Chapter-1: Introduction

1.1 Description of Organisation:

1.1.1 General description :

The **airline reservations system (ARS)** was one of the earliest changes to improve efficiency. ARS eventually evolved into the computer reservations system (CRS). A computer reservation system is used for the reservations of a particular airline and interfaces with a global distribution system (GDS) which supports travel agencies and other distribution channels in making reservations for most major airlines in a single system.

Jet Airways is the largest Indian airline based out of Mumbai, Maharashtra. It operates over 400 flights daily to 76 destinations worldwide. Its main hub is Mumbai, with secondary hubs at Delhi, Kolkata, Chennai, Cochin, Ahmedabad, and Bengaluru. It has an international hub at Brussels Airport, Belgium. Jet Airways is owned by Naresh Goyal.
Jet Airways's head office is located in the Siroya Centre in Andheri, Mumbai

Jet Airways serves 52 domestic destinations and 24 international destinations, a total of 76 in 19 countries across southern Africa, Asia, Europe and North America. Short-haul destinations are served using Boeing 737 Next Generation. ATR 72-500s are used only on domestic regional routes, while long-haul routes are served using its Airbus A330-200 and Boeing 777-300ER aircraft. London, England was the airline's first long-haul destination and was launched in 2005.

1.1.2 Organisational objectives

Jet Airways will achieve these objectives:-

1. simultaneously ensuring consistent profitability
2. achieving healthy, long-term returns for the investors
3. Providing its employees with an environment for excellence and growth.
4. Providing Comforts in all zones while traveling to the customers.
5. Giving a quick response on any query raised either by employee or by customer.
6. Achieving goal in hanging up with customer in a increasing percentage year by year
7. They are trying to upgrade the concept of domestic airline travel to be a world class domestic airline.

1.1.3 Key Result Areas (KRAs)

a. **On Ground Services**: It is the process of booking ticket or checking in for flight, It ensures that every need on the ground is met.

b. **Check-in options** : Jet Airways offer multiple check-in options.

c. **Airport Lounges** : Jet Privilege Silver, Gold or Platinum card member or a Club Premiere passenger, can relax and enjoy complimentary snacks and beverages in jet Airways' plush airport lounges.

d. **Coach Services** : Airport Authority of India (A. A. I.) operates shuttle coaches for transit passengers from domestic to international airport and vice-versa at Mumbai and Delhi airports.

e. **Complimentary Chauffeur Drive :** A service specially for PREMIERE passengers traveling between Mumbai/Delhi and London (Heathrow).

f. **In-Flight Services** : Jet Airways continually endeavours to better its services, both on the ground and in the air. From crew, whose priority is passengers' comfort to the safety standards enforced to ensure that one is free of worr

1.1.4 Organisational structure of Jet Airways

Jet Airways is led by a dynamic, extremely talented and experianced team:

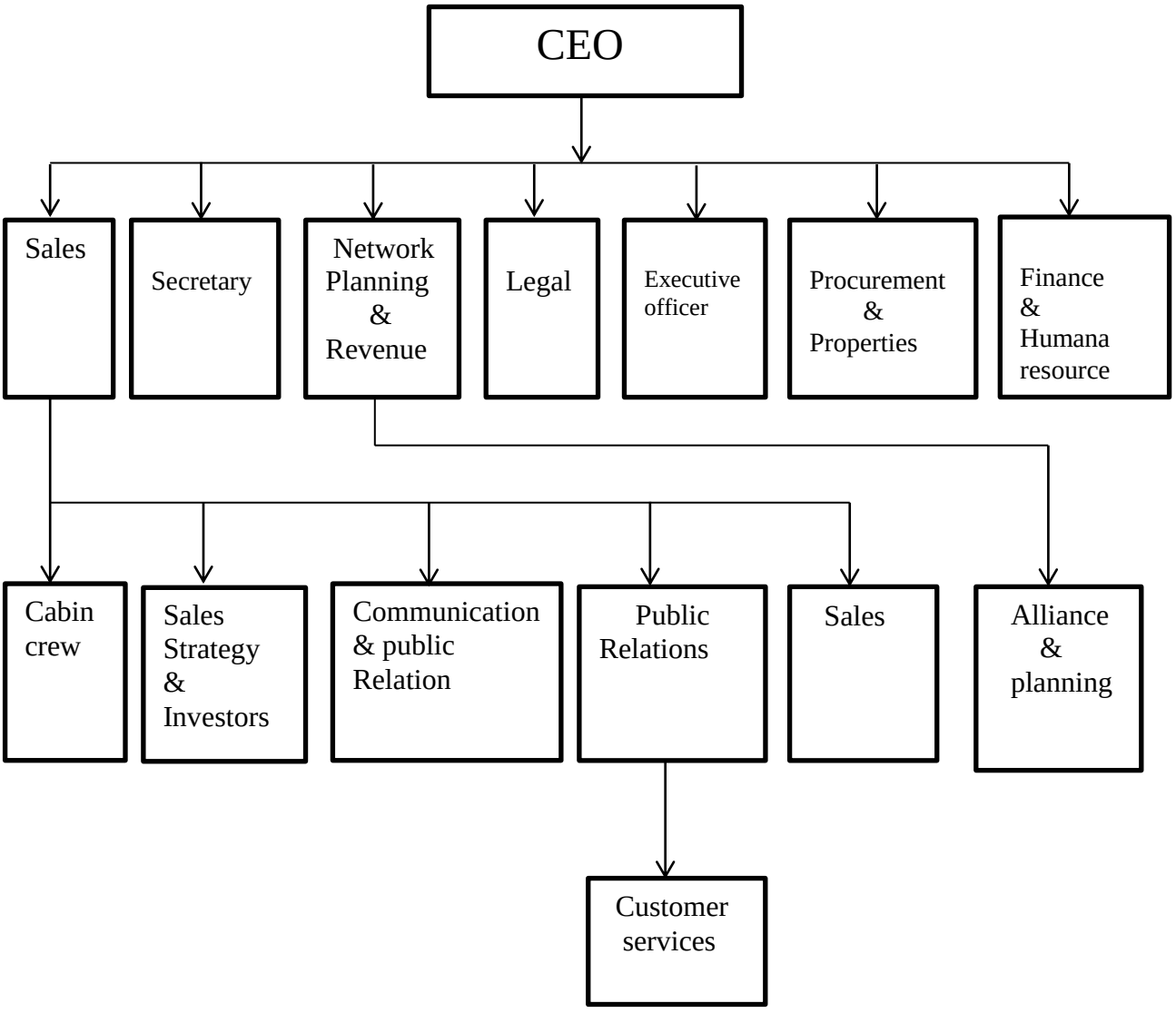

Figure N0-1 Data Flow Diagram of Organizational Structure

1.1.5 Functions/activities of organization in reference to the information system under study.

a. Online ticketing Reservation at jetairways.com: It Book, pay and print your tickets instantly. Also, book multiple sectors for domestic and international flight at jetairways.com.

b. **IVR Interactive Voice Response: It** Book and pay for your tickets through our 24x7 call center over a secure IVR, and get your tickets via e-mail.

c. **Mobile Ticketing with Jet Wallet:** Book, pay and generate your eTicket. SMS 'Jet Wallet' to 56388 to download Jet Wallet on your GPRS phone.

d. **Pay Online service:** Book your ticket at Jet Airways reservation office and pay online at jetairways.com.

e. **Web Check-in:** Select your seat, print your boarding pass and proceed directly for security check.

f. **SMS Check-in**: Check-in anytime, anywhere and avail of a confirmed seat number on your mobile phone.

g. **Kiosk Check-in:** New age Kiosks at select airports in India help you select your seat and print your boarding pass at the touch of a screen.

h. Bus service: To make travel simpler, Jet Airways now provides a bus service to transport guests travelling to Dammam via Bahrain and vice-versa through King Fahad Causeway

i. **Secure Flight Passenger Data:** The United States Transportation Security Administration (TSA) has introduced a new 'Secure Flight Passenger Data' system for all guests travelling to / from the United States Of America.

The 'Secure Flight Passenger Data' system is also applicable to all guests travelling to / from / within Canada and flying over continental U.S.

