Prutha Patel

Ahmed Mansour

Salman Nawaz

Lean Barredo

**Integration Process**

For this project we have to integrate both Wrong Way Airlines and Misdirected Deliveries, Inc. Wrong Way Airlines is used to keep track of the locations of all of their aircraft. However, their system has gone from being paper based to an automated process. Their website allows you to view the contents regarding their aircraft such tail number, plane type, pilot name and fuel. You can also view the pilot and the navigator name. You may also add and remove which airport the aircraft is at.

Misdirected Deliveries Inc happen to be a warehouse/ delivery company. They keep a records of orders, customers and shipments. Their website allows you to view their customer, as well as adding and removing customers. They also have an inventory with a selection of cars you can chose from. The order number of your purchase is then added to the invoice table, which creates an invoice for your purchase. Now that these two companies are automated and no longer paper-based, they need to be integrated.

For the integration process, we took a look at the type of data for each of the website. Wrong Way Airlines collected data regarding aircraft and destinations, while Misdirected Deliveries Inc was looking at inventory and deliveries. So therefore, we came to the conclusion that Wrong Way Airlines would be responsible for delivering the packages/cargo for Misdirected Deliveries Inc. As per the specifications of this project, the airline should be allowed to load packages on board their airplane, and Misdirected Deliveries Inc should be allowed to see which flight their packages are on.

First we decided to make a table called Airline. The airline table allows you to see all the different aircrafts you can load your cargo onto. It tells you the Plane Id, the Tail number, Plane type, the pilot name, and the Fuel. Once you have made your selection of the aircraft, you type the plane ID into the field which says “Plane ID”. Then you can go about filling in the rest of the fields. The rest of the fields include “Cargo number”, “Weight” (the amount your cargo weighs in pounds), “Destination Airport” and “Destination City.” For Destination Airport, put in the airport name of which you would like to transport your cargo to such as LAX. Once you have put information into all of the corresponding fields, then you may click the button which states “Load cargo onto airline or Remove cargo from airline.” We also have a button which states “Click here to view Already Loaded Cargo”, when that button is clicked you get a table which displays the cargos which have already been loaded onto the aircraft. If you enter the same cargo number twice, you will get an error, because you don’t want redundancy by loading the same cargo twice.

So as you can see, we have integrated the two websites together by begining to choose an aircraft which you can load your cargo onto for transport. The second form of integration is for Misdirected Deliveries. If Misdirected Deliveries Inc wanted to see what flight their package was on, then they would click the tab which says “CHECK ONBOAD PACKAGE”. Because the two tables are integrated, you can only choose packages that have already been loaded onto the aircraft and therefore, in the database. The Delivery table includes plane Id, Cargo number, weight, destination airport and destination city. Plane Id is the primary key of the Airplane table and therefore, a foreign key in the Delivery table. Plane Id is used to link the two tables together, so you can view which aircraft your cargo is on.

There will be a table present on the webpage which tells you different cargo id’s you can pick from. You may not pick any random cargo id because that Id may not be linked to an aircraft. Once you enter a valid cargo id from the table, you will be able to view which aircraft your cargo is onboard.

I think the hardest part of this project was coming up with a proper way to integrate the two systems. We were a bit confused at the beginning because we weren’t entirely able to figure what the other group’s website was supposed to be doing. Now that two concepts are integrated between the two websites, you select which aircraft to load your cargo on. If your cargo has already been loaded, you can also put in the cargo number to view which aircraft the cargo is on. There are different ways one can integrate the system, but we chose to just use the concept of linking tables together so the tables can have access to each other’s data and thus allowing integration of the two companies.