should be booked, which is provided in the flight info box.
7. Your ticket is now booked. You can view your ticket in the Ticket List.
8. To complete the payment details, click on payment details and enter your ticket number and fill the boxes provided.
9. In case you want to cancel the ticket, click on Cancellation and enter your customer id.
10. Then select the Cancel button and enter Update System.

**To check Flight Info and detail:**

1. Incase to check flight info, select Flight information and enter either your flight number or click show all.
2. This will show you the information of flight i.e. departure time, date, source, destination, plane capacity etc.
3. You can also check journey details by clicking on Journey detail and selecting the desired source and destination.

**Admin Mode:**

1. Admin can add customer, user, pilot, and employee.
2. You can view the total list of above mentioned.
3. Add Flights etc.

# Implementation Details

The completion of this whole project took about a week and half. Firstly we had to submit the schema and ER diagram, and the schema was generated directly through the ER diagram that was created on MySQL Workbench.

After that the actual implementation started on Eclipse. Firstly, the functionality was divided into classes (the most essential functionality that was required in the system). I started with the most basic class that was Login. As my Project is GUI based, I had a bit of difficulty at first because it was my first time using GUI.

The connection was established between eclipse and MySQL workbench through jar files and some coding.

All-important classes needed to book flight, ticket etc. were created. Further all the SQL learned throughout the semester is used which included insert, delete, select grouping and joining etc.

**Issues:**

* Initial issues were establishing connection with database.
* Foreign keys were not easily handled at first, some constrain issues.
* Some data has to be inserted initially for smooth performance of application.
* Some queries were checked on SQL workbench before writing them into the code.

# Conclusion

With time and technology evolving, it’s better to adapt to easier and reliable ways. In this document, I’ve discussed a system that holds information regarding airlines. Database provide us a better way to store information, and make the users life easier. With better user-interface and technologies, this system will prove to be time-efficient for its user. Everything will be just a click away, saving time and cost.

# References