Transportation Security Administration (TSA) requires you to provide the below information:

- Full Name (Your name as it appears on your passport)
- Date of Birth
- Gender
- Redress Number (if available)

j. **IVR Ticketing : Interactive Voice Response (IVR) based Payment and Ticketing**

Jet Airways' IVR based payment and ticketing service is the latest booking facility through our 24*7 call centre. Now book and pay for your eTickets over an exclusively customized and secure Interactive Voice Response (IVR) system.

Our IVR service allows you to complete your reservation, pay using credit cards through a secure gateway and instantly receive your eTickets via e-mail.

Once you confirm that you want to pay through the contact centre, our contact centre executive will transfer you to a secure IVR system that will request you to enter your credit card details. On a successful authorization of the credit card, you will get an automated response and your

1.2 Data Collection

1.2.1 Description of method/source of collection of data for each set of data

These are the links of sites from where we got the data about the topic which we got:-

http://en.wikipedia.org/wiki/Jet_Airways
http://www.yatra.com/YT/airlines/jet-airways.html
http://www.jetairways.com/EN/IN/Home.aspx?gclid=CKuq28TeyrACFUZ76wodgz0OXQ

Jet airways office:

13 Commercial Centre, Jet Air House, Yusuf Sarai, Yusuf Sarai New Delhi, Delhi 110016
011 25675404

1.2.2 Primary data Collection :- It involves collecting data by means of direct interactions with the human subject. Examples of such methods used are interviews, questionnaires, observations, measurements, and abstractions from medical records. It is divided in two parts :- Interview & questionnaire.

1. **Questionnaire**

a. Which airlines you prefer to travel by??
   Jet airways Kingfisher
   Indigo Lufthansa

b. You prefer to book airlines ticket by??
   Agent Online
   Airport Phone

c. Which airline is good for providing services??
   Jet airways Indigo
   Lufthansa Kingfisher

d. According to you which airlines provide you all comforts as it gives words??
   Jet airways Indigo
   Lufthansa Kingfisher

e. You are fit to fly from which airline service??
   Jet airways Kingfisher

Indigo Lufthansa

f. You prefer to have meal in flight ??
   Yes No
   Sometimes Always
g. You book your meal in flight??
   At the time of booking ticket Manage Booking facility
   Before departure In flight

h. You prefer to travel in ??
   Business class Economy class
   General class In any

2. Interview

a. In which site you search for booking the airline ticket?

b. Which airlines you prefer to travel by?

c. According to you the price of the flight tickets should be reduced or not and if yes then why?

d. Which class you prefer to travel in for a long flight route?

e. Why do you prefer travelling from flight rather than from other means of transport?

f. How you easily book you airline ticket?

g. Do airlines provide all the comfort about which they give words?

h. According to you which flight is best to travel in, with a normal cost, good meal, & best services?

1.2.3Secondary Data Collection: - It involves data that additionally arise from the processing of data when the product or service is used (e.g., usage data, log files, statistical data, data for authorization, configuration data). It involves document analysis & internet.

- **Document analysis**

Recent document analysis has been done on jet airway, which was done by Jet Airways (India) limited company on the Company's profile & SWOT analysis.
They have introduced all the factors in all fields. Like:-

a. Fast facts
b. SWOT analysis
c. Revenue & margin
d. Return on Equity

1. **Fast Fact**

Headquarter Address	Siroya Centre, Mumbai 400 059, India
Telephone FAX Website	+91 22 61211000 +91 22 285051313 www.jetairways.com
Ticker Symbol, Stock Exchange	532617, Bombay Stock ExchangeJETAIRWAYS, National Stock Exchange of India
Number of Employees	13, 177
Fiscal year End Revenue (in US$ million)	March 3, 205.70
Revenue(in INR million)	147,296.80

Table No- 1: Data of Fast Fact of JetAirways

2. SWOT analysis

SWOT Analysis	
Strengths	**Weaknesses**
Broad range of airlines services	Limited financial Liverages
Jetprivilege program	
Leading market position In india Strong business patnerships	
String liquidity position	
Strong operating performances	
OPPORTUNITIES	**THREATS**
Government initiatives to promote tourism	Foreign currency fluctuations
New services launches Recovery in global travel & tourism industry	Increasing fuel price Political unrest in the Middle East & Northj Africa
	Unforeseen Circumstances

Table No-2: Table of SWOT Analysis of JetAirways

Operating performances

The company reported revenue of US$3,205.70 million during the fiscal year 2011. The company's revenue grew at a CAGR of 15.68% during 2007-2011, with an annual growth of 20.34% over 2010. In 2011, the company recorded an operating margine of -0.33% as against -3.35% in 2010

3. Revenue & Margins

Figure N0-2: Graph Of Revenue & Margins

4. Return on Equity

The company recorded a return on equity ROE of 2.58% for 2011, as compare to its peers, spiceJet limited, Kingfisher Airlines Limited & Global Vectra Helicorp Limited, which recorded ROE's of 9.92%, 42.86% & -55.74% respectively. The company reported on operating margin of -0.33% in 2011

Figure N0-3: Graph Of Return of Equity

- **Internet**

1) http://en.wikipedia.org/wiki/Airline_reservations_system
2) http://www.makemytrip.com/flights/bangalore-jet_airways.html
3) http://www.yatra.com/YT/airlines/jet-airways.html

1.2.4 Storage and processing requirements

None

1.3. Project Planning

1.3.1 Plan of distribution of work amongst the team members
1.3.2. Name of task/activity, Precedence/order (date-wise) in which these are performed and name of team member

S. NO	Task Name	Start	Finish	Resource Names
1	**Chapter 1 1: Introduction**	6/11/12	6/25/12	Harish Singh Bisht, Geetanjali
2	**1.1 Description of Organization**	6/11/12	6/14/12	Geetanjali
3	**1.1.1 General description**	6/11/12	6/11/12	Geetanjali
4	1.1.2 Organisational objectives	6/11/12	6/11/12	Harish Singh Bisht
5	1.1.3 Key Result Areas	6/12/12	6/12/12	Harish Singh Bisht
6	1.1.4 Organisational structure	6/13/12	6/13/12	Geetanjali
7	1.1.5 Functions/activities of organization	6/13/12	6/14/12	Geetanjali
8	**1.2 Data Collection**	6/15/12	6/17/12	Harish Singh Bisht, Geetanjali
9	1.2.1 Description of method/source of collection	6/15/12	6/15/12	Geetanjali
10	1.2.2 Primary data Collection	6/16/12	6/16/12	Harish Singh Bisht
11	1.2.3 Secondary Data Collection	6/16/12	6/17/12	Geetanjali
12	1.2.4 Storage and processing requirements	6/17/12	6/17/12	Harish Singh Bisht
13	**1.3. Project Planning:**	6/18/12	6/22/12	Geetanjali
14	1.3.1 Plan of distribution of work	6/18/12	6/18/12	Harish Singh Bisht
15	1.3.2. Name of task/activity, Precedence/order	6/19/12	6/19/12	Geetanjali
16	1.3.3Proposed Methodology or Technique of Project Design	6/20/12	6/21/12	Harish Singh Bisht
17	1.3.4 Gantt chart	6/22/12	6/28/12	Geetanjali
18	Submission Chapter-01	6/29/12	6/30/12	Harish Singh Bisht, Geetanjali
19	Chapter-2: System Analysis	7/2/12	7/14/12	Harish Singh Bisht, Geetanjali
20	**2.1 Description of Information System:**	7/2/12	7/9/12	Harish Singh Bisht
21	2.1.1Description of the functioning of information system under study in n, Functional 'Block Diagram'arrative form in	7/2/12	7/4/12	Harish Singh Bisht
22	2.1.2List of Processes included in the information system under study	7/4/12	7/5/12	Geetanjali
23	2.1.3List of Input & Output for each process identified	7/5/12	7/5/12	Geetanjali
24	2.1.4List of data elements connected with each process identified	7/5/12	7/6/12	Geetanjali
25	2.1.5Catalogue of data elements is to be presented in tabular form	7/15/12	7/15/12	Geetanjali

