



High-Level Design & Low-Level Design

AIRLINE RESERVATION SYSTEM

Project Revision History

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Date	Version	Author	Brief Description of Changes	Approver Signature
28.10.2022	1.0	Group 3	Airline Reservation System	

Index

1. Introduction	3
1.1 Intended audience	3
1.2 Project purpose	3
1.3 Key project objective	3
1.4 Project scope and limitation	3
1.5 Functional overview	4
1.5.1 Header files	4
1.5.2 Functions	4
2. Design overview	7
2.1 Design objective	7
2.2 Design alternative	7
2.3 User interface paradigms	7
2.4 Error detection/ Exceptional Handling	7
2.5 Performance	7
2.6 Maintenance	7
3.. Detailed system design	8
4. Environment description	9
4.1 Time zone support	9
4.2 Language support	9
4.3 User desktop requirement	9
4.3.1 Deployment consideration	9
4.3.2 Integration requirements	9
4.4 Configuration	9
4.4.1 Operating system	9

Introduction: -

1.1 Intended Audience: -

The document is intended to be read by, Client.

1.2 Project Purpose: -

The name of the software is “Airline Reservation System”. This software provides options for viewing different flights available with different timings for a particular date and provides admin with the facility to book a ticket.

1.3 Key Project Objectives: -

- a Allow admin to add record to file.
- b Allow admin to add customer.
- c Allow admin to book tickets.
- d Search and display flight details.
- e Search and display customer details.

1.4 Project scope and limitation: -

The effectiveness of the system depends on the way in which the data is organized. In the existing system, much of the data is entered manually and it can be very time consuming. When records are accessed frequently, managing such records becomes difficult. Therefore, organizing data becomes difficult. The major limitations are:

Modifications are complicated

Much time consuming

Error prone

Unauthorized access of data

1.5 Functional Overview: -

1.5.1 Following header files are included in the program:

- a `#include <stdio.h>`
- b `#include <functions.h>`
- c `#include <stdlib.h>`
- d `#include <macros.h>`
- e `#include <string.h>`
- f `#include <ctype.h>`
- g `#include <struct.h>`

1.5.2 Following functions are included in the program:

1. `int admin() :-` It will check for the admin credentials

This is the function that is built in the Airline Reservation System to log in as admin, It requires both username and password to get admin access.

2. `void menu_admin() :-` It will display the menu for admin

This is the function which is used to display the menu for admin which contains

- (a) Book the Tickets
- (b) Flights
- (c) Exit

3. `void clear() :-` It will clear the screen

4. `void addflight() :-` It helps in adding the flights

This is the function which is used to add flights, the requirements to add flights are

- (a) Name of the flight
- (b) Name of the source city
- (c) Name of the destination city
- (d) Number of seats available

The above are the required data to add a flight.

5. void displayflight() :- It displays flight details

This is the function which displays the flight details like flight name,flight number,name of the source city and also destination city with number of seats available

6. void searchflight() :- It will helps in searching flights

This is the function which is used to search a flight using the flight number.It displays the flight name,destination city and also number of seats available

7. void addcustomer() :- It helps in adding the customer details

This function is used to add details of the customer like customer ID,age,source city,destination city,travel date and number of seats required.

8. void displaycustomer() :- It displays customer details

This function is used to display the details of the customer.

9. void searchcustomer() :-It'll search and display the customer details

This function is used to search and display the details of the customer.

Airline reservation system comprises of the following modules:

Name of the Module	int admin
Handled by	Devi Priya
Description	It will check for the admin credentials.

Name of the Module	void menu_admin
Handled by	Pooja
Description	It will display the menu for admin.

Name of the Module	void clear
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Handled by	Gayathri
Description	It will clear the screen

Name of the Module	void addflight
Handled by	Gayathri
Description	It helps in adding the flights

Name of the Module	void displayflight
Handled by	Keerthana
Description	It displays flight details

Name of the Module	void searchflight
Handled by	Thulasi
Description	It will helps in searching flights

Name of the Module	void addcustomer
Handled by	Devi priya
Description	It helps in adding the customer details

Name of the Module	void displaycustomer
Handled by	Keerthana
Description	It displays customer details.

2.Design Overview

2.1 Design Objectives: -

- Add flight
- Display flight
- Search flight
- Add customer
- Display customer

2.2 Design Alternative: -

we have used linked list to perform all the relevant operations in the particular file .

2.3 User Interface Paradigms: -

The Airline reservation system pro gives a user an option to view the flights to a selected destination on selected date and time.Customer can also book required number of seats as per availability.It also provides admin to add flights and search flights.

2.4 Error Detection / Exceptional Handling: -

User should first enter the details according the condition and if the entered detail is not according the condition specified sometimes it is displays the message that is entered and sometimes it returns with an error.

