Airline Database Project

By Alexandra Feely

The idea behind this project was to create a simple database that would keep track of information for an airline in a given day. Ideally it would pull information from a live database that is constantly changing and being updated and provide a meaningful record for airlines to keep track of important information. The scope of this ended up becoming rapidly larger than I was anticipating, but I feel that I captured many of the essentials that would need to be there for an undertaking like this. Eventually I would like to expand on this and pull relevant data from the internet and do some analysis on popular flight destinations across the year in a post-COVID 19 world.

Tables:

Flights

This table keeps track of flights as well as a staff group that will man said flights. It also keeps track of where the flight is leaving from and its destination.

Patrons

A table for Patrons/Passengers as well as relevant information such as their name and what flight they are on. Also keeps track of a unique patron ID in order to not have conflicts if customers with the same name appear.

StaffGroupID

This table keeps track of staff groupings in order to assign to various flights. I initially wanted this to be more in depth, but upon thinking on it further, came to realize that airlines have many different ways of assigning staff. Some work together on flights throughout the day, some change every flight, and yet others have more permanent working groups in order to help things run smoothly. This simpler layout will accommodate more

potential systems and allow airlines to plug in their own staff assigning systems more easily.

Staff

This is just meant to keep track of staff members and the relevant group they may be apart of, and therefor the potential flights they may be working on. This table also uses a unique staff ID in order to help separate staff with potentially the same name.

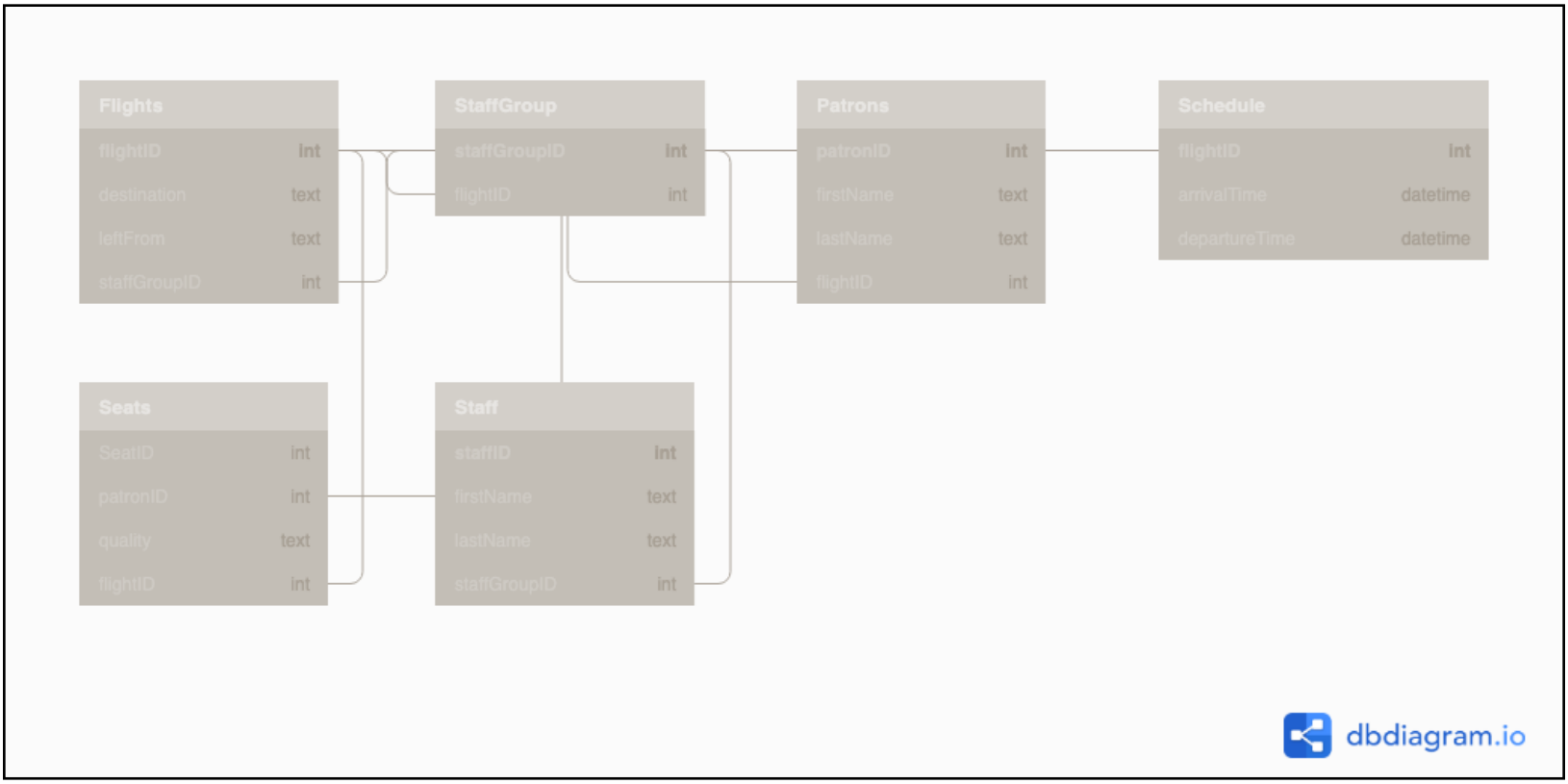
Schedule

This wasn't implemented in this project but may be later. It is simply a database to keep track of the schedule of each flight.

Seats

A table used to keep track of patrons and their seats. Considering the various models of planes, I decided to make the ID an int rather than the standard designations. The idea would be that you could create

ERD Diagram



various scripts for each flight and have them run accordingly in order to keep track of more traditional seat ID's.

Closing Notes:

The scope of this project was severely limited by my work on implementing a python variation of the sql script. Eventually I would like to expand this and use what I learned from the python side of this project to be able to pull information from a wider variety of sources. The python script will also be included in the final submission.