26	**2.2 procedures/rules/mathematical relationships used for converting input into output**	7/15/12	7/16/12	Harish Singh Bisht
27	Chapter-3: Systems Requirement Specification (SRS)	7/15/12	7/27/12	Harish Singh Bisht, Geetanjali
28	**3.1 Physical Specifications:**	7/15/12	7/16/12	Harish Singh Bisht
29	3.1.1DFD	7/15/12	7/15/12	Harish Singh Bisht
30	3.1.2ERD	7/16/12	7/16/12	Harish Singh Bisht
31	**3.2 Output Specifications:**	7/30/12	7/31/12	Geetanjali
32	3.2.1Detailed characteristics of contents (fields) to be included in each Output Screen and Print layouts.	7/17/12	7/17/12	Geetanjali
33	3.2.2List of data elements (comprising Field Name, Field Type, Field Size & description) for each Output presented in the tabular form.	7/18/12	7/18/12	Geetanjali
34	**3.3 Input Specifications:**	8/1/12	8/3/12	Harish Singh Bisht
35	3.3.1Detailed characteristics of contents (fields) to be included in each Input screen or document.	7/30/12	7/31/12	Harish Singh Bisht
36	3.3.2List of data elements (comprising Field Name, Field Type, Field Size & description) for each Input presented in the tabular form .	7/20/12	7/21/12	Harish Singh Bisht
37	**3.4 Validation Specifications:**	7/23/12	7/23/12	Geetanjali
38	3.4.1Description of the validation rules to be included for input/output, wherever required.	7/23/12	7/23/12	Geetanjali
39	**3.5 Database Specifications**	8/1/12	8/2/12	Geetanjali
40	3.5.1Detailed characteristic of fields of each file/table included in the database are to be tabulated with Field Name, Type, and Size & Description	8/6/12	8/7/12	Geetanjali
41	**3.6 Processing Logic:**	7/26/12	7/30/12	Harish Singh Bisht
42	3.6.1 Programme Flow Chart.	8/1/12	8/2/12	Harish Singh Bisht

Table N0-3: Table of Project planning among partners

1.3.3 Proposed Methodology or Technique of Project Design

The Waterfall Model of Software Development Life Cycle has been used for the development of this project. It is the simplest and most basic approach used to develop software wherein each phase has a well-defined starting and end point. No backtracking is permissible under this approach

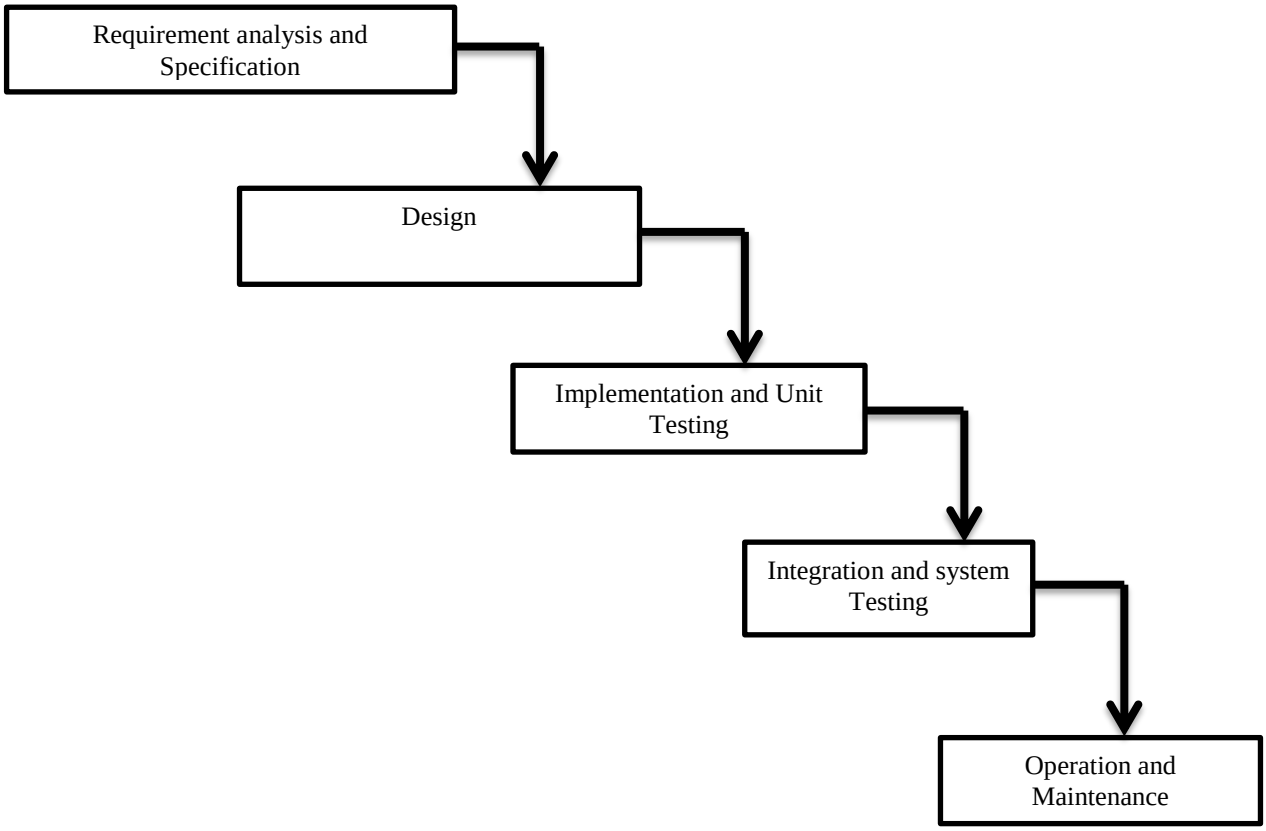

Figure N0-4: Data Flow Diagram of Waterfall Model

1.3.4 Gantt charts using MS Project.

	Task Name	Duration	Start	Finish	Resource Names
1	**Airlines Reservation System**	44 days	Mon 6/11/12	Wed 8/1/12	Geetanjali,Harish Singh Bisht
2	**Chapter 1 1: Introduction**	13 days	Mon 6/11/12	Mon 6/25/12	Geetanjali,Harish Singh Bisht
3	**1.1 Description of Organization**	4 days	Mon 6/11/12	Thu 6/14/12	Geetanjali
4	**1.1.1 General description**	1 day	Mon 6/11/12	Mon 6/11/12	Geetanjali
5	1.1.2 Organisational objectives	1 day	Mon 6/11/12	Mon 6/11/12	Harish Singh Bisht
6	1.1.3 Key Result Areas	1 day	Tue 6/12/12	Tue 6/12/12	Harish Singh Bisht
7	1.1.4 Organisational structure	1 day	Wed 6/13/12	Wed 6/13/12	Geetanjali
8	1.1.5 Functions/activities of organization	2 days	Wed 6/13/12	Thu 6/14/12	Geetanjali
9	**1.2 Data Collection**	3 days	Fri 6/15/12	Sun 6/17/12	Harish Singh Bisht,Geetanjali
10	1.2.1 Description of method/source of collection	1 day	Fri 6/15/12	Fri 6/15/12	Geetanjali
11	1.2.2 Primary data Collection	1 day	Sat 6/16/12	Sat 6/16/12	Harish Singh Bisht
12	1.2.3 Secondary Data Collection	2 days	Sat 6/16/12	Sun 6/17/12	Geetanjali
13	1.2.4 Storage and processing requirements	1 day	Sun 6/17/12	Sun 6/17/12	Harish Singh Bisht
14	**1.3. Project Planning:**	2.5 days	Mon 6/18/12	Wed 6/20/12	Geetanjali,Harish Singh Bisht
15	1.3.1 Plan of distribution of work	1 day	Mon 6/18/12	Mon 6/18/12	Harish Singh Bisht
16	1.3.2. Name of task/activity, Precedence/order	1 day	Tue 6/19/12	Tue 6/19/12	Geetanjali
22	1.3.3Proposed Methodology or Technique of Project Design	2 days	Wed 6/20/12	Thu 6/21/12	Harish Singh Bisht
23	1.3.4 Gantt chart	5 days	Fri 6/22/12	Thu 6/28/12	Geetanjali
24	Submission Chapter-01	1 day	Fri 6/29/12	Sat 6/30/12	Harish Singh Bist,Geetanjali
25	Chapter-2: System Analysis	11 days	Mon 7/2/12	Sat 7/14/12	Harish Singh Bisht,Geetanjali
26	**2.1 Description of Information System:**	6 days	Mon 7/2/12	Mon 7/9/12	Harish Singh Bisht
27	2.1.1Description of the functioning of information system under study in n, Functional 'Block Diagram' arrative form in	3 days	Mon 7/2/12	Wed 7/4/12	Harish Singh Bisht
28	2.1.2List of Processes included in the information system under study	2 days	Wed 7/4/12	Thu 7/5/12	Geetanjali
29	2.1.3List of Input & Output for each process identified	1 day	Thu 7/5/12	Thu 7/5/12	Geetanjali
30	2.1.4List of data elements connected with each process identified	2 days	Thu 7/5/12	Fri 7/6/12	Geetanjali
31	2.1.5Catalogue of data elements is to be presented in tabular form	1 day	Tue 7/10/12	Tue 7/10/12	Geetanjali
32	**2.2 procedures/rules/mathematical relationships used for converting input into**	2 days	Sun 7/15/12	Mon 7/16/12	Harish Singh Bisht