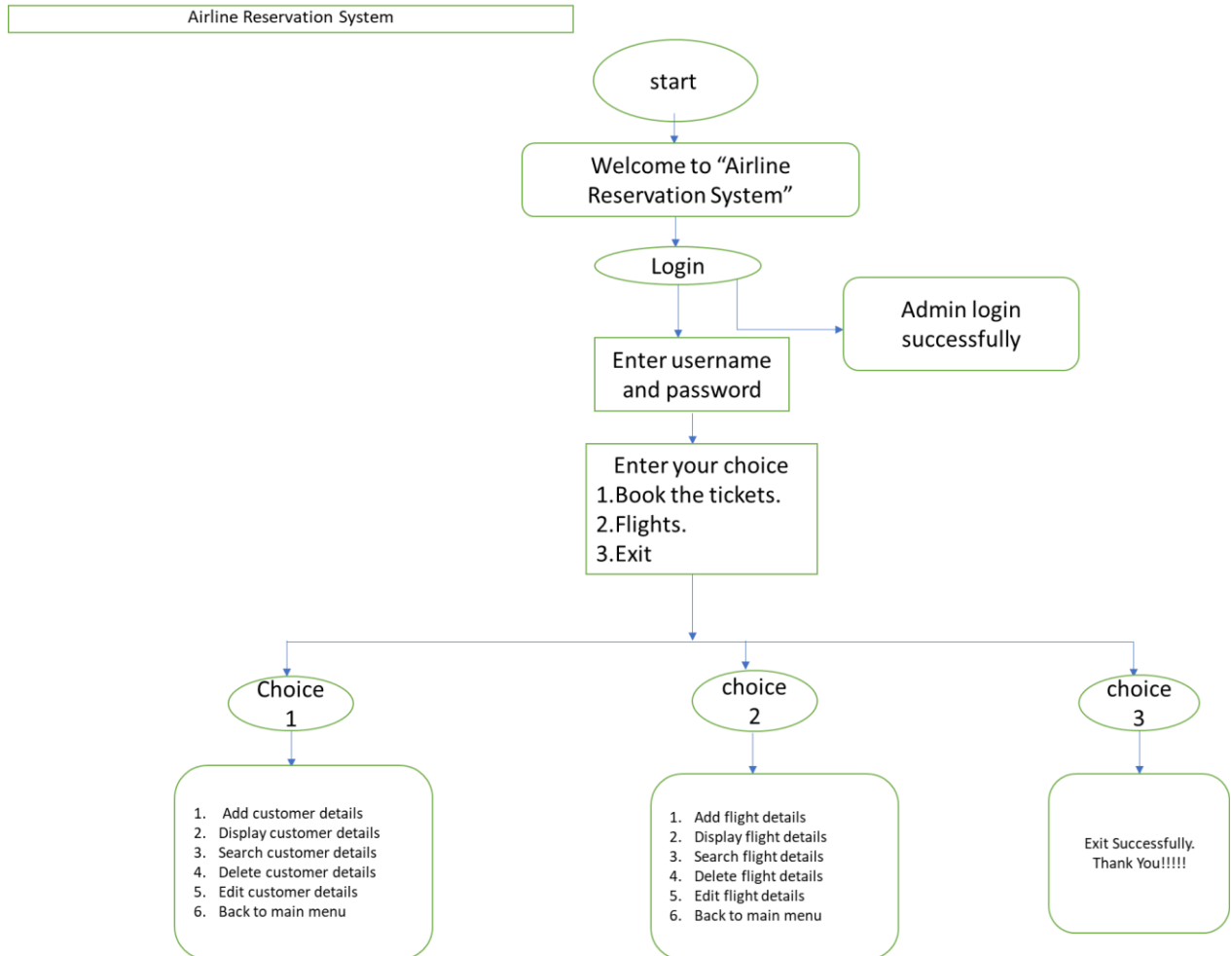
2.5 Performance: -

The performance depends up on the hardware component and cloud working of the user's system.

2.6 Maintenance: -

Very little maintenance should be required for this setup. An initial configuration will be the only system required interaction after system is put together. The only other user maintenance would be any changes to settings after setup, and any specified special cases where user settings or history need to be changed. Physical maintenance on the system's parts may be required, and would result in temporary loss of data or Internet. Upgrades of hardware and software should have little effect on this project but may result in downtime.

3. DETAILED SYSTEM DESIGN



4. Environment Description: -

4.1 Time Zone Support: - IST

4.2 Language Support: - English

4.3 User Desktop Requirements: -

- a. 64-bit processor, 1 GHz or faster
- b. At least 2 GB free hard drive space
- c. At least 1 GB RAM

4.3.1. Deployment Considerations: -

- .a Easy setup: no session storage daemon, use tmpfs and memory caching to enhance performance.
- .b Local storage is used
- .c No network latency to consider
- .d To scale buy a bigger CPU, more memory, larger hard drive, or additional hardware

4.3.2. Integration Requirements: -

- a. Language: - C
- b. Tools: - Valgrind, Makefile
- c. Compiler: - gcc
- d. Linux Environment

4.4 Configuration: -

4.4.1. Operating System: - Linux environment