AIRLINE RESERVATION SYSTEM

A Report for the Evaluation 3 of Project 1

Submitted by

VARSHA NIRWAN

(1713104085)

in partial fulfillment for the award of the

degree of

BACHELOR OF COMPUTER APPLICATION

IN

COMPUTER SCIENCE AND ENGINEERING

SCHOOL OF COMPUTING SCIENCE AND ENGINEERING

Under the Supervision of
Dr. K.M. BAALAMURUGAN, Ph.D.,
Assistant Professor

APRIL / MAY- 2020

SCHOOL OF COMPUTING AND SCIENCE AND ENGINEERING

BONAFIDE CERTIFICATE

Certified that this project report **"AIRLINE RESERVATION SYSTEM"** is

the bonafide work of "**VARSHA NIRWAN(1713104085)"** who carried out the

project work under my supervision.

SIGNATURE OF HEAD

Dr. MUNISH SHABARWAL,
PhD (Management), PhD (CS)
Professor & Dean,
School of Computing Science &
Engineering

SIGNATURE OF SUPERVISOR

Dr. K.M. Baalamurugan, Ph.D.,
Assistant Professor
School of Computing Science &
Engineering

TABLE OF CONTENTS

PAGE NO.

ABSTRACT

To design the system that will replace the paper based data collection and information exchange system among the various departments of Airlines is our primary objective. It performs some functions like storing the details of customer, flight information, displaying the details of flights available etc.

This software will help in recording, accessing the information with ease and also manage the whole system of airlines with ease like Reservation,Cancellation,Viewing details and checking the status of flights. With the use of this project the user can fill in hundreds of details and access them with just a click of the button.

User need to enter all the details in case of reservation like name ,age ,address,phonenumber,gender.Flight information-to and from,time ,date,class and mode of payment.
This project is based on vbscript,dbms,msaccess.Minimum hardware requirement for the project is a computer with a configuration of 486 or higher with minimum 16MB ram.
Our objective is to develop a system that has good management of data along with integrity and minimizing redundancy.System should be user friendly in all possible ways and provide better customer support for passenger.

INTRODUCTION

The Proposed system ensures the complete freedom for users, where user at his own system can logon to this website and can book his ticket. Our proposed system allows only registered users to book the tickets, view timings and cancel their tickets

.

In this Proposal the entire work is done on online and ticket with id is also provided for passengers as a print document. Here passengers can send their queries and suggestions through a feedback form.

The project "Airline Reservation System" is a dynamic environment to show the coordinated working of the two software's using the concept of frontend and backend. The frontend tool here is the "Visual Basic" and the backend tool is "MS Access".

The frontend tool has the responsibility of interacting with the user through the various graphical user interfaces that are represented by the menu forms in this project. The forms are developed independently using Visual Basic and are then combined together to give it the shape of a project. The various forms are interconnected as the menus transfer the control of the execution of the program throughout the execution of the program.

The backend tool has the responsibility of storing the database of records that are entered separately after creating tables in MS Access.

During the execution of the program the Visual Basic calls the database so as to display the flight information that was entered in the Access tables and then the user is provided with a set of options to deal with which include to check about the various flights, to check his ticket and flight status and even cancel an already issued ticket.

The project "Online Air Reservation System " works simultaneously on two soft wares that form the backbone of the modern computer industry i.e.:-

     {A} ACCESS
     {B} VISUAL BASIC 6.0

This project works on the concept of frontend and backend tools. Here ACCESS database acts as the backend of the project and VISUAL BASIC forms provide the necessary user interface which is termed as the frontend.

ACCESS database provides all the flights including the name, source, destination, time status etc about the flights available on a particular day. It also contains a table regarding the number of tickets issued and to whom. Cancellation records are also maintained in a separate table that allows the user to cancel an already assigned flight using the ticket number issued to him. Various forms designed to perform different tasks work hand in hand to provide the user with the necessary manus and the required details. Every form has the option of going back to the previous form so that if a user has by mistake entered some wrong information can go back and edit it.

Forms are loaded and unloaded as the need is specified by the user commands. All the database is accessed using the VISUAL BASIC forms and the user is never confronted to dealing with typical commands of the ACCESS database.

