

# PROJECT ON AIRLINE RESERVATION SYSTEM



# **ACKNOWLEDGEMENT**

I would like to take this opportunity to express my gratitude towards all the people who have in various ways, helped in the successful completion of my project.

I must convey my gratitude to Ms.B.Vjjay Kumar for giving me the constant source of inspiration and help in preparing the project, personally correcting my work and providing encouragement throughout the project.

I also thank all my faculty members for steering me through the tough as well as easy phases of the project in a result oriented manner with concern attention.



# **CERTIFICATE**

This is to certify that this is a bona fide record to the project work done satisfactorily at JBIET by Rajasheker Eajjagiri of 3rd Semester.

This report or the similar report on this topic has not been submitted for any other examination and does not form part of any other course undergone by the candidate.

**Signature of Project Guide**

**Name: B.Vijay Kumar**

# CONTENTS



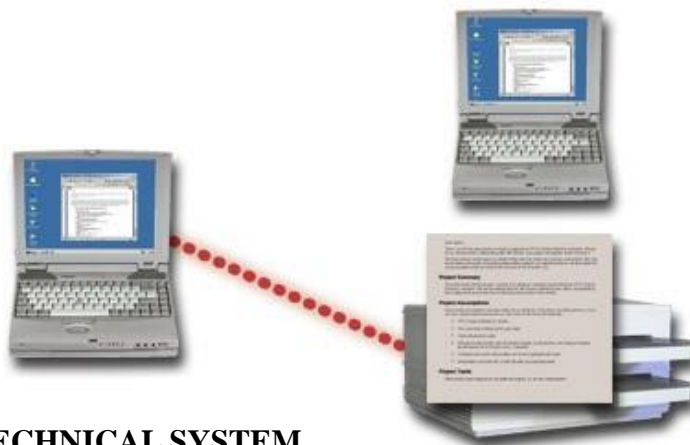
1. PROBLEM DEFINATION
2. FEASIBILITY STUDY
  - ECONOMIC FEASIBIITY
  - TECHNICAL FEASIBILITY
  - OPERATIONAL FEASIBILITY.
3. SYSTEM ANALYSIS
4. BLOCK DIAGRAM
5. DATA COLLECTION
6. SYSTEM DESIGN
  - E-R DIAGRAM
  - DATA FLOW DIAGRAM
  - INPUT SCREEN
  - REPORTS
  - TABLES.
7. CODING
8. SYSTEM IMPLEMENTATION
9. TESTING AND DEBUGGING
10. CONCLUTION
11. SCOPE OF IMPROVEMENT

## **PROBLEM DEFINITION**

The definition of our problem lies in manual system and a fully automated system.

**Manual system** : The system is very time consuming and lazy. This system is more prone to errors and sometimes the approach to various problems is unstructured.

**Technical system** : With the advent of latest technology if we do not update our system then our business result in losses gradually with time. The technical systems contains the tools of latest trend i.e. computers printers, fax, Internet etc. The systems with this technology are very fast, accurate, user-friendly and reliable.

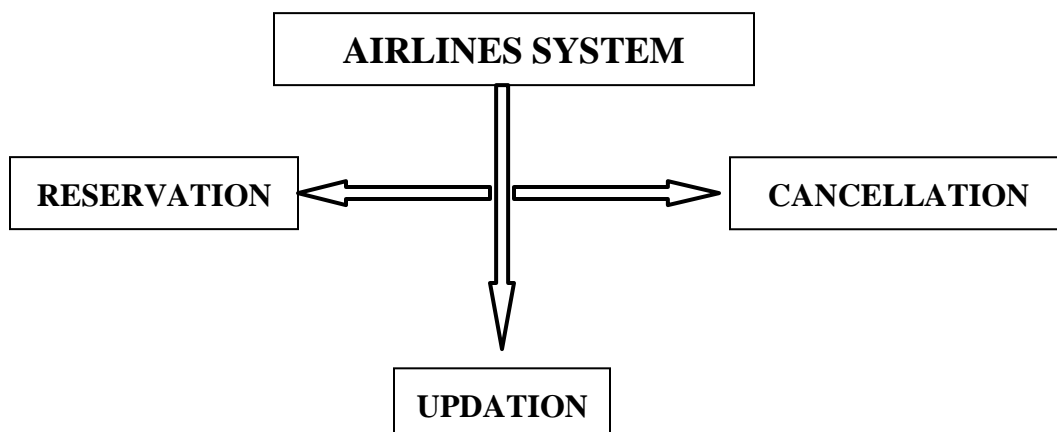


### **TECHNICAL SYSTEM**

#### **Need of Airlines system**

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

- 1) Faster System
- 2) Accuracy
- 3) Reliability
- 4) Informative
- 5) Reservations and cancellations from any where to any place



## **FEASIBILITY STUDY**

Feasibility study is to check the viability of the project under consideration. Theoretically various types of feasibilities are conducted, but we have conducted three type of feasibilities explained as under.

### **ECONOMIC FEASIBILITY**

With the manual system the operating cost of the system is about 60 Lacks P.A.. This cost comprises salary of 25 people, stationary, building rent, electricity, water, telephone etc. But with the new system this reoccurring cost comes out to be about 20 Lacks P.A. Hence the new system is economically feasible.

### **TECHNICAL FEASIBILITY**

The new system requires only 6 trained person to work with the system and in overall 10 people per office are sufficient. So we will identify 6 best people from existing system and train them.

As our existing system is purely manual, so we need a one time investment of Rs 4 Laks for the purchase of 7 computers, 5 Ticket printers, a laser printer, AC and networking etc. It requires 20 Lacks PA as a operating cost.

With the above details our system is technically feasible as after investing 24 Lacks in a year, the company is still saving Rs 25 Lacks PA.

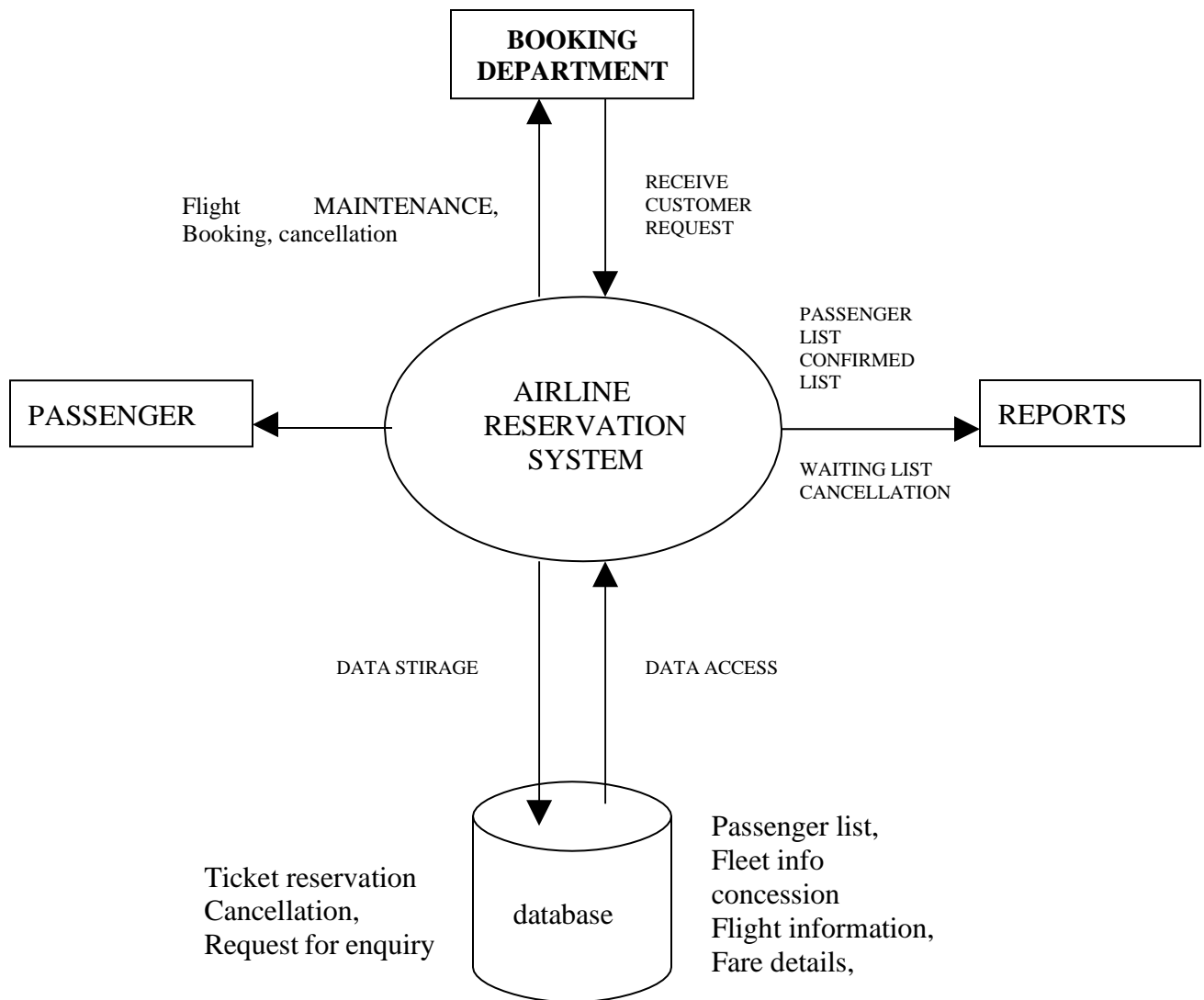
### **OPERATIONAL FEASIBILITY**

The new solution is feasible in all sence but operationally it is not. The new system demands the expulsion of at least 15 people from the company. It creates an environment of joblessness and fear among the employees. It can lead to an indefinite strike in the company also. So the management must take corrective actions prior in advance in order to start the further proceedings.

## SYSTEM ANALYSIS

This was the most important phase of my project life cycle .It had connected my maximum time .The block diagram given bellow depict various fact which were understood by one during the analysis phase.

### BLOCKDIAGRAM



In that phase initially I had observed the system by visiting to Indiragandhi Airport(domestic terminal) and a few airline reservation agency. Pardes Airline agencies , Lotus Airline agencies.

The above block diagram is an implementation of this observation .

In the next phase I had various quires in my mind ,Which I tried to ask from appropriate authorities A sample of my quires is enclosed as Annex 1.

Q.1 Tick mark the features to be included in the new system?

- Enquiry
- Reservation
- Cancellation
- Report
- Edit
- Other specify

Q2. Tick mark that the system should be ?

- Multi-user
- Single user

Q3. Tick marks the total time required for the implementation of the project?

- 3 months
- 6 months
- 9 months
- Others specify



Q4. Tick mark the reports to be Incorporated?

- List of all passenger
- List of all flights
- List of passenger(date wise)
- List of passenger(flight wise)
- Any other

After getting solution my queries I started studying database structure used in the existing system . In this connection I had come to know about various master files as

**In passenger list :** Passenger name,Address , tel\_no , d\_o\_b, profession father name,

**Fleet info:** No aircraft, club\_pre\_capacity, economic capacity, engine type,cruisespeed,air length,

**Flight info:** f\_name, f\_code, c\_code,t\_exeseat no, t\_economic seat no.

**Concession:** concession name , concession code , class , discount , v\_o\_t , baggage allowance , fare.

**Move of payment:** Passenger code ,Date of paid ,Current date, cash, Debit,cheque,credit.

**Fare:** route , destination place ,source place ,Departure time, Arrival time,Flight code,class,Fare.

**Reservation:** Ticket report, PNR, flight code, destination place, source place, departure time arrival time , Class, number of passenger, Age, sex, Fare, seat .

