Project Report

Upon using the install.bat, the application will install any dependencies and create the tables in their account if they correctly setup and put their password.txt in the correct folder. Once install.bat is finished it will open the server and the client automatically. On the About page/homepage, the user can choose to reset the database, prepopulate the tables, or view the ER model or demo. Our Airline app allows users to book flights that meet the requirements they set on the Find Flights page. After their requirements are set (Departure Airport, Arrival Airport, Date, Number of Travelers, Fare Conditions), they are directed to the next page where the flights that meet those requirements are listed. They then pick a flight id from the list. If there are available seats on the flight (or if there are none they are put on the waitlist) they are sent to the next page. The next page is where they put all their information for the number of travelers they picked (Full name, email, phone). After that they are directed to the payment page where it shows the price break down with total price, taxes, traveler number, fare condition they picked. They then put in their credit card number, security code, Full name, and billing address. After payment they pick their seats for all travelers in their party. With that the application is complete and their flight and ticket information is shown to them. After they are done with the application, they change check their ticket and flight info again at a later date in the check ticket tab. Or they can see their entire booking in the check booking tab which shows them all tickets tied to their booking number. They can also request a refund with the credit card used and their booking number. Upon processing a refund, their tickets get canceled, and the connected flight gets their seats updated. They can also search for specific flights in the view all flights tab. Airline clerk

side is in the Airline Portal tab, where is shows all of the passenger's information and their ticket

number, booking number, and seat number.

Airline Extended ER Model with Cardinalities

Payment	
(PK)payment_id	char
(FK)book_ref	char

User_history	
(PK)history_id	integer
(FK)departure_airport	character
(FK)arrival_airport	character

N

1

N

1

Bookings	
(PK)book_ref	char
(FK)customer_id	integer

N   M

Customer_information	
(PK)customer_id	integer

Airport	
(PK)airport_code	char

1

1   1

N   N

Tickets	
(PK)ticket_no	char
(FK)book_ref	character

1   N

Ticket_flights	
(FK)ticket_no	character
(FK)flight_id	integer

N   1

Flights	
(PK)flight_id	integer
(FK)departure_airport	character
(FK)arrival_airport	character
(FK)aircraft_code	character

N   1

Aircraft	
(PK)aircraft_code	char

1

1

N

Boading_passes	
(FK)ticket_no	character
(FK)flight_id	integer

Seats	
(FK)aircraft_code	character
(PK)seat_no	character varying