33	Chapter-3: Systems Requirement Specification (SRS)	12 days	Sun 7/15/12	Fri 7/27/12	Harish Singh Bisht,Geetanjali
34	**3.1 Physical Specifications:**	2 days	Sun 7/15/12	Mon 7/16/12	Harish Singh Bisht
35	3.1.1DFD	1 day	Sun 7/15/12	Sun 7/15/12	Harish Singh Bisht
36	3.1.2ERD	1 day	Mon 7/30/12	Mon 7/30/12	Harish Singh Bisht
37	**3.2 Output Specifications:**	2 days	Mon 7/30/12	Tue 7/31/12	Geetanjali
38	3.2.1Detailed characteristics of contents (fields) to be included in each Output Screen	1 day	Tue 7/17/12	Tue 7/17/12	Geetanjali
39	3.2.2List of data elements (comprising Field Name, Field Type, Field Size & description)	1 day	Tue 7/31/12	Tue 7/31/12	Geetanjali
40	**3.3 Input Specifications:**	3 days	Wed 8/1/12	Fri 8/3/12	Harish Singh Bisht
41	3.3.1Detailed characteristics of contents (fields) to be included in each Input screen or	2 days	Thu 7/19/12	Fri 7/20/12	Harish Singh Bisht
42	3.3.2List of data elements (comprising Field Name, Field Type, Field Size & description)	2 days	Fri 7/20/12	Sat 7/21/12	Harish Singh Bisht
43	**3.4 Validation Specifications:**	1 day	Mon 8/6/12	Mon 8/6/12	Geetanjali
44	3.4.1Description of the validation rules to be in	1 day	Wed 8/1/12	Wed 8/1/12	Geetanjali
45	**3.5 Database Specifications**	2 days	Tue 8/7/12	Wed 8/8/12	Geetanjali
46	3.5.1Detailed characteristic of fields of each fil	2 days	Mon 8/6/12	Tue 8/7/12	Geetanjali
47	**3.6 Processing Logic:**	3 days	Thu 8/9/12	Mon 8/13/12	Harish Singh Bisht
48	3.6.1 Programme Flow Chart.	2 days	Tue 8/7/12	Wed 8/8/12	Harish Singh Bisht

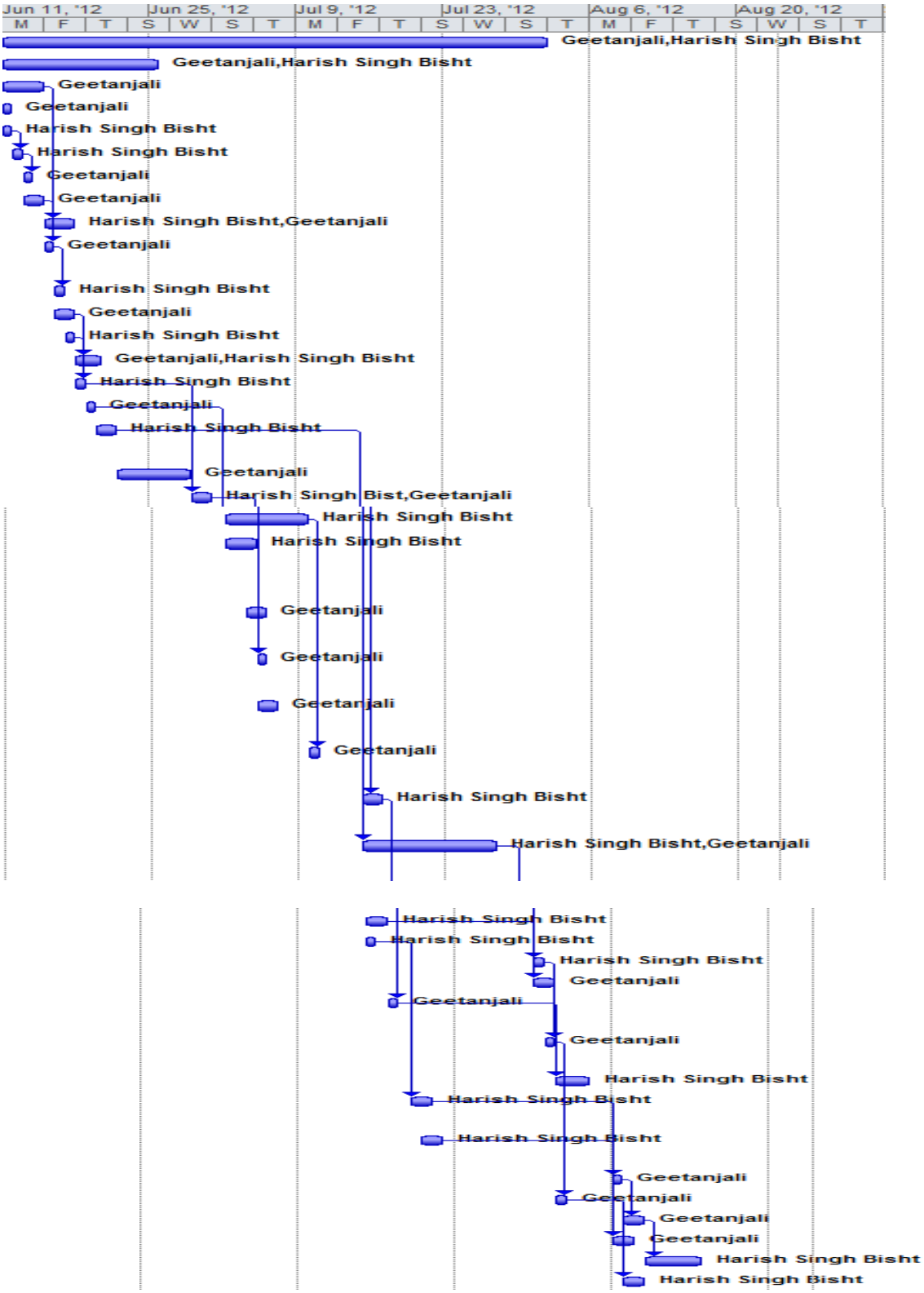

Figure N0-5: Gant chart of project

Chapter-2: System Analysis

2.1 Description of Information System:

2.1.1 Description of the functioning of information system under study in narrative form in Details. Functional 'Block Diagram'.