**Enquiry:** Ticket no, seat number , pnr.

**Cancellation :** Pnr, ticket no, Days left, Basic amount, Cancel amount .

Various categories of flight code are display here CD455,IC548,IC7896,IC567,CD445  
Flight schedule - gau to del 12.33 pm to 2.33 pm

In this process further I had visited the air port again in order to INTER VIEW people to know more about the system

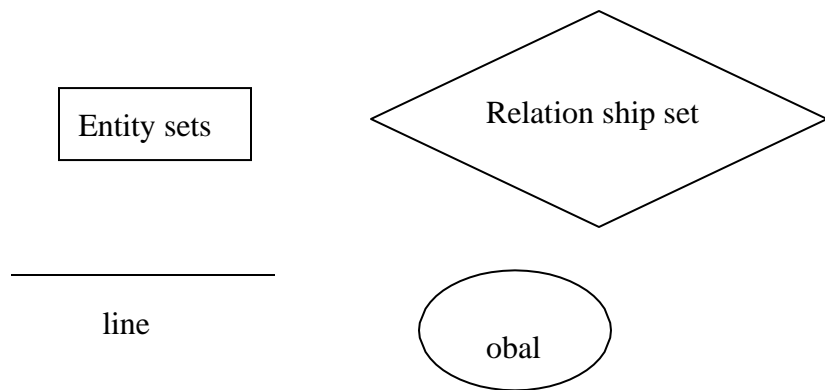
The main purpose was To analyses the method of calculating daily in come reservation cost generation methods, and few concern things. Duty schedule .

## **4.SYSTEM DESIGN**

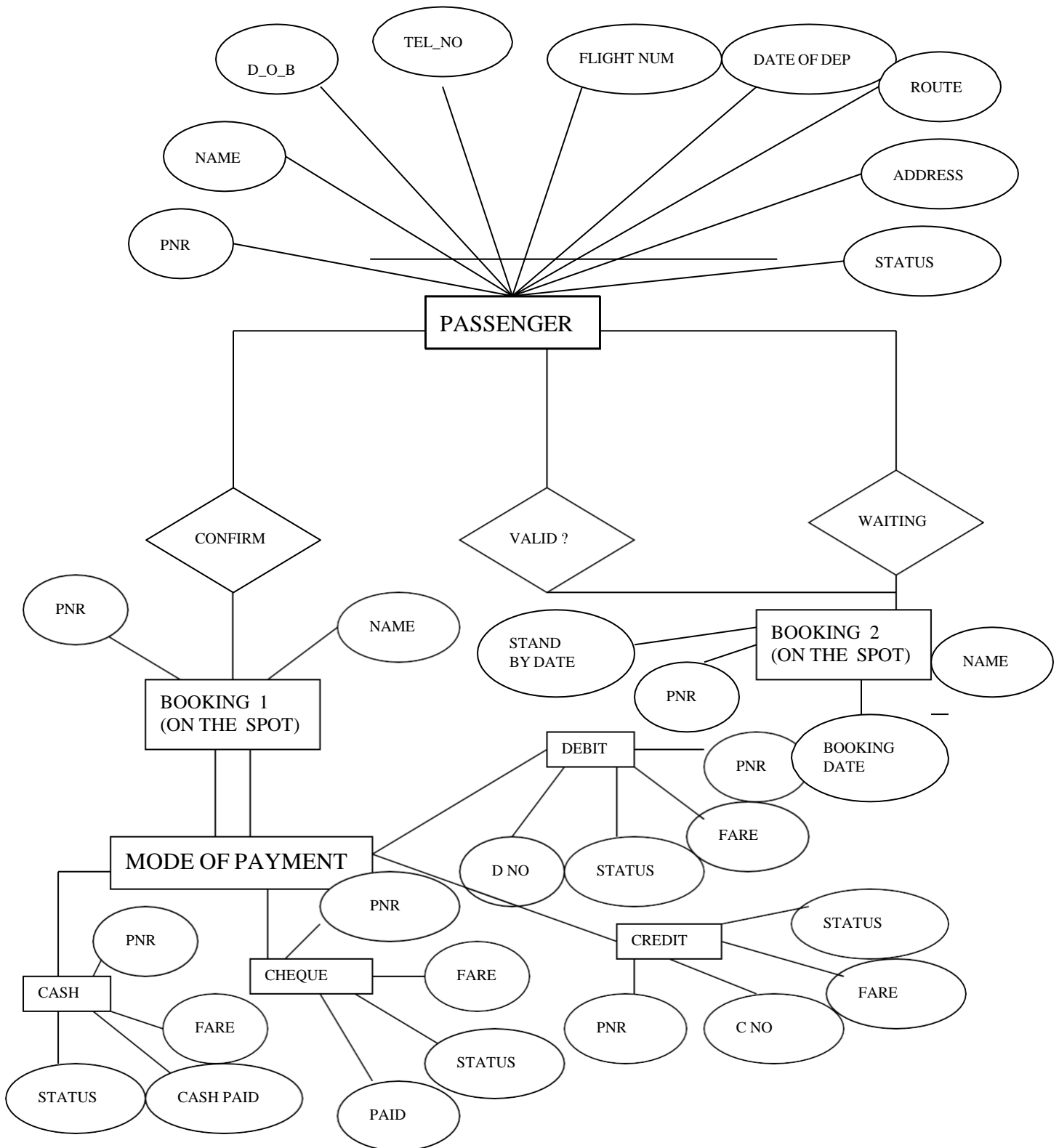
In this phase initially I had designed E-R diagram of the processes , in order to identify various entities and relation ship set ,entity set ,attributers, link attributes The Diagram of this process as under.

After this step We had tried design the data base for the new system and normalized it The tables motivated in data dictionaries enclosed as annex II is an out come of this step

