**Description of Airline Reservation System**

The proposed system is designed facilitate several objective during flight reservation and boarding.

**Objectives**

* Enable passengers a quick and easily accessible way to search for flights, book flights and manage flight booking.
* Allows quick payment method
* Offers the passenger addition ancillary services
* Gives prompt updates in changes in flight details, passing of security and accurate baggage handling
* Ensures Passengers have access to customer service at any time

These objectives are achieved through the ideal version of the system as described in the data flow diagram.

**Interaction and Integration**

The proposed system will be integrated into the company be ensuring interaction with the correct external entities are achieved. The following are a list of the external entities necessary for interacting with the system:

**External Entities**

Passengers

These are the primary users of the proposed system.

Bank/Credit Card Company

For checking card authorisation

Finance Department

For sending payment to and/or transferring refunds back to the passenger if necessary

Car Hire Companies

The system will allow passengers to book a car for hiring.

Hotel Service

The system will allow passengers to book a hotel for the length of their stay.

Security

Checks that the passenger is allowed to fly.

Airplane

Baggage is sent to plane as passengers are boarding

**System Transactions**

The transactions that the system will be required to implement are as follows:

Search flight destinations

Search flight departure airports

Search flight times

Search flight dates

Search flight seat availability

Book a flight

Send boarding card

Cancel a booked flight

Accept payments, make refunds

Check in customer at airport

Search travel insurance

Search car rental

Find hotel deals

Handle customer complaints

Inform security of passenger details

Update baggage information

**System Processes**

The following are the level 1 processes:

Search Flights

Book Flights

Give Refund

Take Compliant

Find Ancillary Services

**System Dataflow**

The following are the Data flows associated with the level 1 processes:

Search Flights:

Enter Search Details

Retrieve Flight details from DB

Display Search Results

Book Flights:

Request Flight

Update Seat availability on flight

Request Payment

Enter Credit card details

Confirm Card Authorisation

Send and confirm payment with finance department

Request and confirm refund

Send boarding card

Give Refund:

Request refund

Confirm with flight DB that refund is outside non-refundable period

Update seat availability

Request and confirm Refund Transfer from finance

Take Complaint:

Submit Complaint

Contact Passenger:

Find Ancillary services:

Search car hire

Search hotels

Display results

Search Insurance

Book car hire

Send search request to car hire companies

Send search results

Redirect to car hire website

Book Hotel

Send search request to hotel companies

Send search results

Redirect to hotel website

Book Insurance

Send search request to insurance companies

Send search results

Redirect to insurance company website

Check In

Update and confirm Passenger Check in flight DB

Submit Baggage:

Update Baggage info

**Data Storage**

One central flight database containing all details about the flights, passenger details, checkin-baggage etc.