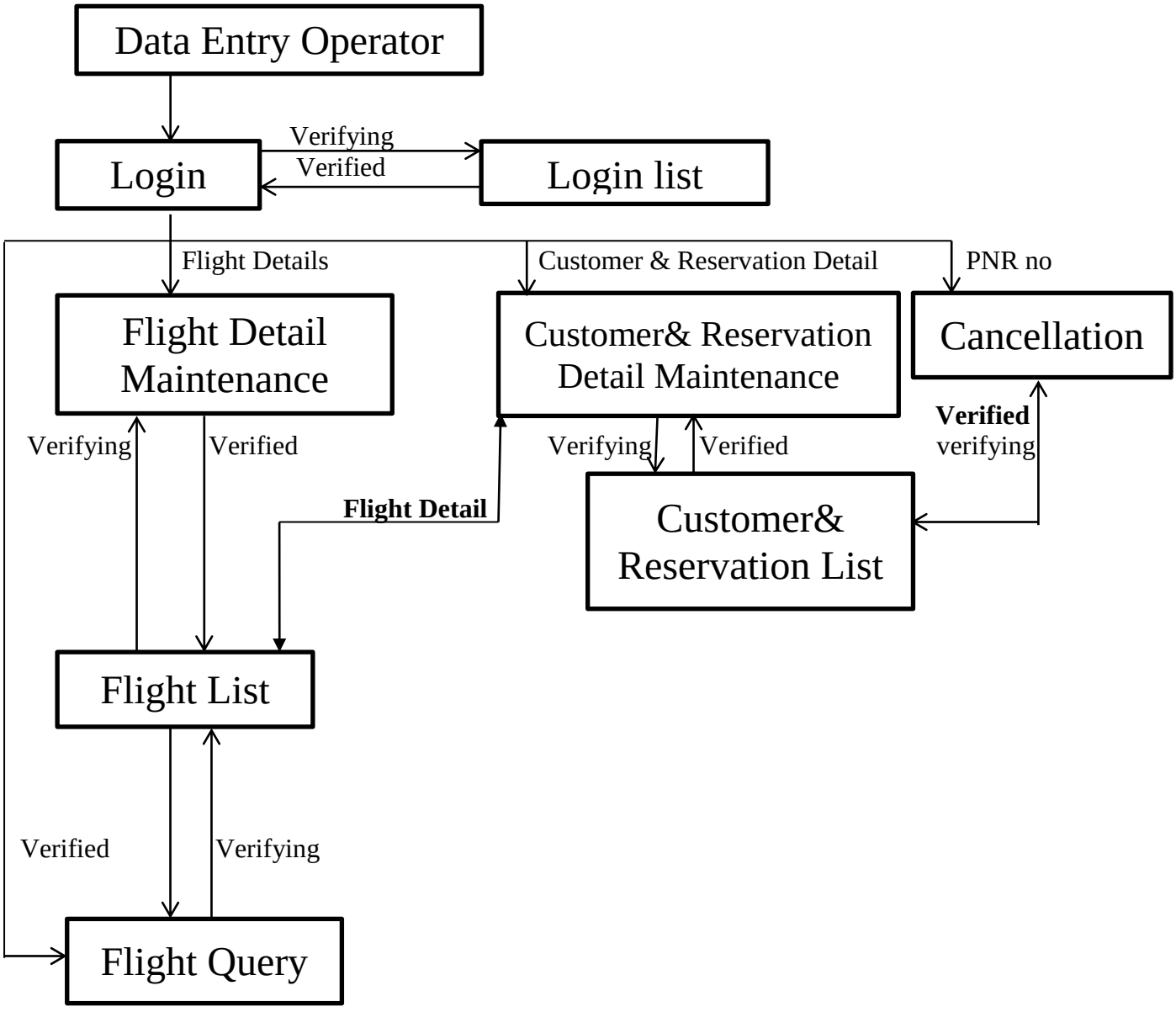

Figure N0-6:- Block Diagram

It is the study of systems — sets of interacting entities, including computer systems. This field is closely related to operations research. It is also "an explicit formal inquiry carried out to help someone, referred to as the decision maker, identify a better course of action and make a better decision than he might have otherwise made.

2.1.2List of Processes included in the information system under study.

1. Login process
In this process, operator can access the software by putting id and password. If id and password is correct he/she can access the software.

2. Sales ticket process
In this process, the operator checks ticket details and verify the details of the tickets from the list.

3. Check availability
In this process, the operator checks availability of the desired ticket for customers according to their choice.

4. Invoice/Bill

In this process, the operator can generate the invoice/bill by checking the price of the ticket.

2.1.3 List of Input & Output for each process identified

This section contains the details about all the processes that are performed in the software system and also tells us about the input and output identification i.e. what is the input being given and what is the desired output.

1. Login process

Input: id, password.

Process: Operator will enter his/her ID and password, if valid user then he'll/she'll be logged in and can now sale tickets, update the details, and check total collection came out after sealing tickets

Output: The operator now can perform the various operations i.e. sells, updation, deletion of tickets

2. Sales order process

Input: Selecting the item, item code, date of tickets to be reserve on, quantity of tickets done.

Process: Operator will select the item, date of order, and its quantity ordered as per customer's giving order.

Output: This process results into generation of tickets .

3. Check availability

Input: The operator updates the new arrived or remained tick

Process: The operator enters the new arrived tickets & includes the tickets which got cancelled

Output: The new items added are now available along with its manufacturing date and date of expiry.

4. Invoice/Bill

Input: The operator enters the price of the tickets and quantity of tickets reserved.

Process: The operator enters the ticket number or reads its bar code with the help of bar code reader, enter price of each tickets, discount given if any.

Output: The bill of sold tickets are now available along with it price of each tickets and tax applied on it, and name of flight of which the customer have been reserved the tickets.

2.1.5Catalogue of data elements is to be presented in tabular form.

INPUT/OUTPUT NAME	DATA ELEMENTS
Login	• user_id • Password.
Customer	• Customer name • address • contact no • e-mail id.
Sales order	• Item name • Date of order. • Quantity of order.
Availability	• Item name. • No of items available in stock
Invoice/Bill	• Bar code • Price list • Quantity of items

Table No- 4 :- Data element to be presented

2.2 procedures/rules/mathematical relationships used for converting input into output

1) Flight No = flight company name (first 3 words) + date + random no (1-100)

   Example kingfisher on date 23-8-2012
   So flight no is kin2382012

2) PNR No =First name of customer(first 3 words) + Last 5 no of mobile no + random no (1-100)

   Example customer name is shamid khan and mobile no is 9834598238
   So PNR No is sha98238

Chapter-3: Systems Requirement Specification (SRS)