MODULES:

1. Registration module

2. Administrative module

3. Passenger module

1. Registration module

In registration module first we ask passenger to give his details.After registering with us the passenger can logon to his/her own account and can view all flight details such as Timings, Prices,Availability of seats and can book the ticket with unique ticket id.Once Passenger registered with us can book any number of tickets.

2. **Administrative module**

Administrative module is provided for the sake of administrators to manage the site and update the

content at regular intervals, The major operations included in this module are:

- ➢ Create and maintain airline schedule, fare and timings of the Flight.
- ➢ View the passenger list.
- ➢ View the available seats in the flights.
- ➢ Cancel the tickets.
- ➢ Updating the flight schedule and timings and fare.

3. Passenger module

This module is meant for passengers, where a user logging into his/her owns account will view this panel. The major operations included in this module were

- ➢ View all airline schedules, timings, fare details and seats availability.
- ➢ Book for the tickets.
- ➢ View and cancelling of the ticket.
- ➢ Send feedback

Behind these modules, it also includes additional WebPages like Password recovery console, Tips regarding journey, Traveling news around world and help regarding our site.

PROPOSED SYSTEM

The Proposed system ensures the complete freedom for users, where user at his own system can logon to this website and can book his ticket. Our proposed system allows only registered users to book the tickets, view timings and cancel their tickets.

In this Proposal the entire work is done on online and ticket with id is also provided for passengers as a print document. Here passengers can send their queries and suggestions through a feedback form.

ADVANTAGES

A few factors that direct us to develop a new system are given below -:

1) Faster System

2) Accuracy

3) Reliability

4) Informative

5) Reservations.
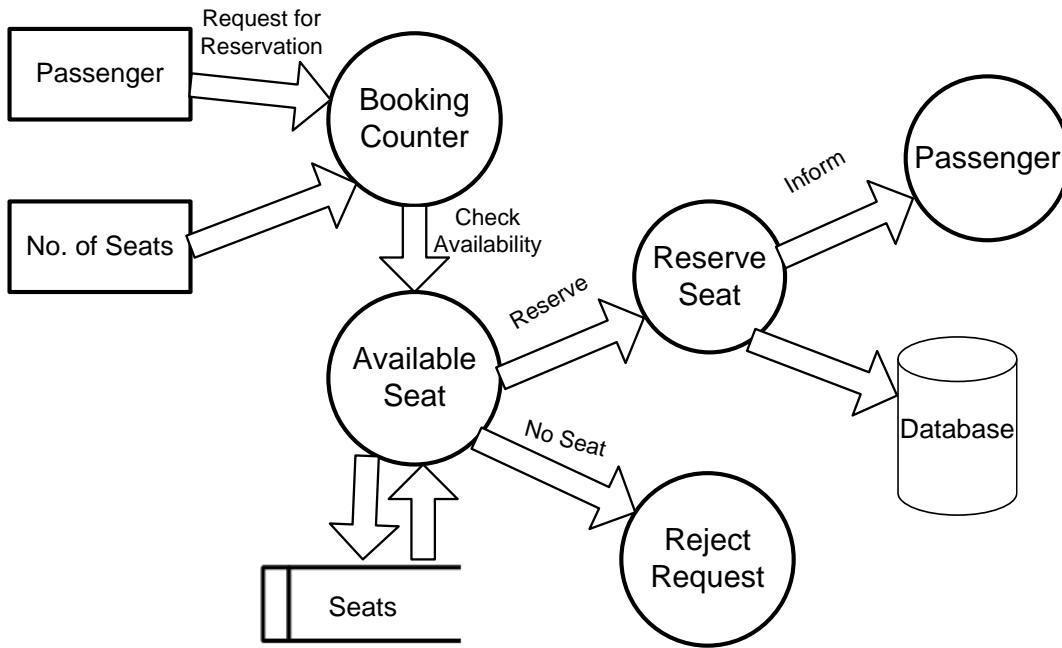
We have developed a computerized system which is the "Airline Reservation System".Working in team reinstates the team for some common guideline and standard to be followed by all the members of the team.For the optimum use of time it is important that every session is planned.Planning of this project includes the following things:

. Topic Understanding
. Modular breakup of system
. Process logic for each module
. Database requirements
. Documentation

Topic Understanding

It is vital that the field of application as introduced may be a new field so we focused on preparing this project with the feature of credit cards in it.

