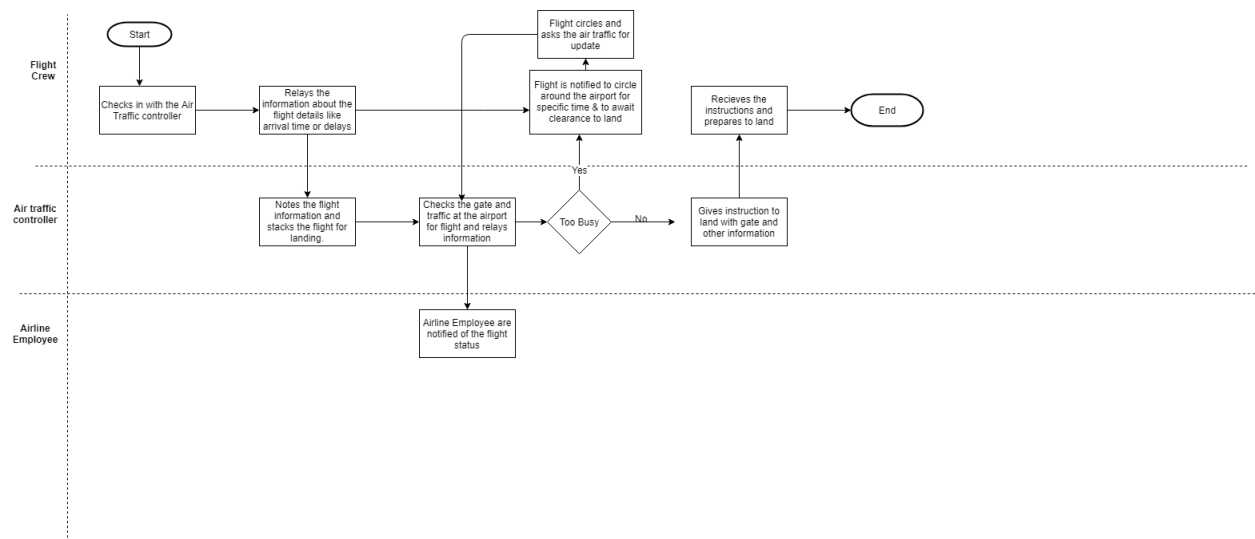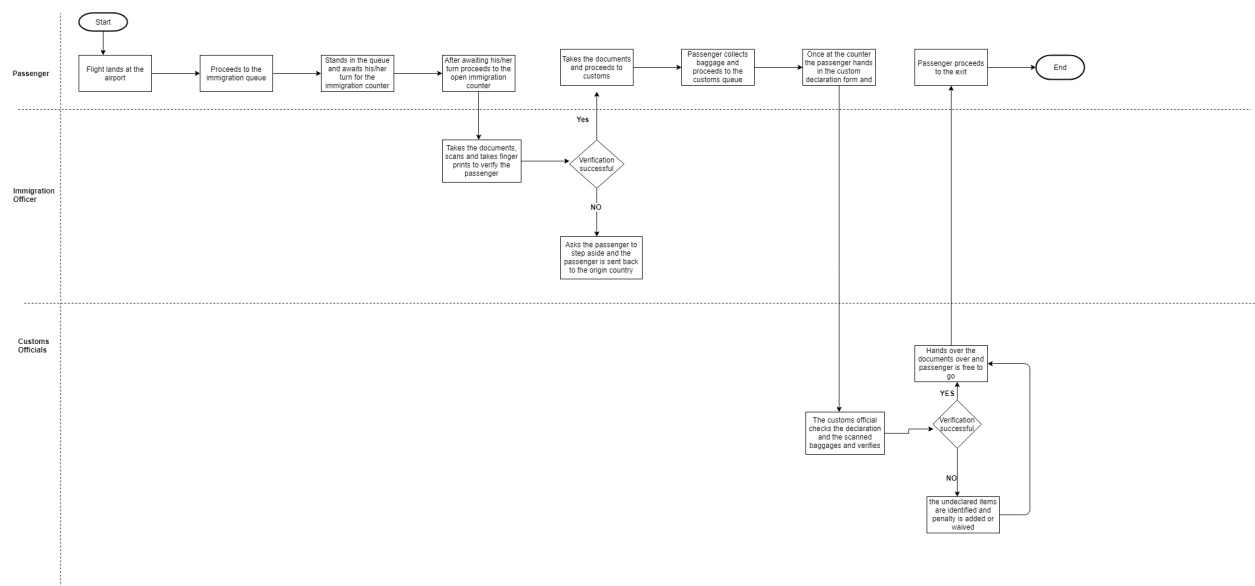# BUSINESS PROBLEM