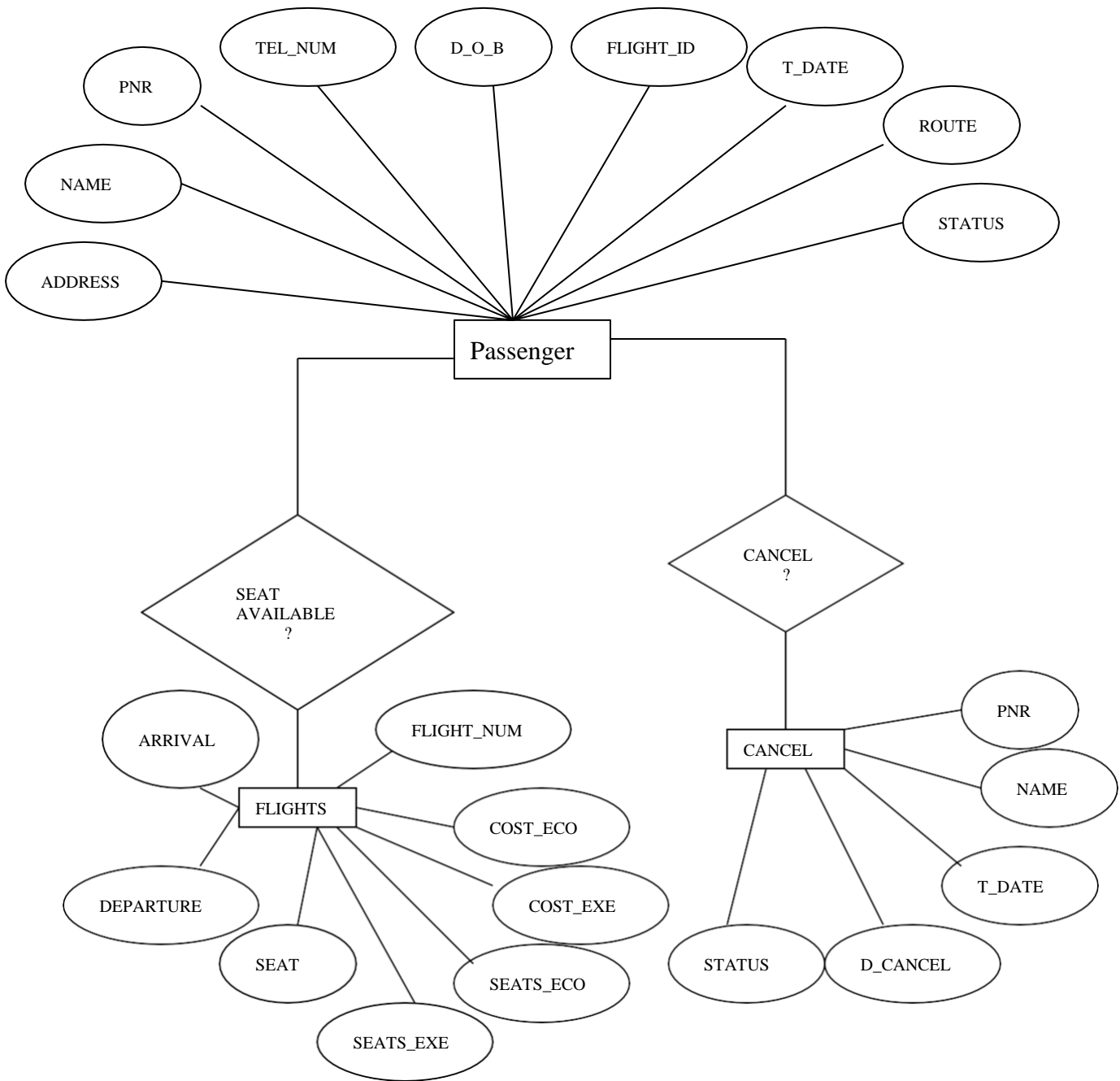
The symbol of entities are shown bellow



## E-R DIAGRAM FOR BOOKING DEPARTMENT



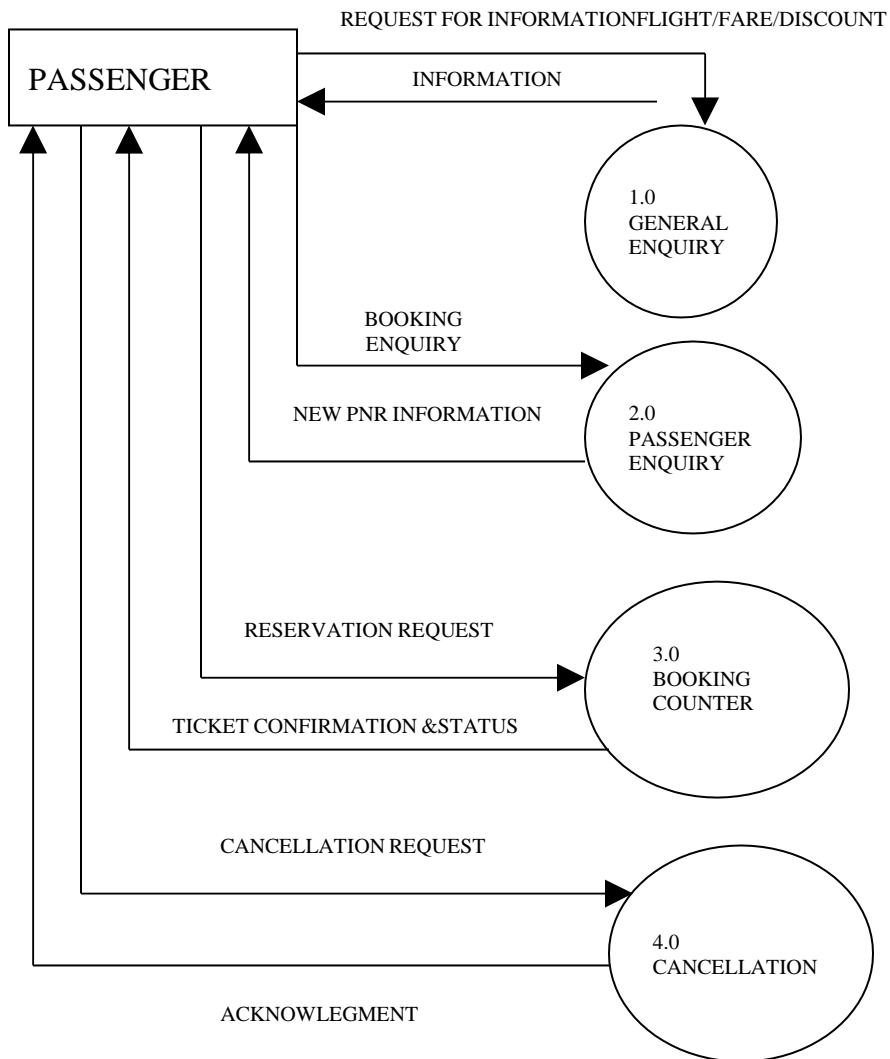
## E-R DIAGRAM FOR CANCELLATION



## DATA FLOW DIAGRAM

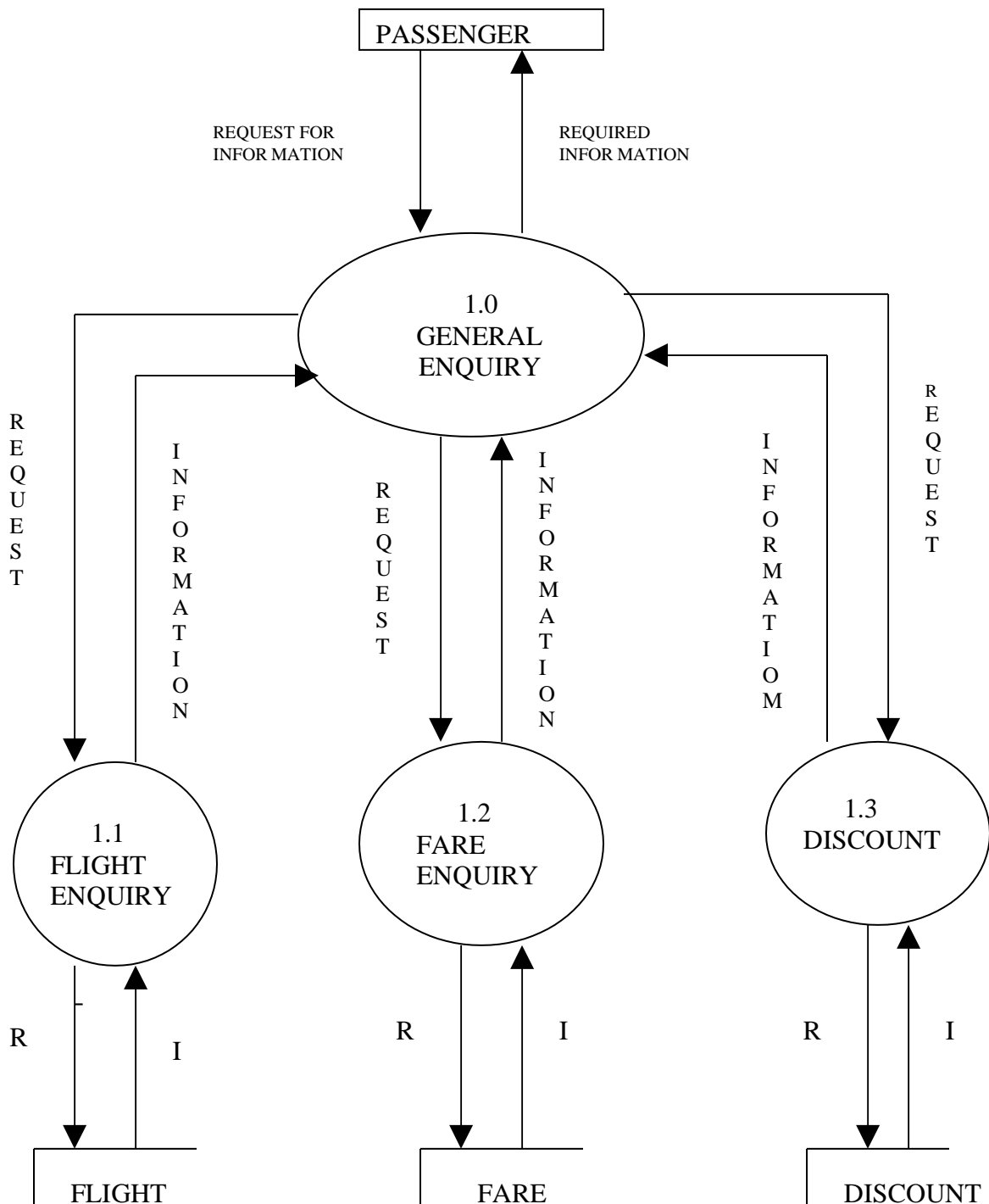
In order to design a better solution. I had designed the DFD for system including all technical processing details is given bellow

### LEVEL 0 DATA FLOW DIAGRAM



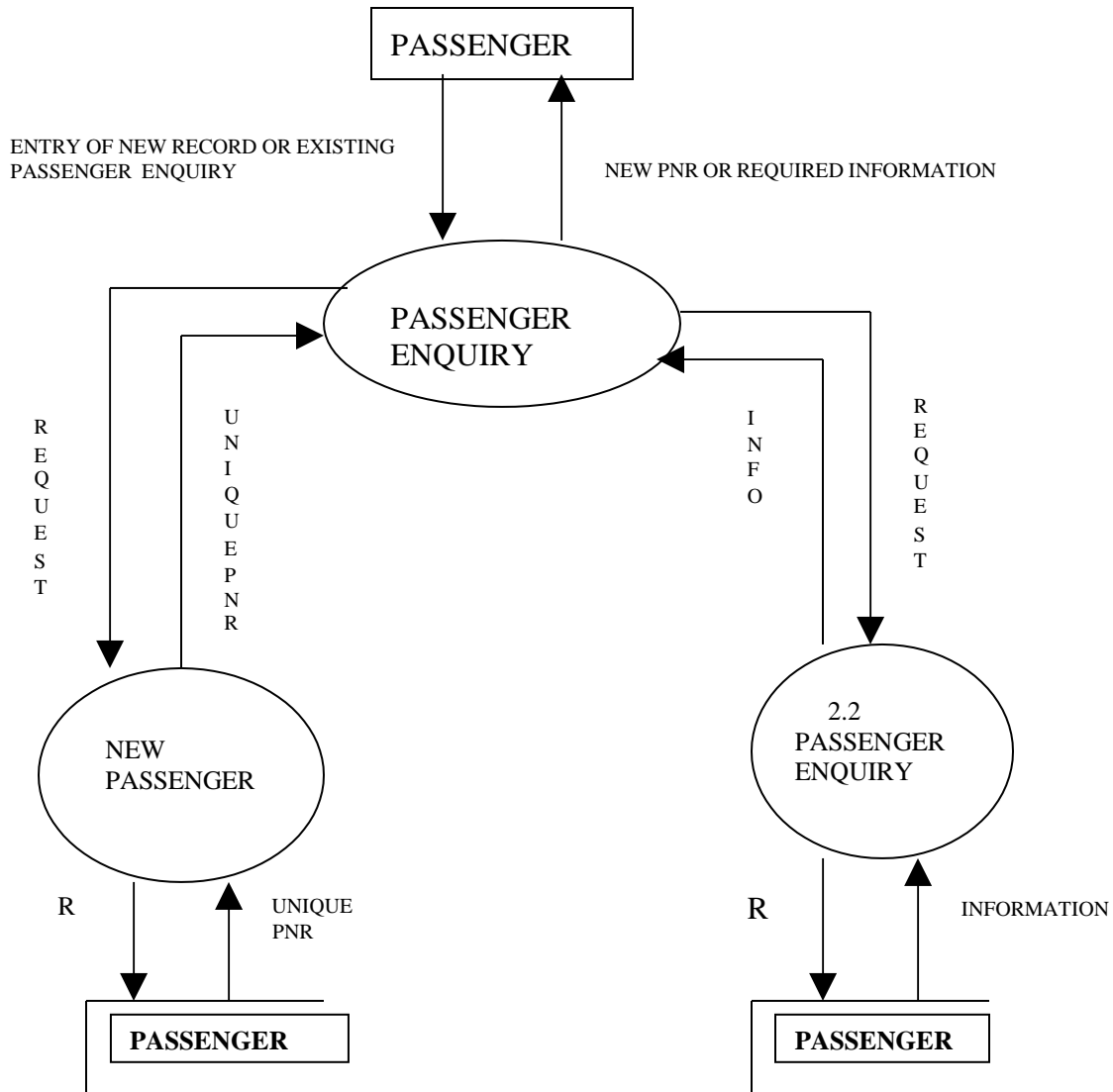
## LEVEL 1 DATA FLOW DIAGRAM OF GENERAL ENQUIRY

### SYSTEM



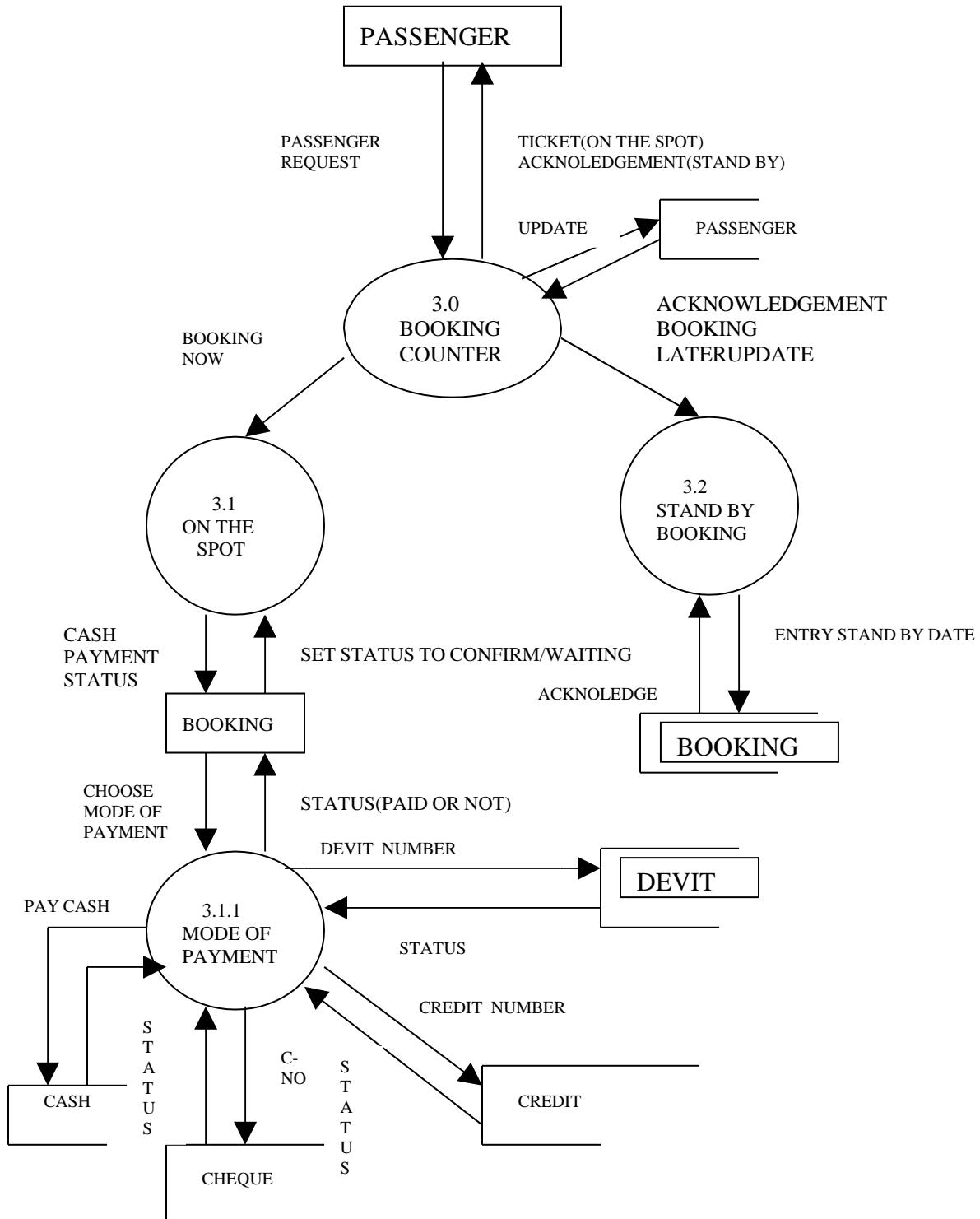
# LEVEL 1 DATA FLOW DIAGRAM OF PASSENGER ENQUIRY