3.1 Physical Specifications:

3.1.1 DFD

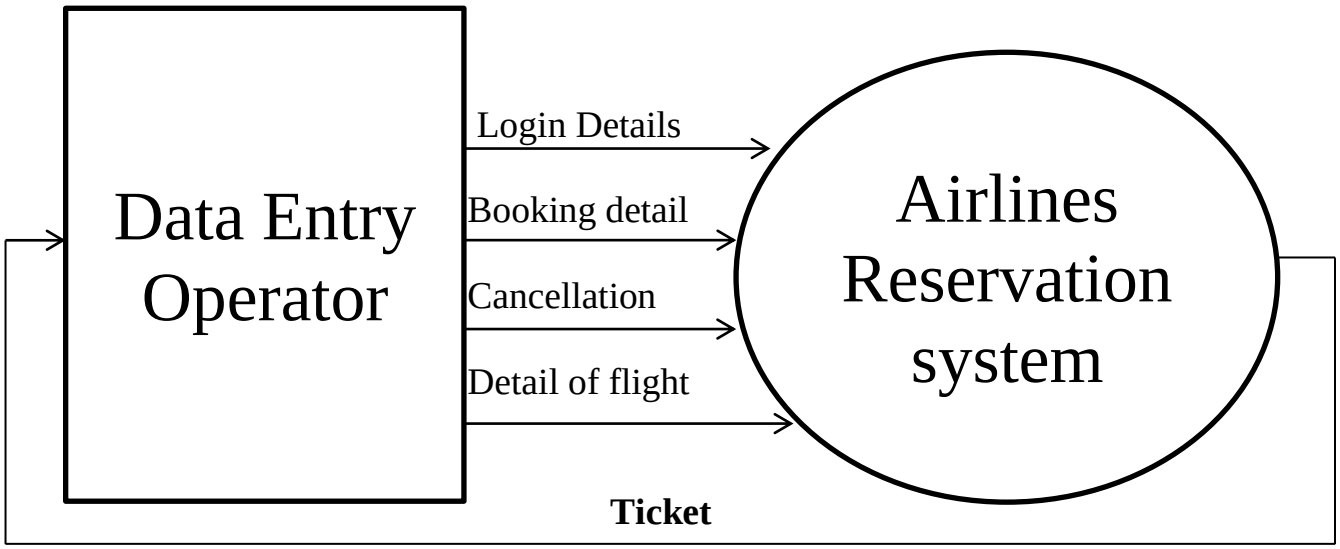

Figure N0-7: Data Flow Diagram of 0 level DFD of ticket booking

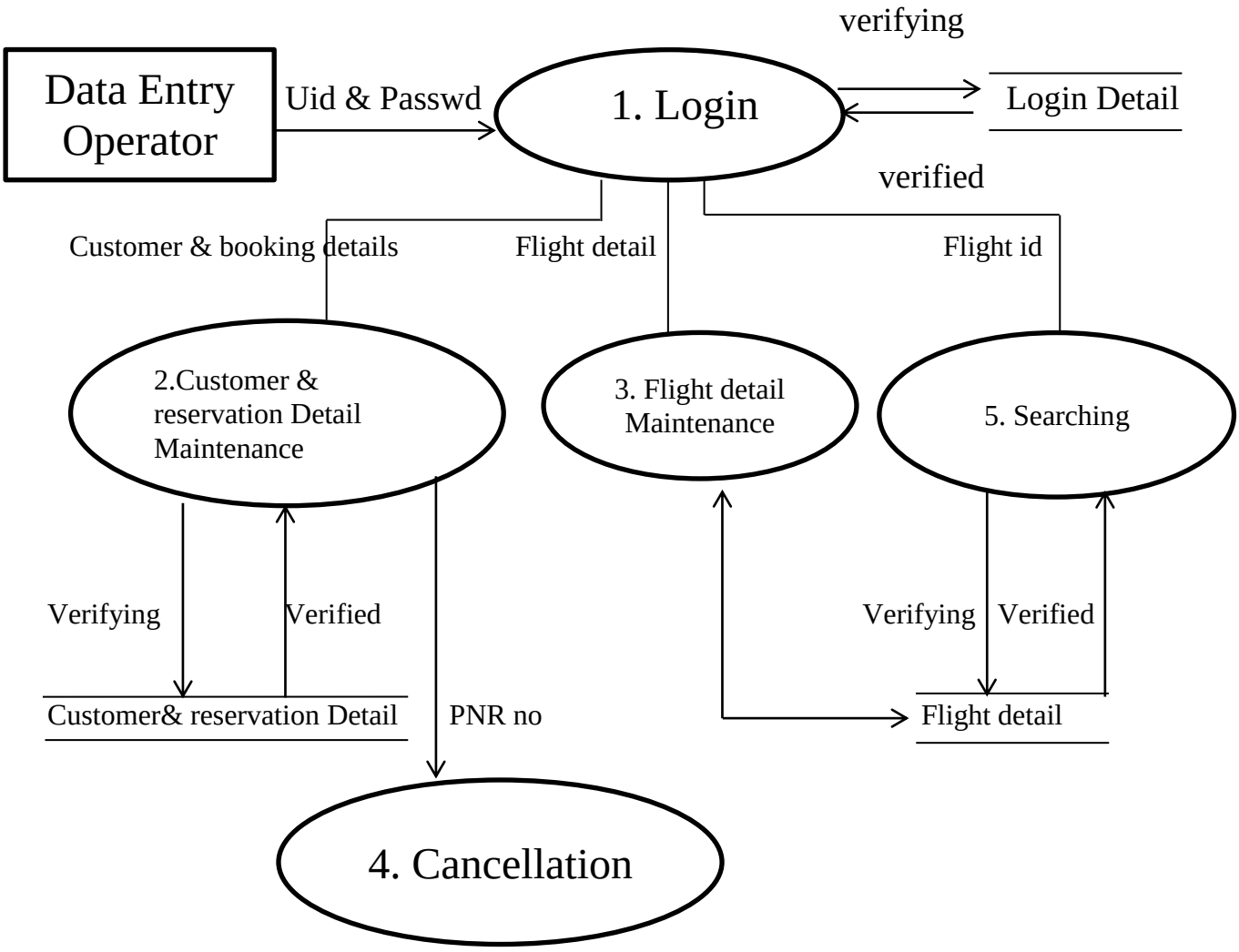

Figure N0-8: Data Flow Diagram of 1 level DFD of ticket booking

3.1.2 ERD

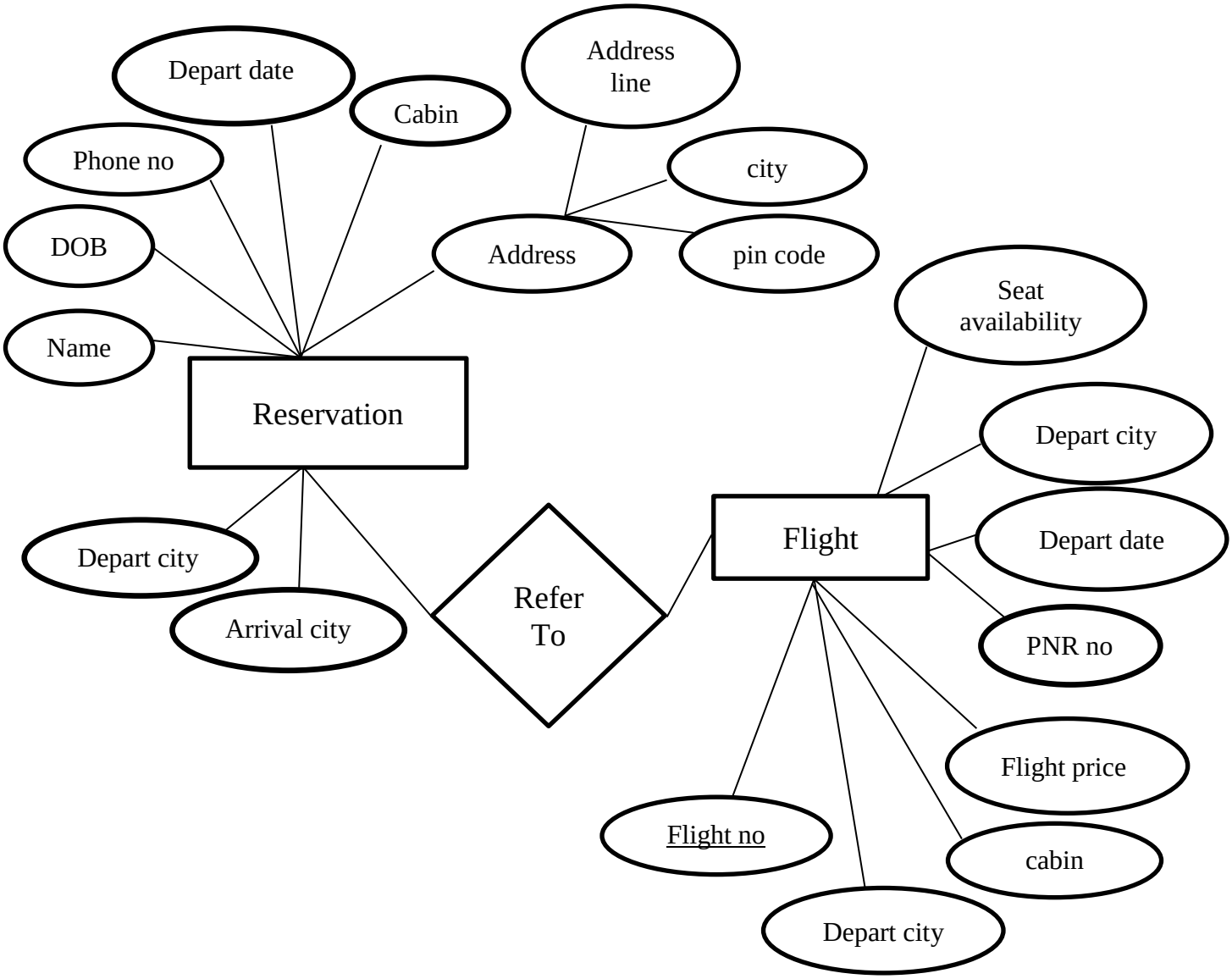

Figure N0- 9:- ER DIAGRAM FOR AIRLINES TICKET RESERVATION

3.2 Output Specifications & validation specification:

3.2.1Detailed characteristics of contents (fields) to be included in each Output Screen and Print layouts.