As a manager or different airports in the United States, the different challenges faced by manager include identification and resolution of various aspects for flight delays, immigration delays and also the performance analysis from an airport to a specific destination. There are also many flights that get diverted due to air traffic or are cancelled due to multiple reasons which affect the performance of the airport and causes chaos, analyzing the data can aid in reducing if not removing such scenarios.
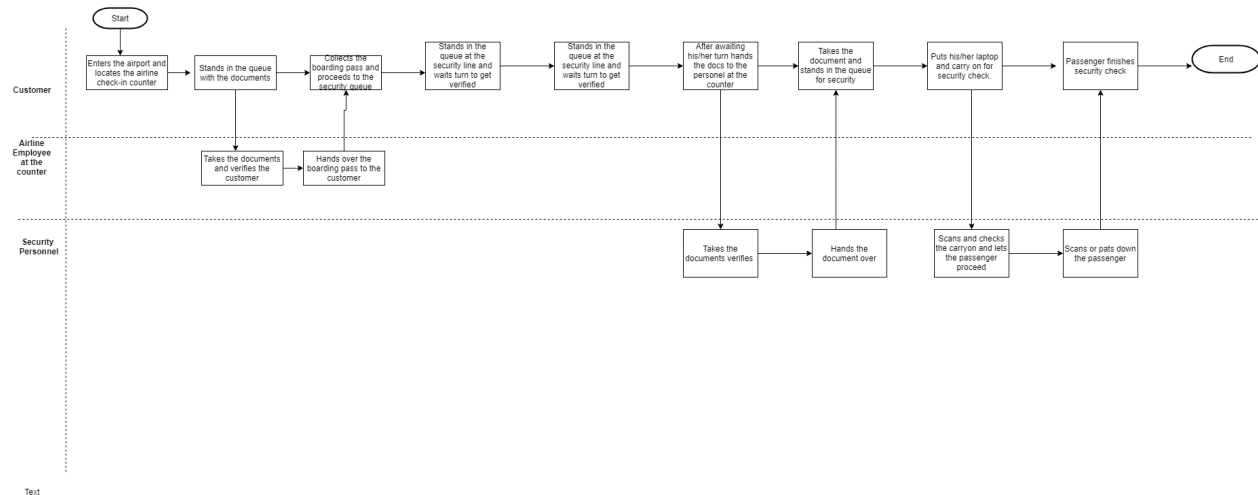
SWIMLANE DIAGRAMS:

Arrival Diagram:

Immigration Diagram:

Security Check:

USE CASES

Descriptive analysis on flight delays: For 323 airports and 14 airlines, we will perform an analysis in the delays of departure and arrival times for a combination of each of these airports and airlines for various types of delays such as security delay, weather delay etc. Considering variables such as Scheduled time, Air time, Departed time

Descriptive Analysis on Immigration Delays: We will perform an analysis to find the average time taken at each terminal and also find how many numbers of open counters are required to reduce the waiting time increasing the efficient use of the available resources

Predictive Analysis on reducing flight delays: The delays caused are based on factors such as weather, security, air traffic. Using these criteria's, the manager can predict the delay for a particular flight and take steps beforehand to minimize the effect.

Predictive Analysis on airport optimization: 323 airports in USA have different factors affecting the everyday working and delays for all 14 airlines. Using the comparison and data from other airport the government can predict the increase or decrease of air traffic and plan for new airports and resources and also prioritize one airport over the other.