## SECTION

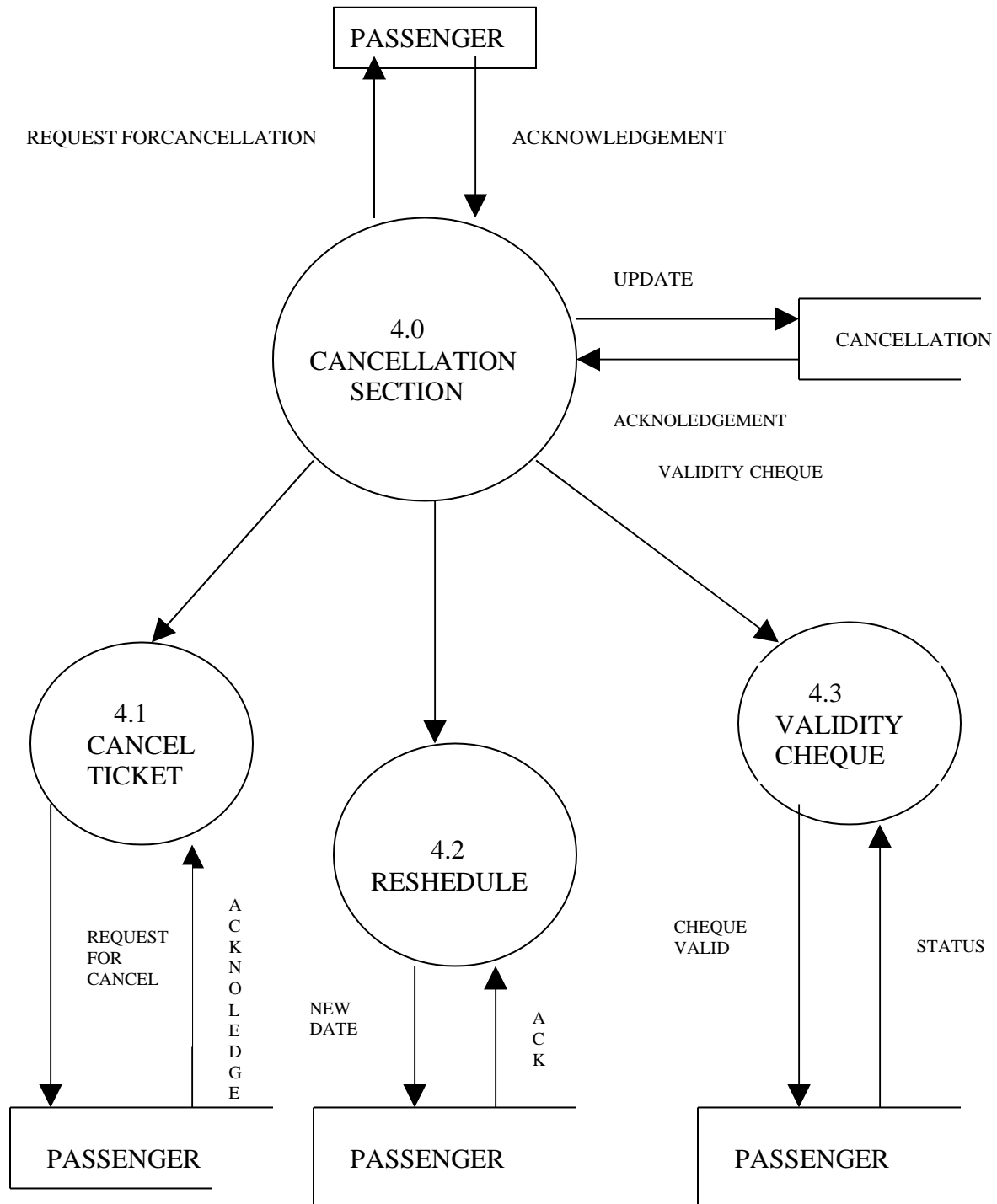




## LEVEL 2 DFD OF BOOKING



## LEVEL 2 DFD OF CANCELLATION



## **ALGORITHM**

In this phase further I had designed algorithms for various technical sub problem a few than are enclosed here with.

### **RESERVATION**

- A PERSON COME TO RESERVED ATICKET.
- THEN HE GIVES HIS FULL DETAILS
- IN CUSTOMER FORM THOSE DETAILS WERE WRITTEN.
- THEN COMPUTER CHEQUE THE DATE WHAT DATE THE PERSON RESER  
VED
- DATE WISE IT CHEQUE THE FLIGHTS
- IF THE FLIGHT IS FLING THAT DAY
- THEN SYSTEM JUSTIFY THE SPECIFIC FLIGHT ID
- IT CHEQUE ITS SEAT CLASS.
- IF THE PASSENGER WANT TO ECONOMIC CLASS AND WINDOW SIDE SEAT
- THEN SYSTEM CHEQUE IF THERE ANY SEAT IN ECONOMIC CLASS WHICH  
IS INSIDE THE WINDOW
- IF SEAT IS EMPTY THEN SYSTEM RESERVED THE SEAT .
- THEN TICKET IS GENERATED.
- THE TICKET IS CONFIRMED.
- IF THE CONDITION IS NOT APPLIED THEN IT CHEQUE NEXT SEAT
- AND JUSTIFIED IT .
- IF IT IS NOT ALSO EMPTY THEN IT CHEQUE NEXT BY NEXT.
- IF THERE IS NO SEAT THEN SYSTEM TAKE TICKET WHICH IS NOT  
CONFIRMED
- THEN IT GIVE WAITING LIST.

- END.

## **CANCELLATION**

- A PASSENGER COME TO CANCEL THE TICKET
- THEN THE SYSTEM OPEN THE DELET FORM
- THEN CLICK SHOE COMMAND
- IT DISPLAY ALL THE PASSENGER LIST
- THEN SELECT THE PNR NUMBER AND CLICK DELET OPTION
- THE SYSTEM SHOW RECORD IS DELETED.

WHEN PASSENGER COME TO RESERVED A TICKET THEN SYSTEM FIND OUT THE FLIGHT DETAILS.

SYSTEM CLICK FLIGHT DETAILS OPTION THEN THE FLIGHT DETAILS FORM OPEN

THOSE SYSTEM ARE FOLLOWED .

FLIGHT\_DETALS:-

- . IN FLIGHT DEAILS WE FIRST CREATE A FORM.
- . THEN WE MAKE ALL TEXT BOX.
- . WE CREATE COMMAN BOX..
- . IN THIS FORM WE ARE USE VARIOUS COMMAND BOX THOSE ARE
- PREVIOUS,FIRST,NEXT, ADD,NEW,UPDATE, DELETE, SAVE
- . IN THIS FORM WE ADD NEW FLIGHT RECORD AND UPDATE IT THEN THE
- VALU IS GO TO THE DATABASE.
- .WHEN WE CLICK NEXT , LAST , PREVIOUS, FIRST COMMAND BUTTON
- THEN IT SHOW VARIOUS THING SERIALY.

- A PERSON COME TO KNOW THE TIMMINGS FOR THE FLIGHT WHICH IS GO FROM DELHI TO GAU.
- THEN WE CLICK SHOW COMMAND BUTTON.

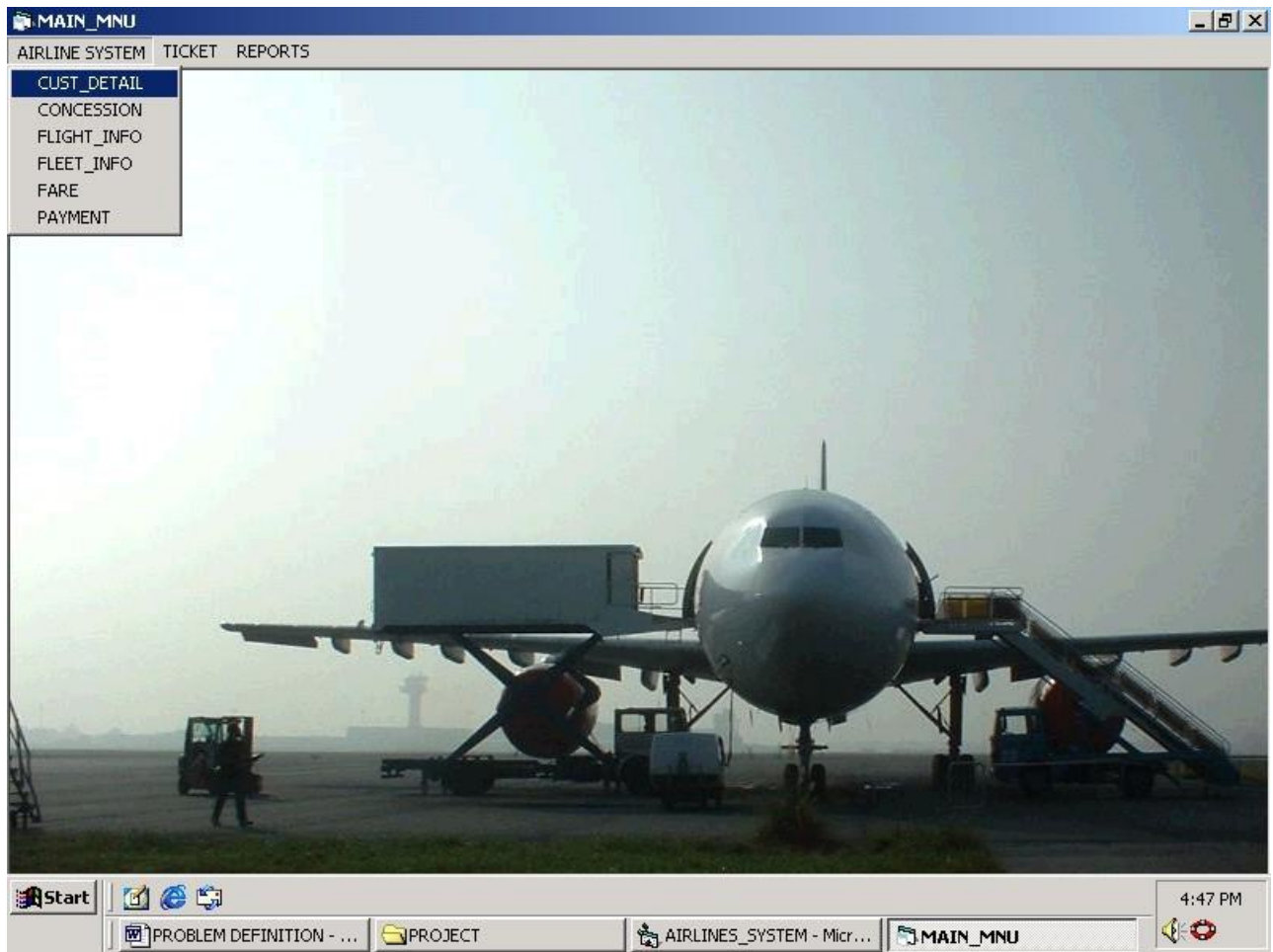
## **CONCESSION**

- FIRST IT CLICK THE CONCESSION BOX.
- CONCESSION BOX OPEN
- IT SELCT THE CETEGORI.
- THEN IT IS CALCULATE.
- AND THE FARE IS CALCULATE.
- THEN FINAL FARE IS GENERATE IN TICKET.