Ticket screen

1) Name of departure city and arrival city
2) Date of departure
3) Cabin/class
4) Flight no
5) Departure time
6) First name and last name of passenger
7) PNR no
8) Price of ticket

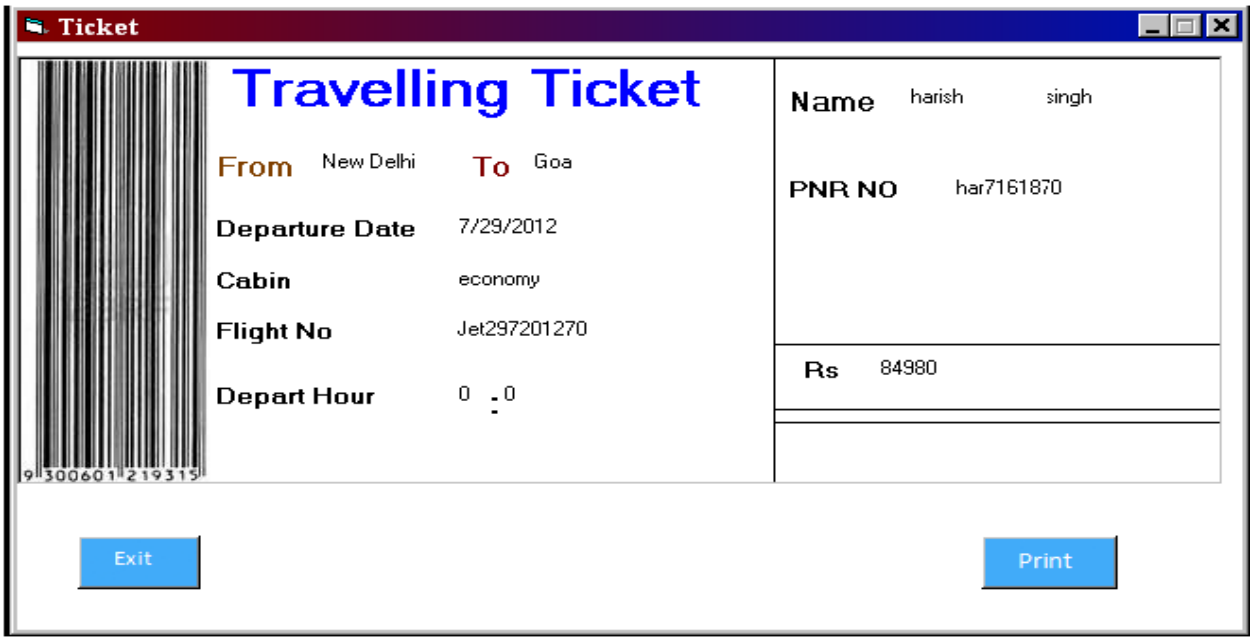

Figure No- 10:- Screen of Ticket

Validation specification

a) Departure city and arrival city should be cordially mentioned there.
b) Date of departure cannot be left blank.
c) Passenger's contact should be there.
d) Cabin & class should be mentioned.

Cancellation screen

1) First name and last name of passenger
2) Mobile no of passenger
3) PNR no of passenger

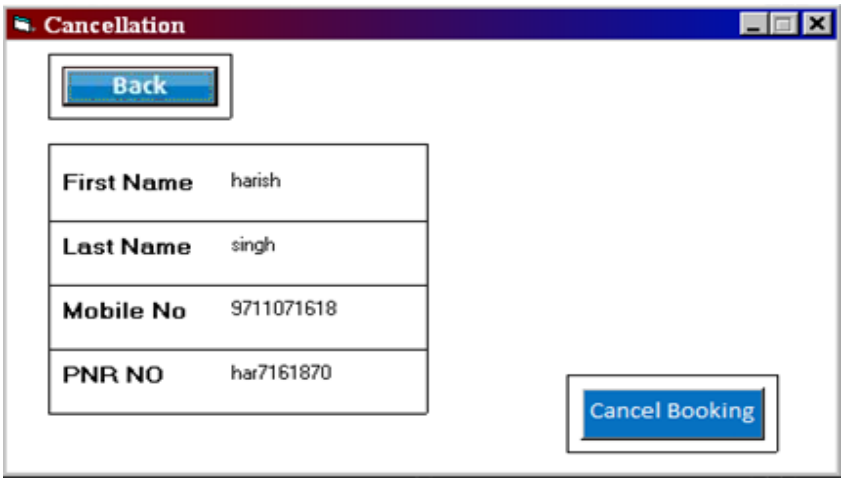

Figure No- 11:- Cancellation screen of ticket

Validation specification

a) PNR number should be there, without PNR number ticket cannot be cancelled.

3.2.2 List of data elements (comprising Field Name, Field Type, Field Size & description) for each Output presented in the tabular form.

TICKET SCREEN			
Field Name	**Field Type**	**Field Size(No of Character)**	**Description**
Depart_City	Varchar	10	flight departure city name
Arrival_City	Varchar	10	Flight arrival city name
Depart_Date	Varchar	10	Flight arrival date
Cabin	Varchar	10	Class (economy/business)
Flight_No	Varchar	15	unique No of flight
Depart_Hour	Number	3	Flight depart hour
Depart_Minute	Number	3	Flight depart minute
First_Name	Varchar	20	Contain first name
Last_Name	Varchar	20	Contain last name
Pnr_No	Varchar	20	System generated unique no
Eco_Price	Varchar	10	Price of one seat in economy class
Bust_Price	Varchar	10	Price of one seat in business class

Table No- 5:- Data elements for Ticket screen

CANCELLATION SCREEN			
Field Name	**Field Type**	**Field Size(No of Character)**	**Description**
First_Name	Varchar	20	passenger first name
Last_Name	Varchar	20	passenger last name
Mobile_No	Char	15	passenger mobile no
Pnr_No	Varchar	20	System generated unique no

Table No- 6:- Data elements for Cancellation screen

3.3 Input Specifications:

3.3.1Detailed characteristics of contents (fields) to be included in each Input screen or document.

Flight searching

1) Name of departure city
2) Name of arrival city
3) Departure date
4) Cabin/class

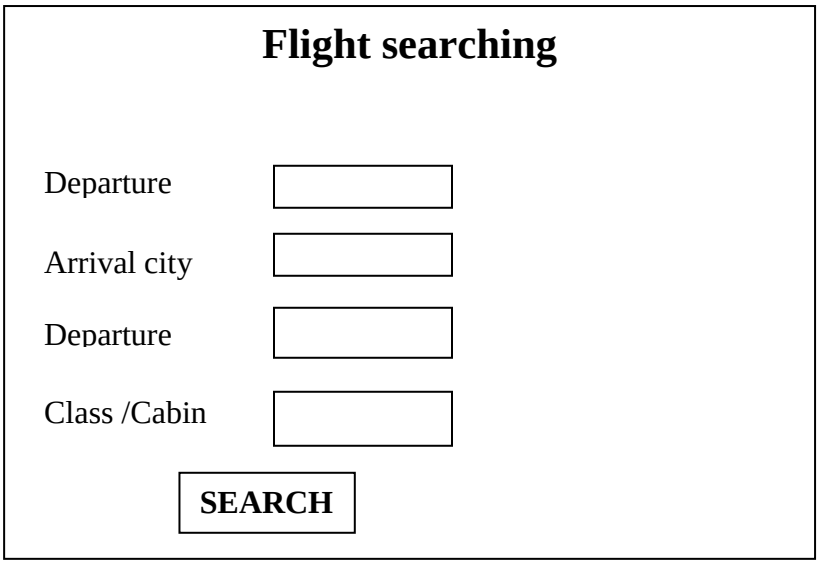

Figure No- 12:- Screen of Flight Searching form

Validation searching

a) Passenger's name cannot be left blank.
b) Passenger's address cannot be left blank.
c) Passenger's contact should be there.
d) Passenger's DOB details cannot be left undone.
e) Amount of seats cannot be left blank
f) Departure place & time cannot be left blank.

Print ticket

1) PNR no

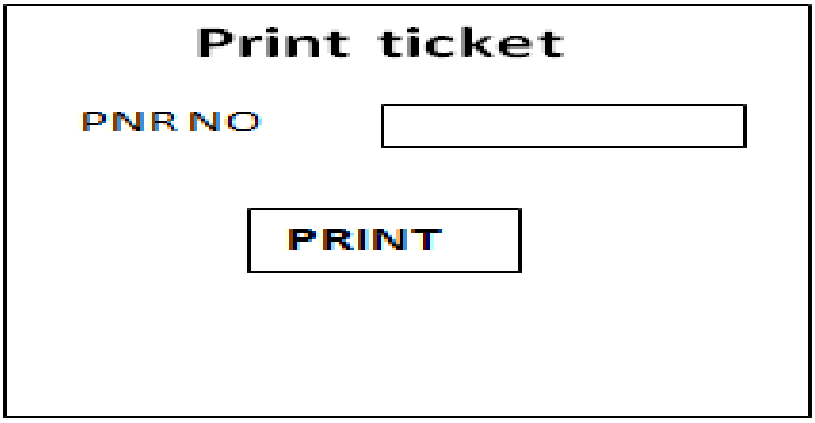

Figure No- 13:- Screen of Print ticket

Cancellation screen

1) PNR no

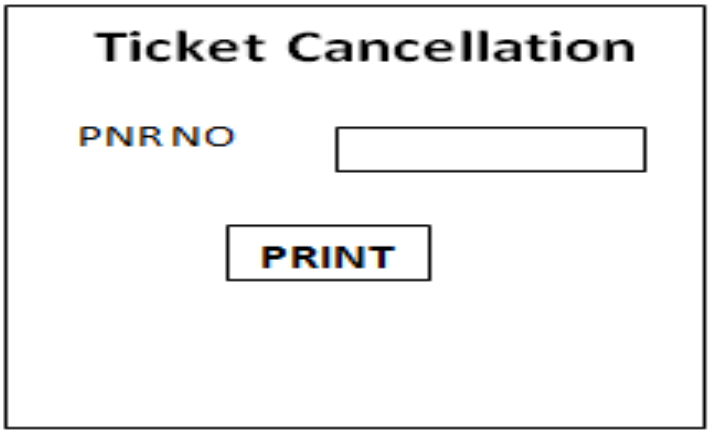

Figure No- 14:- Ticket cancellation screen

3.3.2List of data elements (comprising Field Name, Field Type, Field Size & description) for each Input presented in the tabular form .