Modular break up of system

1. Identify the various modules in the system
2. List them in right hierarchy
3. Identify their priority of development

Process logic for each module

For every module the logic should be identified so that an outline is ready,coding would then take less time.

Database requirements

1. Identify the various tables required
2. Fields for these tables
3. The various key fields

EXISTING SYSTEM

 In the existing system if any person wants to travel somewhere by flight he should take some basic steps to get ticket like he should go to airport to book the flight ticket, he should speak with Airline help center regarding the availability of flights. It is time consuming process.

In few countries if a person wants to book a flight ticket, he use to follow one of these things:

➤ Manually goes to the Airport and book his ticket.
➤ Downloading the ticket form as paper document, filling it manually and submitting it at Airport.
➤ Fill the Ticket form on system and get the print out as paper documents to submit it at Airport.
➤ Booking the Ticket at some particular registered ticket counters in online.
➤ Even above approaches make a ticket booking online, it was not completely done on online. Passenger may not have much freedom over this approach.
➤ Hence the Passenger may or may not be satisfied with this approach as it includes manual intervention like travelling to Airport for booking his ticket.

IMPLEMENTATION AND ARCHITECTURAL DESIGN

Creation of software is a scientific process and like all other scientific activities it has a framework of activities which determine how the problem at hand has to be investigated, how the goals has to be determined and how it has to be achieved. All these parameters are the driving force, which determines the course of action for software creation. The life cycle of adopting various available software models – a model is a team of software engineers, which have different strategies to incorporate problem.

Each model entertains a development strategy which has phases and the duration of each phases depends on the type of model undertaken to solve a particular problem. The model used for this project is **WATERFALL** or **LINEAR SEQUENTIAL MODEL.**

The simplest, oldest & widely used model for software development is waterfall of linera sequential model. The model has a specific structure with certain phases to the process pf software development and each phase is unique & mandatory. It suggests a systematic, sequential approach to software development that progresses through:

- Analysis
- Design
- Coding
- Testing

The work begins by establishing requirements for all system elements and allocating some subset of these requirements to the software. The requirement gathering process is intensified and focused on the software.

ANALYSIS

To understand the nature of the program(s) to be built, the developer must understand the information domain for the software, its functions, interfaces and performance. With the requirements given to me I decided to make the interfaces like forms to allow user to enter the information and other interfaces to view the details. The information domain is decided as the attributes of various tables.

.1.2 DESIGN

This process translates requirements into representation of the software that can be accessed for quality before we start coding. The interfaces are designed in VISUAL BASIC and are tested for quality and requirements.

.1.3 CODING

The design is then translated to machine readable form. The coding for the work of the forms is done as to how the data is to be saved in the database and how it is retrieved. The database is generated in ACCESS.