## INPUT SCREEN

As a last step in design phase I had designed various Input and out put inter phase screen .The sample format of this screens is enclosed in annex III..

### THIS IS A PICTURE OF THE MAIN MENU.



In this picture there are three parts . Those are master file, ticket , report, When we click in master file then it show six forms those are custodial ,concession Flight info , fleet info, fare ,payment . when we click any one of this then the form is Open. Now we open each file one by one.

## THIS IS A FORM OF CUSTOMER DETAIL

MAIN\_MNU - [CUST\_DETAIL]

AIRLINE SYSTEM TICKET REPORTS

### CUSTOMER\_DETAIL

Cust_name	BIJON BOSH
Father_name	RATAN BOSH
Gender	M
D_O_B	4/13/1983
Address	NASIRPUR
Tell_no	115546377
Profession	TEACHER
Security	NO
Concession	NO

Add

Update

Close

First Previous Next Last

Start | AIRLINES\_SYSTEM - Micr... | MAIN\_MNU - [CUST\_D... | PROBLEM DEFINITION - ... | 12:01 PM



In this form we enter the customer detail. When we enter the new name then we click add button and then update .Then it is automatically update .This is under master file. In this form first button work for show first record ,next button work for show next record. Preview show the just preview record.

**THIS IS A FORM OF CONCESSION**

MAIN\_MNU

AIRLINE SYSTEM    TICKET    REPORTS

CONCESSION

CONCESSION

Select category here :

LOCOMOTOR\_

STUDENT(12-25)

SENIOR\_CITIZEN

CANCER\_PATIENT

BLIND\_PASSENGER

ARMED\_FORCE

YOUTH\_FARE

LOCOMOTOR\_DISABLED

Details

CONCESSION\_CODE

7

CLASS

ECONOMY

DISCOUNT

50%

VALIDITY

1\_YEAR

BAGGAGE\_ALLOWANCE

20KG

FARE\_BASIC

SERVICEECONOMY

MSRDC1

Start

AIRLINES\_SYSTEM - Micro...

PROBLEM DEFINITION - ...

MAIN\_MNU

12:18 PM

**In this form there are several concession type are shown.**

**Those concessions are 1.Student**

**2.Senior citizen.**

**3.Cancer patient.**

**4. Blind passenger.**

**5. Armed force.**

**6. Youth fare.**

**7. Locomotor**

**When we click any one of them the relevant condition are open.**

**In this form when we click locomotor category then it show its conditions**

- **code..... 7**
- **class.....economic**
- **discount... .....50%**
- **v\_o\_t... .....1 year**
- **baggage allowance..20kg**
- **fare basis .....service concerned.**

## THIS IS A FORM OF FLIGHT INFORMATION

The screenshot shows a Windows application window titled "MAIN\_MNU" with a menu bar containing "AIRLINE SYSTEM", "TICKET", and "REPORTS". Below the menu bar is a sub-window titled "FLIGHT\_INFO". The main area of the "FLIGHT\_INFO" window has a yellow background and is titled "FLIGHT INFORMATION". It contains a form with the following fields and values:

FLIGHT_NAME	IC
FLIGHT_CODE	890
CLASS_CODE	(Y+J)
CLASS_NAME	ECO
TOTALSEATNUMBER	54

Below the form are two buttons: "Add" and "Update". At the bottom of the form area are five buttons: "Next", "Previous", "First", "Last", and "Close". The Windows taskbar at the bottom shows the Start button, several icons, and the following open applications: "AIRLINES\_SYSTEM - Micr...", "PROBLEM DEFINITION - ...", and "MAIN\_MNU". The system clock shows "1:24 PM".

**In this form we are watching the flight information .It has several fields those are**

- **Flight name**
- **Flight code**
- **Class code**
- **Class name**
- **Total seat number.**

**In this form we enter the flight detail .When we enter the new flight then we click add button and then update .Then it is automatically update .This is under master file. In this form first button work for show first record ,next button work for show next record. Preview show the just preview record**

## THIS IS A FORM OF FLEET INFORMATION.

MAIN\_MNU  
AIRLINE SYSTEM TICKET REPORTS

FLEET\_INFO

FLEET\_INFORMATION

737-500  
737-400  
737-500  
737-700  
737-800  
737-900

SHOW\_DETAIL

UB_PRE_CAPACITY	00
ECO_CAPACITY	62
ENGINE_TYPE	PW127F
CRUISESPEED	511 KM/HR
AIR_LENGTH	27.17 N
WING_SPAN	27.0 N

⏪ ⏩ ⏴ ⏵

Start | AIRLINES\_SYSTEM - Micr... | PROBLEM DEFINITION - ... | MAIN\_MNU | 1:28 PM

**Fleet information is a special type of form in this form there are some field are include .In db como1 list of flight are coming when we click in run time. In fleet information there are basic type of flights those are**

**737-400**

**737-500**  **Clube pre capacity... .....00**

**737-700** **Economic capacity... .....62**

**737-800** **Engine type... .....PW127F**

**737.900** **Cruisespeed... .....511km/hr**

**Air length... .....27.17N**

**Wing spam... .....27.0 N**



**THIS IS A FORM OF THE ROUTE BASIS FARE.**

**MAIN\_MNU**  
AIRLINE SYSTEM TICKET REPORTS

**FARE**

**FARE OF ROUTE**

Route\_code 0361

Route

S_place	VIA	D_place
GAU	BAGDOGRA	DELHI

Time

D_Time	Stopage	A_Time
10:44:00 AM	YES	2:44:00 PM

Code\_Fare

Flight_code	Class_code	Fare
CD7892	ECONOMY	9840

Add Update Last  
Next Previous First Close

Start | AIRLINES\_SYSTEM - Micr... | PROBLEM DEFINITION - ... | MAIN\_MNU | 2:09 PM

**This is a form of fare in this fare form there are various fields those are**

- **Route**
- **S\_place**
- **D\_place**
- **Via**
- **D\_time**
- **A\_time**
- **Stoppage**
- **Flight\_code**
- **Class\_code**
- **Fare**

**In this form we enter the fare detail .When we enter the new fare then we click add button and then update .Then it is automatically update .This is under master file.In this form first button work for show first record ,next button work for show next record. Preview show the just preview record**

**THIS IS A FORM OF RESERVATION.**

**TICKET RESERVATION**

TICKET NUMBER: 11127  
PNR: 2349

---

FLIGHT CODE: CD7755  
SOURCE: GAU DESTINATION: AGR  
DEPARTURE: 12:22:00 PM ARIVAL: 1:33:00 PM  
CLASS: ECONOMIC FARE: 2645  
DATE OF JOURNEY: 2/12/2004  
NUMBER OF PASSENGER: 4

AGE	SEX	SEAT	FARE
22	M	1	2645
33	F	2	2645
22	M	3	2645
23	M	4	2645

Print  
Exit  
Save

CURRENT DATE: 22/11/2 TOTAL: 10580

**This is reservation form or ticket .PNR number are generated automatically .When click passenger age then fare is coming by the route based. When we click total button then total fare is shown. When we click in Print command button then the ticket is print. And when we click in exit button then the form is closed.**

**THIS FORM IS ENQUIRY.**

The screenshot shows a software window titled 'MAIN\_MNU' with a menu bar containing 'AIRLINE SYSTEM', 'TICKET', and 'REPORTS'. Inside the window is a sub-window titled 'RESERVED\_SEAT' which contains an 'ENQUIRY' form. The form has a teal background and a yellow title bar. It features seven input fields: 'TICKET\_NUMBER', 'FLIGHT NAME', 'SEAT NUMBER', 'FARE', 'PASSENGER\_CODE', 'TRAVEL DATE', and 'TRAVEL TIME'. Below these fields are two rows of buttons. The first row contains 'ADD', 'Update', 'Next', and 'CONFIRM'. The second row contains 'First', 'Last', 'Previous', and 'Close'. The Windows taskbar at the bottom shows the Start button, several application icons, and the taskbar itself with open windows: 'PROBLEM DEFINITION - ...', 'AIRLINES\_SYSTEM - Micr...', and 'MAIN\_MNU'. The system clock shows '2:47 PM'.

**This is a form of ENQUIRY .**

**If any person come to AIRPOART want to know that its seat reserved or not  
Then system open the enquiry form and put the value of ticket no and click  
confirm box .If it is confirmed then it show value of the all concerning data .  
Either show not confirmed.**

## THIS IS A CANCELLATION FORM.

The screenshot shows a Windows-style application window titled "MAIN\_MNU" with a menu bar containing "AIRLINE SYSTEM", "TICKET", and "REPORTS". A sub-window titled "CANCEL\_TICKET" is open, displaying a form titled "TICKET\_CANCELLATION". The form contains the following fields and controls:

- CUSTOMER\_CODE: Text input field
- CLASS: Text input field
- SEAT\_NUMBER: Text input field
- DAYS LEFT: Dropdown menu
- BASIC\_AMMOUNT: Text input field (pink background)
- CANCEL\_AMMOUNT: Text input field (orange background)
- REFUND\_AMMOUNT: Text input field (purple background, highlighted with a black border)

At the bottom of the form are four buttons: "Show", "Sub", "Cancel", and "Close". The Windows taskbar at the bottom shows the Start button, several icons, and open applications including "PROBLEM DEFINIT...", "AIRLINES\_SYSTEM...", "Search Results", and "MAIN\_MNU". The system clock shows "3:14 PM".