FLIGHT SEARCHING			
Field Name	**Field Type**	**Field Size(No of Character)**	**Description**
Depart_City	Varchar	10	passenger departure city name
Arrival_City	Varchar	10	passenger arrival city name
Depart_Date	Varchar	10	passenger departure date
Cabin	Varchar	10	Class (economy/business)

Table No- 7:- Data elements for Flight screen

PRINT TICKET			
Field Name	**Field Type**	**Field Size(No of Character)**	**Description**
Pnr_No	Varchar	20	Passenger unique no

Table No- 8:- Data elements for Print ticket

3.4 Validation Specifications:

3.4.1Description of the validation rules to be included for input/output, wherever required.

Validity Checks:-

a) Passenger's name cannot be left blank.
b) Passenger's address cannot be left blank.
c) Passenger's contact should be there.
d) Passenger's DOB details cannot be left undone.
e) Amount of seats cannot be left blank
f) Departure place & time cannot be left blank.
g) Only the data entry operator will be authorized to access the information. Passenger will only be able to view their transaction history.
h) The total amount can never be negative.

3.5 Database Specifications

3.5.1Detailed characteristic of fields of each file/table included in the database are to be tabulated with Field Name, Type, and Size & Description

CUSTOMER & RESERVATION DATABASE			
Field Name	**Field Type**	**Field Size(No of Character)**	**Description**
Title	Varchar	4	Title of customer
First_Name	Varchar	20	First Name of the Ticket for whom its booked
Last_Name	Varchar	20	Last Name of the Ticket for whom its booked
Date_of_Birth_Day	Number	2	Age of passenger according to day
Date_of_Birth_Month	Char	4	Age of passenger according to month
Date_of_Birth_Year	Number	4	Age of passenger according to year
Mobile_No	Char	15	Contact number/ mobile number of passenger
Address_Line_One	Varchar	50	Address of passenger
Address_Line_Two	Varchar	50	Sub address of passenger
City	Varchar	10	City where passenger living
State	Varchar	15	State where passenger living
Country	Varchar	15	Country where passenger living
Pincode	Char	8	Area code of the passengers residential
Pnr_No	Varchar	20	Pnr no of the ticket registered/ reserved (system generated)
Flight_No	Varchar	15	Unique flight no of plane
Cabin	Varchar	10	Section in which the seat reserved

Table No- 9:- Data elements of Customer database

FLIGHT DATABASE			
Field Name	**Field Type**	**Field Size(No of Character)**	**Description**
Flight_Company	Varchar	15	The name of the flight company it belongs to.
Depart_City	Varchar	10	The city from where the flight will take off
Arrival_City	Varchar	10	The city where the flight will land
Depart_Date	Varchar	10	Date of flight take off
Depart_Hour	Number	3	Time in hour of flight's take off time
Depart_Minute	Number	3	Time in minutes of flight's take off time
Eco_No_of_Seat	Number	4	Total economy seats in flight
Eco_Price	Varchar	10	Price of one economy seat
Bust_No_of_Seat	Number	4	Total business seats in flight
Bust_Price	Varchar	10	Price of one business seat
Flight_No	Varchar	15	Unique flight no system genrated

Table No- 10:- Data elements of Flight database

Login Table			
Field Name	**Field Type**	**Field Size(No of Character)**	**Description**
User name	**Varchar**	**10**	**Username**
Password	**Varchar**	**20**	**Password**

Table No- 11:- Data elements of Login

3.6 Processing Logic:

3.6.1 Programme Flow Chart

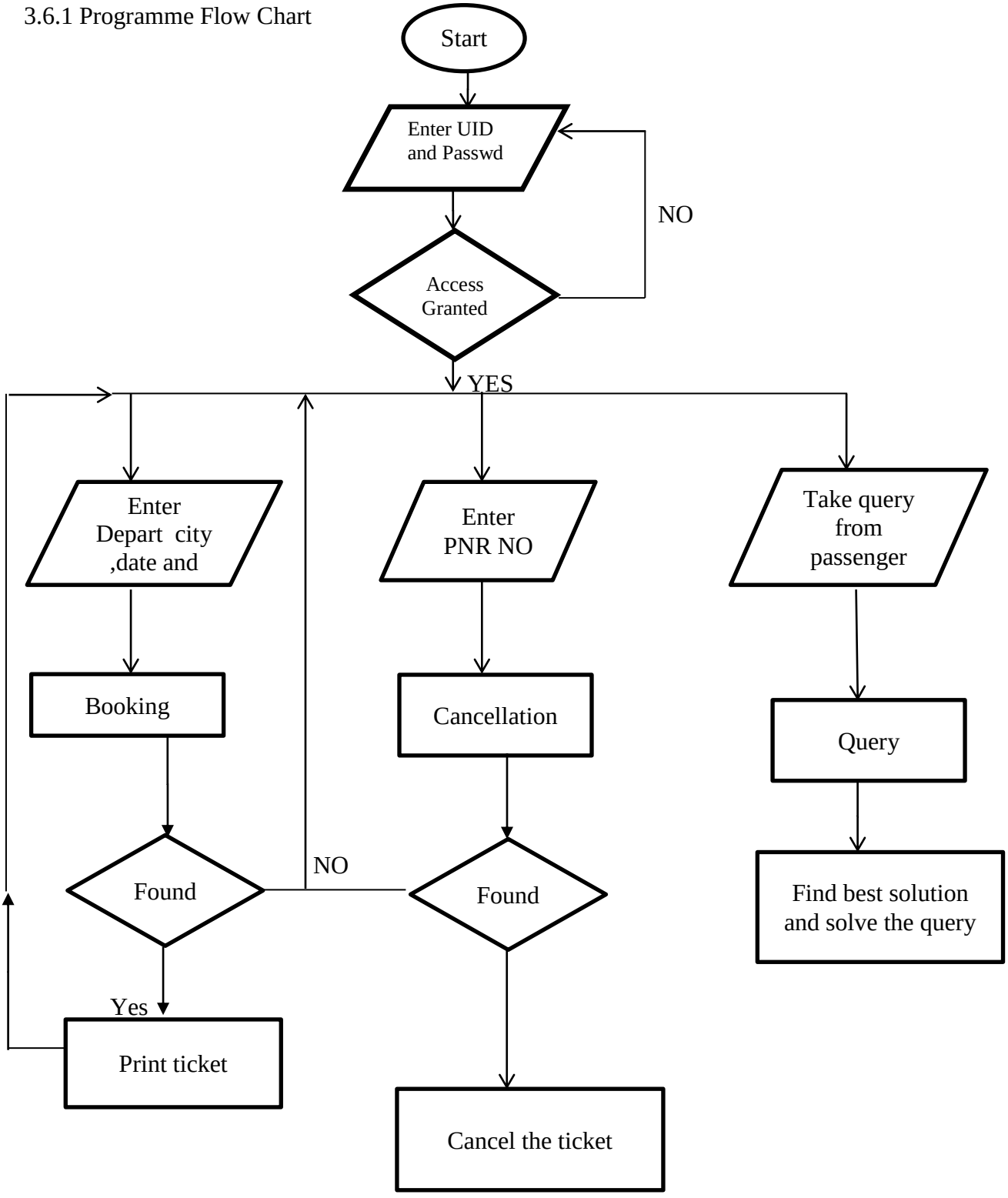

Figure N0-15: Data Flow Diagram of final program chart