.1.4 TESTING

The testing process focuses on the internals of the software, ensuring that all statements have been tested, and on functional externals, that is conducting tests to uncover errors and ensure that defined input will produce actual results that agree with the required results.
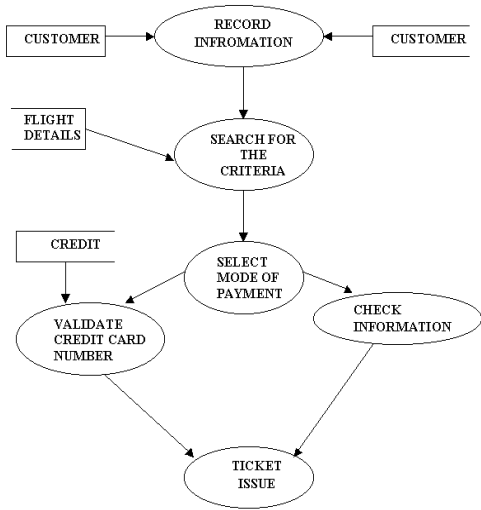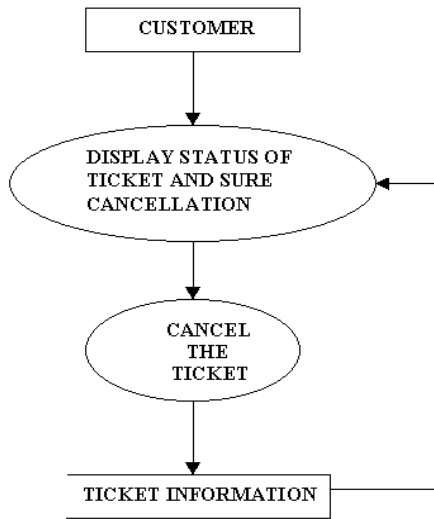
WATERFALL/LINEAR SEQUENTIAL MODEL
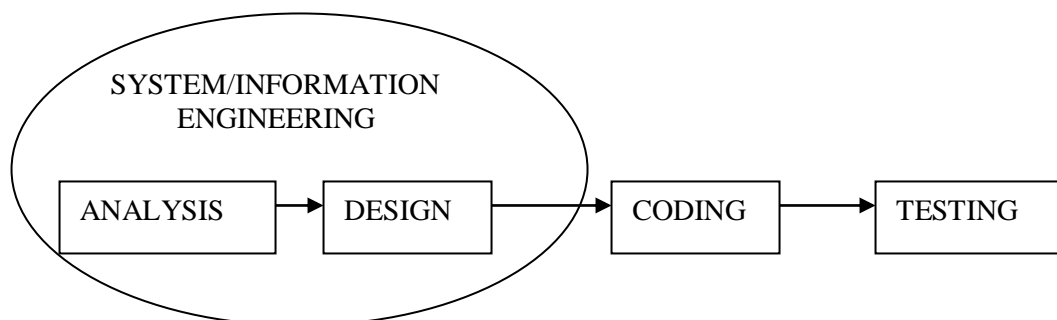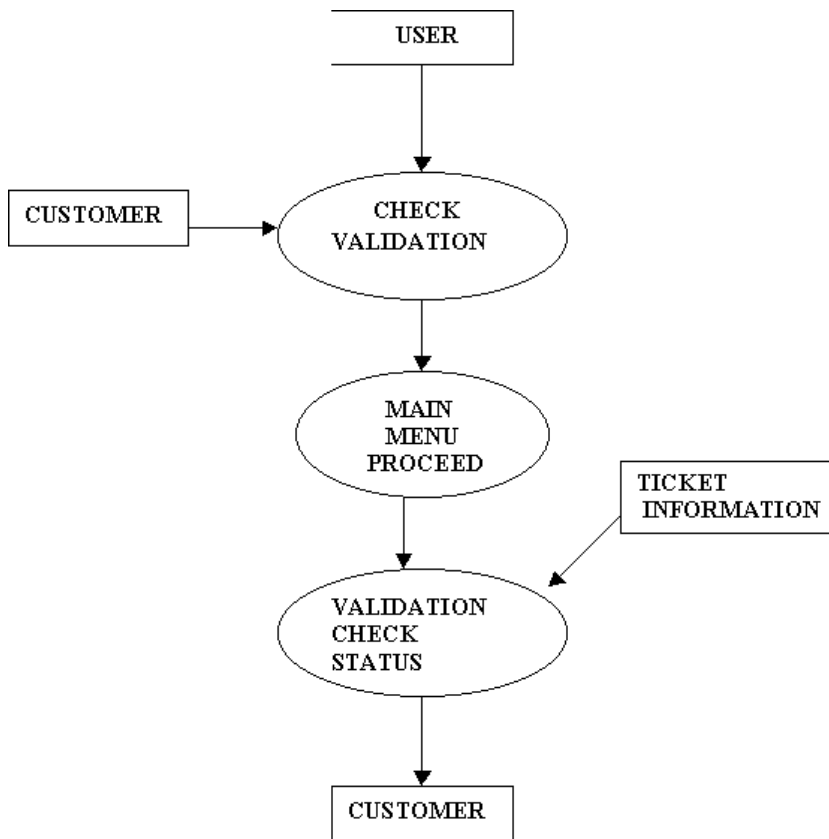
FIG: Reservation
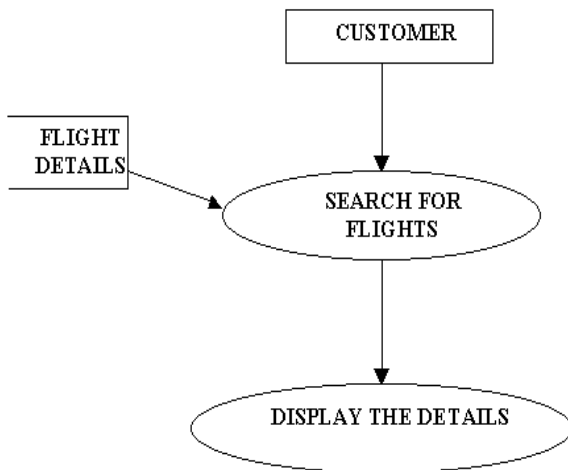
FIG:Cancellation