**This is a form of cancellation .When a person come to cancel his ticket then ,in the form the passenger code are put and click the show button system will show the value of data and refund amount. Then click on the cancel command. Then automatically the record is deleted.**

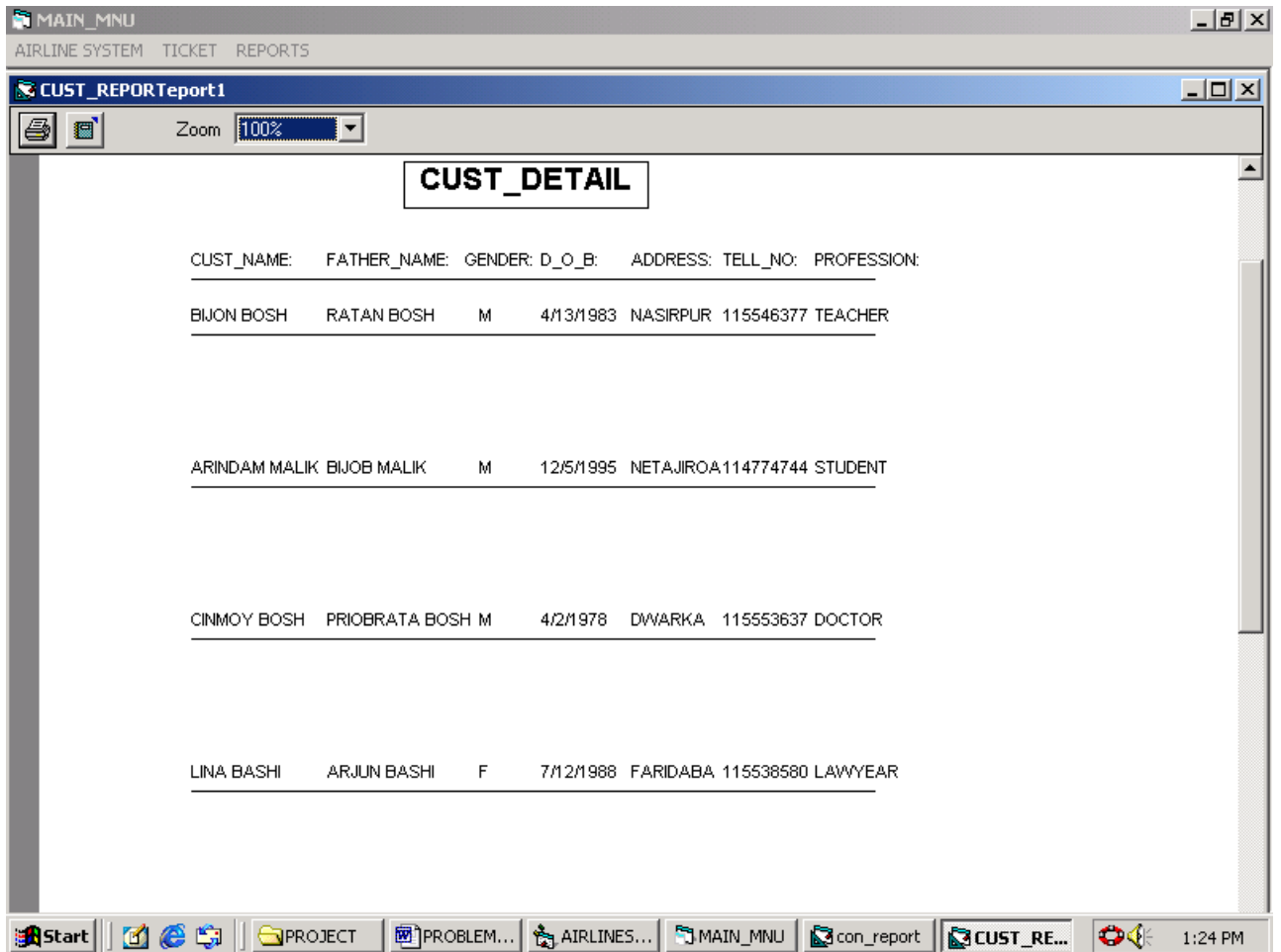
## CONCESSION REPORT ARE SHOWN BELOW.

CONCE_NAME:	CONCE_CODE:	CLASS:	DISCOUNT:	V_O_T:	BAGGAGE_ALL	FARE_BASIC:
STUDENT(12-25_Y	1	ECONOMY	50%	1_YEAR	20KG	CS52
SENIOR_CITIZEN(652		ECONOMY	50%	1_YEAR	20KG	CP50
CANCER_PATIENT	3	ECONOMY	50%	1_YEAR	20KG	CP51
BLIND_PASSENGE	4	ECONOMY	50%	1_YEAR	20KG	BP50
ARMED_FORCE	5	ECONOMY	50%	1_YEAR	(20_40)KG	MIL50
YOUTH_FARE	6	ECONOMY	25%	1_YEAR	20KG	CLUBPREMIERE"
LOCOMOTOR_DISA	7	ECONOMY	50%	1_YEAR	20KG	SERVICEECONOM

-

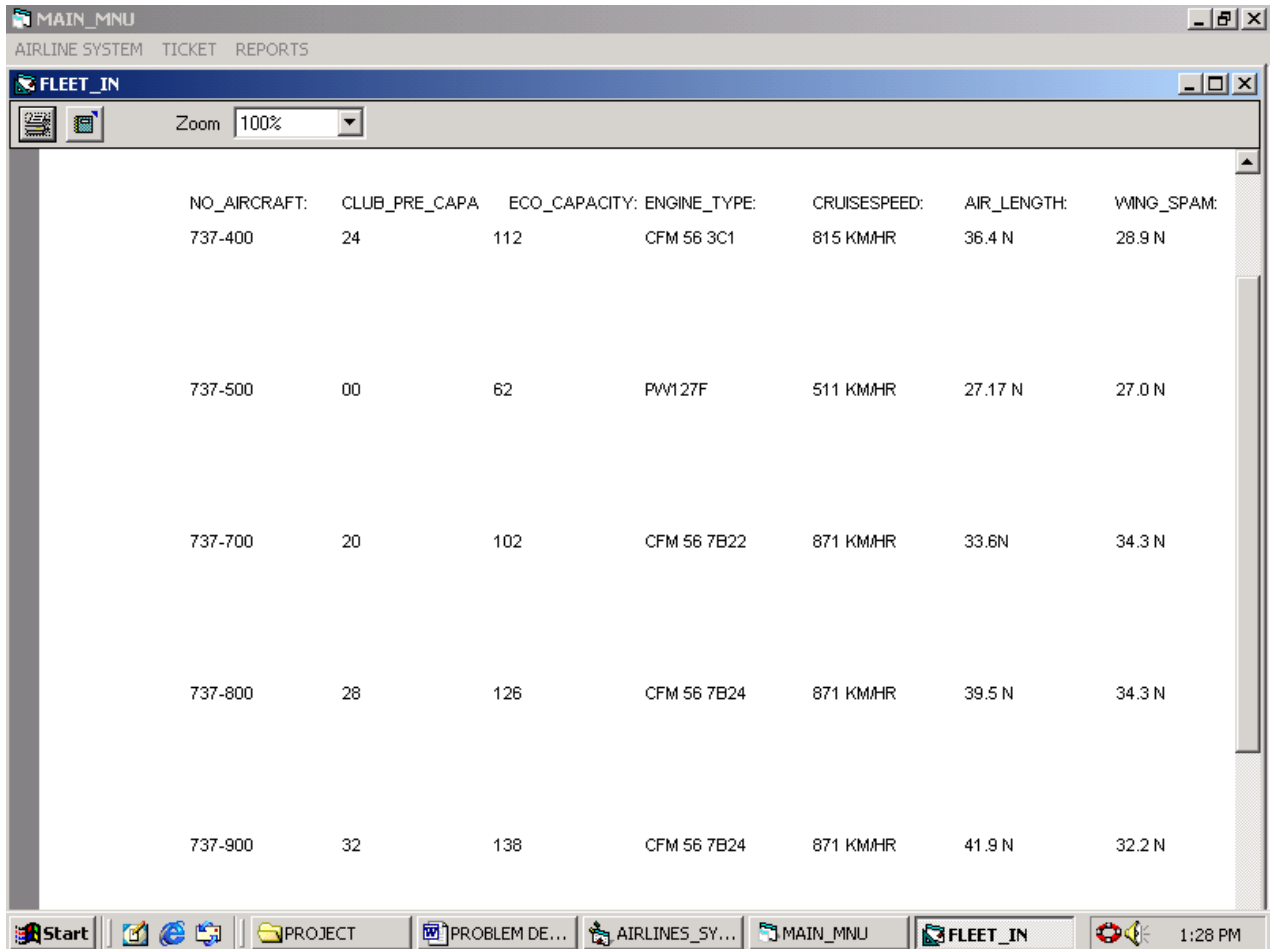
This is report of concession .Various type of concession category are shown upper.

## THIS IS A REPORT OF CUST DETAIL.



When we put passenger detail in passenger record then it is automatically set in report list.

## THIS IS FLEET INFORMATION REPORT.



MAIN\_MNU  
AIRLINE SYSTEM TICKET REPORTS

FLEET\_IN

Zoom 100%

NO_AIRCRAFT:	CLUB_PRE_CAPA	ECO_CAPACITY:	ENGINE_TYPE:	CRUISESPEED:	AIR_LENGTH:	WING_SPAM:
737-400	24	112	CFM 56 3C1	815 KM/HR	36.4 N	28.9 N
737-500	00	62	PW127F	511 KM/HR	27.17 N	27.0 N
737-700	20	102	CFM 56 7B22	871 KM/HR	33.6N	34.3 N
737-800	28	126	CFM 56 7B24	871 KM/HR	39.5 N	34.3 N
737-900	32	138	CFM 56 7B24	871 KM/HR	41.9 N	32.2 N

Start PROJECT PROBLEM DE... AIRLINES\_SY... MAIN\_MNU FLEET\_IN 1:28 PM



THIS IS A REPOT OF ALL FLIGHT.

f_name:	f_code:	c_code:	t_exeseatno:	t_ecoseatno:
IC	879	(Y+J)	89	89
IC	890	(Y+J)	45	54
CD	7755	(Y+J)	45	6
CD	7757	(Y+J)	656	565
CD	7892	(Y+J)	56	65

## **TABLES**

THE LIST OF TABLE ARE WRITTEN HERE WHICH ARE USED IN DATABASE.

### **CUST\_DETAIL**

<b>FIELD TYPE</b>	<b>TYPE</b>	<b>DESCRIPTION</b>
<b>T_DATE</b>	<b>TEXT</b>	<b>TRAVEL DAT</b>
<b>CUST_NAME</b>	<b>TEXT</b>	<b>CUSTOMER NAME</b>
<b>FATHER_NAME</b>	<b>TEXT</b>	<b>CUSTOMER FATHER NAME</b>
<b>GENDER</b>	<b>TEXT</b>	<b>GENDER OF CUSTOMER</b>
<b>D_O_B</b>	<b>DATE/TIME</b>	<b>DATE OF BIRTH OF CUSTOMER</b>
<b>ADDRESS</b>	<b>TEXT</b>	<b>ADDRESS OF CUSTOMER</b>
<b>TEL_NO</b>	<b>NUMBER</b>	<b>CUSTOMER TELEPHONE NUMBER</b>
<b>PROFESSION</b>	<b>TEXT</b>	<b>PROFESSION OF CUSTOMER</b>
<b>SECURITY</b>	<b>TEXT</b>	<b>SECURITY OF CUSTOMER</b>
<b>CONCESSION</b>	<b>TEXT</b>	<b>CONCESSION OF SECURITY</b>

### **FLIGHT INFORMATION**

<b>F_NAME</b>	<b>TEXT</b>	<b>FLIGHT NAME</b>
<b>F_CODE</b>	<b>NUMBER</b>	<b>FLIGHT CODE</b>
<b>C_CODE</b>	<b>TEXT</b>	<b>CLASS CODE</b>
<b>T_EXE SEATNO</b>	<b>NUMBER</b>	<b>TOTAL EXECUTIVE SEATNUM,BER</b>
<b>T_ECO SEATNO</b>	<b>NUMBER</b>	<b>TOTAL ECONOMIC SEAT NUMBER</b>

### **FLEET INFORMATION**

<b>FIELD NAME</b>	<b>DATATYPE</b>	<b>DESCRIPTION</b>
<b>NO_AIRCRAFT</b>	<b>TEXT</b>	<b>NUMBER OF AIRCRAFT</b>
<b>CLUB_PRE_CAPACITY</b>	<b>TEXT</b>	<b>CLUB PRE CAPACITY</b>
<b>ECO_CAPACITY</b>	<b>TEXT</b>	<b>ECONOMIC CAPACITY</b>
<b>ENGINE_TYPE</b>	<b>TEXT</b>	<b>ENGINE TYPE</b>
<b>CRUISESPEED</b>	<b>TEXT</b>	<b>CRUISESPEED</b>
<b>AIR_LENGTH</b>	<b>TEXT</b>	<b>LENGTH OF AIR</b>
<b>WING_SPAM</b>	<b>TEXT</b>	<b>WING_SPAM</b>

### **CONCESSION**

<b>CONCE_NAME</b>	<b>TEXT</b>	<b>CONCESSION NAME</b>
<b>CONCE_CODE</b>	<b>NUMBER</b>	<b>CODE OF CONCESSION</b>
<b>CLASS</b>	<b>TEXT</b>	<b>CLASS OF CONCESSION</b>
<b>DISCOUNT</b>	<b>TEXT</b>	<b>DISCOUNT CONCESSION</b>
		<b>BASIS</b>
<b>V_O_T</b>	<b>TEXT</b>	<b>VALIDITY OF TICKET</b>
<b>BAG_ALLOW</b>	<b>TEXT</b>	<b>BAGGAGE ALLOWANCE</b>
<b>FARE_BASIC</b>	<b>TEXT</b>	<b>FARE BASIC FIXED</b>

## **FARE**

<b>FIELD NAME</b>	<b>DATATYPE</b>	<b>DESCRIPTION</b>
<b>ROUTE_CODE</b>	<b>TEXT</b>	<b>CODE NUMBER OF ROUTE</b>
<b>S_PLACE</b>	<b>TEXT</b>	<b>SOURCE PLACE</b>
<b>VIA</b>	<b>TEXT</b>	<b>VIA</b>
<b>D_PLACE</b>	<b>TEXT</b>	<b>DESTINATION PLACE</b>
<b>D_TIME</b>	<b>DATE/TIME</b>	<b>DEPARTUE TIME</b>
<b>A_TIME</b>	<b>DATE/TIME</b>	<b>ARRIVAL TIME</b>
<b>F_CODE</b>	<b>TEXT</b>	<b>FLIGHT CODE</b>
<b>C_CODE</b>	<b>TEXT</b>	<b>CLASS CODE</b>
<b>FARE</b>	<b>TEXT</b>	<b>FARE OF CLASS</b>

## **TICKET REPORT**

<b>TICKET NO</b>	<b>NUMBER</b>	<b>TICKET NUMBER</b>
<b>PNR</b>	<b>NUMBER</b>	<b>PASSENGER NUMBER</b>
<b>F_ID</b>	<b>TEXT</b>	<b>FLIGHT ID</b>
<b>S_PLACE</b>	<b>TEXT</b>	<b>SOURCE PLACE</b>
<b>D_PLACE</b>	<b>TEXT</b>	<b>DESTINATION PLACE</b>
<b>T_DATE</b>	<b>TEXT</b>	<b>TRAVEL DATE</b>
<b>D_TIME</b>	<b>DATE/TIME</b>	<b>DEPARTURE TIME</b>
<b>A_TIME</b>	<b>DATE/TIME</b>	<b>ARIVAL TIME</b>
<b>FARE 1</b>	<b>NUMBER</b>	<b>FARE OF FIRSTPASSENGER</b>
<b>FARE 2</b>	<b>NUMBER</b>	<b>FARE OF SECOND  PASSENGER</b>
<b>FARE 3</b>	<b>NUMBER</b>	<b>FARE OF HIRDPASSENGER</b>
<b>FARE 4</b>	<b>NUMBER</b>	<b>FARE OF FOURTH  PASSENGER</b>
<b>FARE 5</b>	<b>NUMBER</b>	<b>FARE OF FIFTHPASSENGER</b>
<b>FARE 6</b>	<b>NUMBER</b>	<b>FARE OF SIXTHPASSENGER</b>
<b>SEAT_NO 1</b>	<b>NUMBER</b>	<b>SEAT NUMBER OF 1<sup>ST</sup>  PASSENGER</b>
<b>SEAT_NO 2</b>	<b>NUMBER</b>	<b>SEAT NUMBER OF 2<sup>ND</sup>  PASSENGER</b>
<b>SEAT_NO 3</b>	<b>NUMBER</b>	<b>SEAT NUMBER OF 3<sup>RD</sup>  PASSENGER</b>
<b>SEAT_NO 4</b>	<b>NUMBER</b>	<b>SEAT NUMBER OF 4<sup>TH</sup>  PASSENGER</b>
<b>SEAT_NO 5</b>	<b>NUMBER</b>	<b>SEAT NUMBER OF 5<sup>TH</sup></b>

		<b>PASSENGER</b>
<b>SEAT_NO 6</b>	<b>NUMBER</b>	<b>SEAT NUMBER OF 6<sup>TH</sup></b>
		<b>PASSENGER</b>
<b>AGE 1</b>	<b>NUMBER</b>	<b>AGE OF 1<sup>ST</sup> PASSENGER</b>
<b>AGE 2</b>	<b>NUMBER</b>	<b>AGE OF 2<sup>ND</sup> PASSENGER</b>
<b>AGE 3</b>	<b>NUMBER</b>	<b>AGE OF 3<sup>RD</sup> PASSENGER</b>
<b>AGE 4</b>	<b>NUMBER</b>	<b>AGE OF 4<sup>TH</sup> PASSENGER</b>
<b>AGE 5</b>	<b>NUMBER</b>	<b>AGE OF 5<sup>TH</sup> PASSENGER</b>
<b>AGE 6</b>	<b>NUMBER</b>	<b>AGE OF 6<sup>TH</sup> PASSENGER</b>
<b>CLASS</b>	<b>TEXT</b>	<b>CLASS</b>
<b>PASSENGER</b>	<b>NUMBER</b>	<b>TOTAL PASSENGER</b>

### **ENQUIRY**

<b>T_NO</b>	<b>TEXT</b>	<b>TICKET NUMBER</b>
<b>F_NAME</b>	<b>TEXT</b>	<b>FLIGHT NAME</b>
<b>F_CODE</b>	<b>NUMBER</b>	<b>FLIGHT CODE</b>
<b>C_SEATNO</b>	<b>NUMBER</b>	<b>CLASS SEAT NUMBER</b>
<b>C_FARE</b>	<b>NUMBER</b>	<b>CLASS FARE</b>
<b>CUST_CODE</b>	<b>NUMBER</b>	<b>CUSTOMER CODE</b>
<b>T_DATE</b>	<b>TEXT</b>	<b>TRAVEL DATE</b>
<b>T_TIME</b>	<b>DATE/TIME</b>	<b>TRAVEL TIME</b>

### **CANCELLATION**

<b>CUST_CODE</b>	<b>TEXT</b>	<b>CUSTOMER CODE</b>
<b>CLASS</b>	<b>TEXT</b>	<b>CLASS</b>
<b>S_NO</b>	<b>NUMBER</b>	<b>SEAT NUMBER</b>
<b>DAYS LEFT</b>	<b>DATE/TIME</b>	<b>DAYS LEFT</b>
<b>HOURS LEFT</b>	<b>DATE/TIME</b>	<b>HOURS LEFT</b>
<b>BASIC AMMOUNT</b>	<b>TEXT</b>	<b>BASIC AMMOUNT</b>
<b>CANCELAMMOUNE</b>	<b>NUMBER</b>	<b>CANCEL AMMOUNT</b>

### **RULES**

<b>DATE FROM DEP</b>	<b>TEXT</b>	<b>DATE FROM DEPARTURE</b>
<b>PERCENTAGE</b>	<b>TEXT</b>	<b>PERCENTAGE OF CANCEL</b>
<b>REFUND</b>	<b>NUMBER</b>	<b>REFUND AMMOUNT</b>

### **TERMS**

AGE	TEXT	AGE OF PASSENGER
SEX	TEXT	SEX OF PASSENGER
FARE	NUMBER	FARE OF PASSENGER

### **RESERVED SEAT**

F_CODE	TEXT	FLIGHT CODE
T_RES_ECO_SEAT	NUMBER	TOTAL RESERVED ECONOMIC SEAT
T_RES_EXE_SEAT	TEXT	TOTAL RESERVED EXECUTIVE SEAT
T_DATE	TEXT	TRAVEL DATE
WAITING_NO	NUMBER	WAOTING LIST

## **CODINGS**

The coding of the project under consideration is enclosed in annex - IV

### **Coding for Reservation**

```
Option Explicit
Dim adors As Recordset
Dim adors1 As Recordset
Dim ADORS2 As Recordset

Private Sub Combo1_Click()
If Val(Combo1.Text) = 1 Then
Text3(1).Visible = False
Text3(2).Visible = False
Text3(3).Visible = False
Text3(4).Visible = False
Text3(5).Visible = False
Text3(0).Visible = True
Combo3(1).Visible = False
Combo3(2).Visible = False
Combo3(3).Visible = False
Combo3(4).Visible = False
Combo3(5).Visible = False
Combo3(0).Visible = True
Text4(1).Visible = False
Text4(2).Visible = False
Text4(3).Visible = False
Text4(4).Visible = False
Text4(5).Visible = False
Text4(0).Visible = True
Text6(1).Visible = False
Text6(2).Visible = False
Text6(3).Visible = False
Text6(4).Visible = False
Text6(5).Visible = False
Text6(0).Visible = True
End If
If Val(Combo1.Text) = 2 Then
Text3(1).Visible = True
Text3(2).Visible = False
Text3(3).Visible = False
Text3(4).Visible = False
```

```

Text3(5).Visible = False
Text3(0).Visible = True
Combo3(1).Visible = True
Combo3(2).Visible = False
Combo3(3).Visible = False
Combo3(4).Visible = False
Combo3(5).Visible = False
Combo3(0).Visible = True
Text4(1).Visible = True
Text4(2).Visible = False
Text4(3).Visible = False
Text4(4).Visible = False
Text4(5).Visible = False
Text4(0).Visible = True
Text6(1).Visible = True
Text6(2).Visible = False
Text6(3).Visible = False
Text6(4).Visible = False
Text6(5).Visible = False
Text6(0).Visible = True
End If
If Val(Combo1.Text) = 3 Then
Text3(1).Visible = True
Text3(2).Visible = True
Text3(3).Visible = False
Text3(4).Visible = False
Text3(5).Visible = False
Text3(0).Visible = True
Combo3(1).Visible = True
Combo3(2).Visible = True
Combo3(3).Visible = False
Combo3(4).Visible = False
Combo3(5).Visible = False
Combo3(0).Visible = True
Text4(1).Visible = True
Text4(2).Visible = True
Text4(3).Visible = False
Text4(4).Visible = False
Text4(5).Visible = False
Text4(0).Visible = True
Text6(1).Visible = True
Text6(2).Visible = True
Text6(3).Visible = False
Text6(4).Visible = False
Text6(5).Visible = False
Text6(0).Visible = True