FIG: Status check

FIG: Flight info.

Customer Information

Name

Address

Phone

Age   Gender

<<Back   Next>>

Flight Information

Cities

BANGLORE
DELHI
HYDERABAD

From>>

To>>

Date   7 /27/01   Class

Time

Mode Of Payment

Amount
(N/R)

○ Credit Card   ○ Cash

Submit>>

Enter Details

Ticket Number   [   ]

Cancellation Date   [   ] [   ] [   ]

[<< **Back**]   [   ]

[**Submit**]

Select Origin and Destination to find details of flights

Origin of flight [▼] Destination of flight: [▼]

[**GO**]

[**Back to main menu <<**]

CONCLUSION

This website provides a computerized version of Airline reservation system which will benefit the passengers as well as the staff. It makes entire process online where passenger can search flights, cancel flight ticket, book flight tickets also staff can generate reports and do flight transactions online.

By using this medium it will make all the further flight related work easier as well as reduce the time consumption and will be more efficient for fast growing environment.

This project was exhausting, time-consuming, but above all a very interesting and an enjoyable experience. I've learned a lot by designing and implementing this website project. Now, after I understood a lot of techniques it would help me in future in designing the real working website.

In future, we can have the SMS facility for the user and user search engine that can provide the result on the basis of different criteria to search. We can also have one more module of implementing this project on web.

FUTURE SCOPE

The future scope of this project lies in the development of more sophisticated airline and reservation system. The scope of the project can also be increased by the involvement not only domestic but international flights also. The effectiveness of the project can be enhanced by the inter connection of flights of various companies. This can be achieved by the inclusion of more flights in the database.

Some more features can be added if this reservation system is made online so that the internet users can also access the flight details and get the reservation online itself. Features like "Tele-Checking" can be a handful to provide users with more luxuries.

To add to the efficient working of the project "Airline Reservation System", we can add a few more sorting features to the users of this project. For example in the Flight Details menu provided to the user to sort various flights by their Flight Number, i.e. the flight number acts as the primary key. But it could not be the case always that the user knows the flight numbers, which is quite obvious, so we should provide the user to sort and search the flights by:-
(a). Date – it could be helpful for the users who travel quite regularly, and they
chalk out a plan for weekly or monthly schedule, this can be achieved by making the date as the primary key.

(b). Destination – it could also be a very helpful tool as sometimes the date may not
Be the priority but the destination is predefined by the user. Sorting by destination may proof to be very time saving and easy to use features.

Software Scope:

Extensibility: This software is extendable in ways that its original developers may not except. The following principles enhances extensibility like hide data structure , avoid traversing multiple links or methods , avoid case statements on object type and distinguish public and private operations.

Reusability: Reusability is possible as and when require in this application. We can update it next version . Reusable software reduces design , coding and testing cost by amortizing effort over several designs . Reducing the amount of code also simplifies understanding, which increases the likelihood that the code is correct. We follow up both types of reusability : Sharing of newly written code within a project and reuse of previously written code on new projects.

REFRENCES

- http://www.microsoft.com

- http://www.codeproject.com

- http://www.msdn.com.

- http://www.vb123.com

- http://www.vbcode.com

- http://www.sqltuner.com

- http://www.google.com

- http://www.w3schools.com

- http://www.wikipedia.com

- http://www.phptpoint.com

- ❖ BOOKS:
- ❖ For Visual Basic:
- ❖ Peter Norton(Visual Basic 6.0)
- ❖ Visual Basic in 21 days(Techmedia)