```



End If

If Val(Combo1.Text) = 4 Then

Text3(1).Visible = True

Text3(2).Visible = True

Text3(3).Visible = True

Text3(4).Visible = False

Text3(5).Visible = False

Text3(0).Visible = True

Combo3(1).Visible = True

Combo3(2).Visible = True

Combo3(3).Visible = True

Combo3(4).Visible = False

Combo3(5).Visible = False

Combo3(0).Visible = True

Text4(1).Visible = True

Text4(2).Visible = True

Text4(3).Visible = True

Text4(4).Visible = False

Text4(5).Visible = False

Text4(0).Visible = True

Text6(1).Visible = True

Text6(2).Visible = True

Text6(3).Visible = True

Text6(4).Visible = False

Text6(5).Visible = False

Text6(0).Visible = True

End If

If Val(Combo1.Text) = 5 Then

Text3(1).Visible = True

Text3(2).Visible = True

Text3(3).Visible = True

Text3(4).Visible = True

Text3(5).Visible = False

Text3(0).Visible = True

Combo3(1).Visible = True

Combo3(2).Visible = True

Combo3(3).Visible = True

Combo3(4).Visible = True

Combo3(5).Visible = False

Combo3(0).Visible = True

Text4(1).Visible = True

Text4(2).Visible = True

Text4(3).Visible = True

Text4(4).Visible = True

Text4(5).Visible = False

```

Text4(0).Visible = True
Text6(1).Visible = True
Text6(2).Visible = True
Text6(3).Visible = True
Text6(4).Visible = True
Text6(5).Visible = False
Text6(0).Visible = True
End If
If Val(Combo1.Text) = 6 Then
Text3(1).Visible = True
Text3(2).Visible = True
Text3(3).Visible = True
Text3(4).Visible = True
Text3(5).Visible = True
Text3(0).Visible = True
Combo3(1).Visible = True
Combo3(2).Visible = True
Combo3(3).Visible = True
Combo3(4).Visible = True
Combo3(5).Visible = True
Combo3(0).Visible = True
Text4(1).Visible = True
Text4(2).Visible = True
Text4(3).Visible = True
Text4(4).Visible = True
Text4(5).Visible = True
Text4(0).Visible = True
Text6(1).Visible = True
Text6(2).Visible = True
Text6(3).Visible = True
Text6(4).Visible = True
Text6(5).Visible = True
Text6(0).Visible = True
End If
End Sub

```

```

Private Sub Combo3_Click(Index As Integer)
Dim ADORS2 As ADODB.Recordset
Dim var2 As Integer
Dim var3 As Integer
Dim db As Connection
Set db = New Connection
db.Open "Provider=MSDASQL.1;Persist Security Info=False;Data Source=NATH"

```

```

Set ADORS2 = New ADODB.Recordset
Adodc1.RecordSource = "select * from fixed where f_code ='" &
RTrim(LTrim(DBCombo1.Text)) & "' and tdate = '" & RTrim(LTrim(Text8.Text)) & "'"
Adodc1.Refresh
ADORS2.Open "select * from fixed", db, adOpenStatic, adLockOptimistic
var2 = ADORS2.Fields!t_res_eco_seat
Text6(Index).Text = var2 + 1

End Sub

Private Sub Command1_Click()
Text2.Text = Val(Text4(0).Text) + Val(Text4(1).Text) + Val(Text4(2).Text) + Val(Text4(3).Text)
+ Val(Text4(4).Text) + Val(Text4(5).Text)
End Sub

Private Sub DBCombo1_Change()
On Error Resume Next
MSRDC1.Resultset.Bookmark = DBCombo1.SelectedItem
End Sub

Private Sub DBCombo1_Click(Area As Integer)
On Error Resume Next
MSRDC1.Resultset.Bookmark = DBCombo1.SelectedItem
End Sub

Private Sub Form_Load()
Dim db As Connection
Set db = New Connection
db.Open "Provider=MSDASQL.1;Persist Security Info=False;Data Source=NATH"
Set adors = New Recordset
ADORS2.Open "select
ticket_no,pnr,flight_id,source,destination,t_date,d_time,a_time,fare1,fare2,fare3,fare4,fare5,fare6,class,age1,sex1,seat1,age2,sex2,seat2,age3,sex3,seat3,age4,sex4,seat4,age5,sex5,seat5,age6,sex6,seat6,passenger from ticket_report", db, adOpenStatic, adLockOptimistic
Dim otext As TextBox
For Each otext In Me.Text1

Set otext.DataSource = adors
Next
db.Open "Provider=MSDASQL.1;Persist Security Info=False;Data Source=NATH"
Set adors = New Recordset
Set adors1 = New Recordset
Set ADORS2 = New Recordset
adors1.Open "select max(TICKET_NO)from ticket_report", db, adOpenStatic,
adLockOptimistic

```

```

ADORS2.Open "select max(pnr) from ticket_report", db, adOpenStatic, adLockOptimistic
var1 = adors1.Fields(0)
var2 = ADORS2.Fields(0)
Text1(0) = var1 + 1
Text1(17) = var2 + 1
adors.Open "select * FROM FARE", db, adOpenStatic, adLockOptimistic
Set Text1(1).DataSource = adors
Set Text1(2).DataSource = adors
Set Text1(3).DataSource = adors
Set Text1(4).DataSource = adors

```

```

End Sub

```

```

Private Sub PRINT_Click()
Ticket_report.Print
End Sub

```

```

Private Sub save_Click()
adors.UpdateBatch adAffectAllChapters
End Sub

```

```

Text3_LostFocus(Index As Integer)
Dim temp As Double
If Val(Text3(Index).Text) > 60 Then
temp = (5 * Val(Text5.Text) / 100)
MsgBox (temp)
Text4(Index).Text = temp
Else
temp = Val(Text5.Text)
End If

```

```

Text4(Index).Text = temp
End Sub

```

## Coding for Cancellation

```
Option Explicit  
Dim adors As Recordset
```

```
Private Sub CANCEL_Click()  
Dim SQL As String  
Dim db As Connection  
Set db = New Connection  
db.Open "Provider=MSDASQL.1;Persist Security Info=False;Data Source=NATH"  
SQL = "DELETE FROM TICKET_REPORT WHERE PNR=" & txtfields(0).Text & ""  
db.Execute SQL  
End Sub
```

```
Private Sub Command3_Click()  
Unload Me  
End Sub
```

```
Private Sub Form_Load()  
Dim db As Connection  
Set db = New Connection  
db.Open "Provider=MSDASQL.1;Persist Security Info=False;Data Source=NATH"  
Set adors = New Recordset  
adors.Open "select  
CUST_CODE,CLASS,SEAT_NO,DAYS_LEFT,HOURS_LEFT,BASIC_AMMOUNT,CANCEL_AMMOUNT FROM REFUND_AMMOUNT", db, adOpenStatic, adLockOptimistic  
Dim otext As TextBox  
For Each otext In Me.txtfields  
Set otext.DataSource = adors  
Next  
End Sub
```

```

Private Sub SHOW_Click()
Dim ADORS2 As Recordset
Dim db As Connection
Set db = New Connection
db.Open "Provider=MSDASQL.1;Persist Security Info=False;Data Source=NATH"
Set ADORS2 = New Recordset
ADORS2.Open "select * from TICKET_REPORT WHERE PNR = ' " & txtfields(0).Text & " '
", db, adOpenStatic, adLockOptimistic
txtfields(0) = (ADORS2.Fields(1))

txtfields(1) = (ADORS2.Fields(8))
txtfields(2) = (ADORS2.Fields(7))
txt_basic_ammount.Text = (ADORS2.Fields(9))

End Sub

Private Sub txtfields_LostFocus(Index As Integer)
Dim db As Connection
If Index = 0 Then
Set db = New Connection
db.Open "Provider=MSDASQL.1;Persist Security Info=False;Data Source=NATH"
Set adors = New Recordset
adors.Open "select
CUST_CODE,CLASS,SEAT_NO,DAYS_LEFT,HOURS_LEFT,BASIC_AMMOUNT,CANC
EL_AMMOUNT FROM REFUND_AMMOUNT where cust_code = ('" & txtfields(0).Text &
"'")", db, adOpenStatic, adLockOptimistic
Dim otext As TextBox
For Each otext In Me.txtfields
Set otext.DataSource = adors
Next
End If
End Sub

Private Sub txtsub_Click()
txtresult(7).Text = Val(txt_basic_ammount.Text) - Val(txt_cancel_ammount(6).Text)
End Sub

```

## Coding for Enquiry

```
Option Explicit  
Dim adors As Recordset
```

```
Private Sub add_Click(Index As Integer)  
With adors  
.AddNew  
End With  
End Sub
```

```
Private Sub cl_Click(Index As Integer)  
Unload Me  
End Sub
```

```
Private Sub CONFIRM_Click()  
Dim ADORS2 As Recordset  
Dim db As Connection  
Set db = New Connection  
db.Open "Provider=MSDASQL.1;Persist Security Info=False;Data Source=NATH"  
Set ADORS2 = New Recordset  
ADORS2.Open "select * from TICKET_REPORT WHERE TICKET_NO =" &  
txtfields(7).Text & "'", db, adOpenStatic, adLockOptimistic  
txtfields(4) = (ADORS2.Fields(1))  
txtfields(1) = (ADORS2.Fields(2))  
txtfields(2) = (ADORS2.Fields(9))  
txtfields(3) = (ADORS2.Fields(7))  
txtfields(5) = (ADORS2.Fields(5))  
txtfields(6) = (ADORS2.Fields(6))  
End Sub
```

## **TESTING DEBUGGING AND VALIDATION**

In this phases I had tried to check all the modules separately for there proper formatting.

After this step I had performed a unit test to check the functionality of the whole system.

Further I had come to know to add certain validation in project as given bellow

- 1) Table name- Customer information

Field name –Customer name

Data type -Text.

When we enter number in the form then it show wrong .Because it is not number type  
It is a character. So it show wrong value.

- 2) Table name \_Customer information

Field name- Departure time, Arrival time

Data type- Date/Time.

When we enter 12.33 then it automatically show 12.33pm.

When we enter 11.33 then it automatically show 11.33am.

- 3) Table name –Flight information

Field name- Flight-code

Data type- number

When we Put any other value or character then it ask validity check.



## **IMPLEMENTATION**

For the implementation of my project the mirror H/W & S/W requirements as under

HARDWARE	SOFTWARE
Pentium II to IV Attempt 200 MHz Ram –32MB H.D .space-4xGB FDD- CD ROM DRIVE-52x	Window-9x,2000,2000server MS-Access MS-Excel MS-Word

### **Steps implementation**

Steps of implementation are :

- First load VB in system
- Make a software .In this s/w The airlines Reservation system is stored.
- First make all form.
- Make Main menu. Join every form with Main menu .
- Main menu open .It show all forms heading.
- Now choose what form will be open then click.
- If Reservation form is open then it show new pnr and ticket number.
- After put various value we click save bottom.
- It automatically go to report.

## **CONCLUSION**

Though the system still containing lot of scope of improvement in it. But its overall look and feel gives rough picture of on existing automation system.

I have take MS-Access at backhand but it has a limitation of 1 GB size .It over data size approaches this 1gb some other database the SQL server ,oracle, can be used with OBBC to break this barrier.

\*\*\*\*\*THE END\*\*\*\*\*