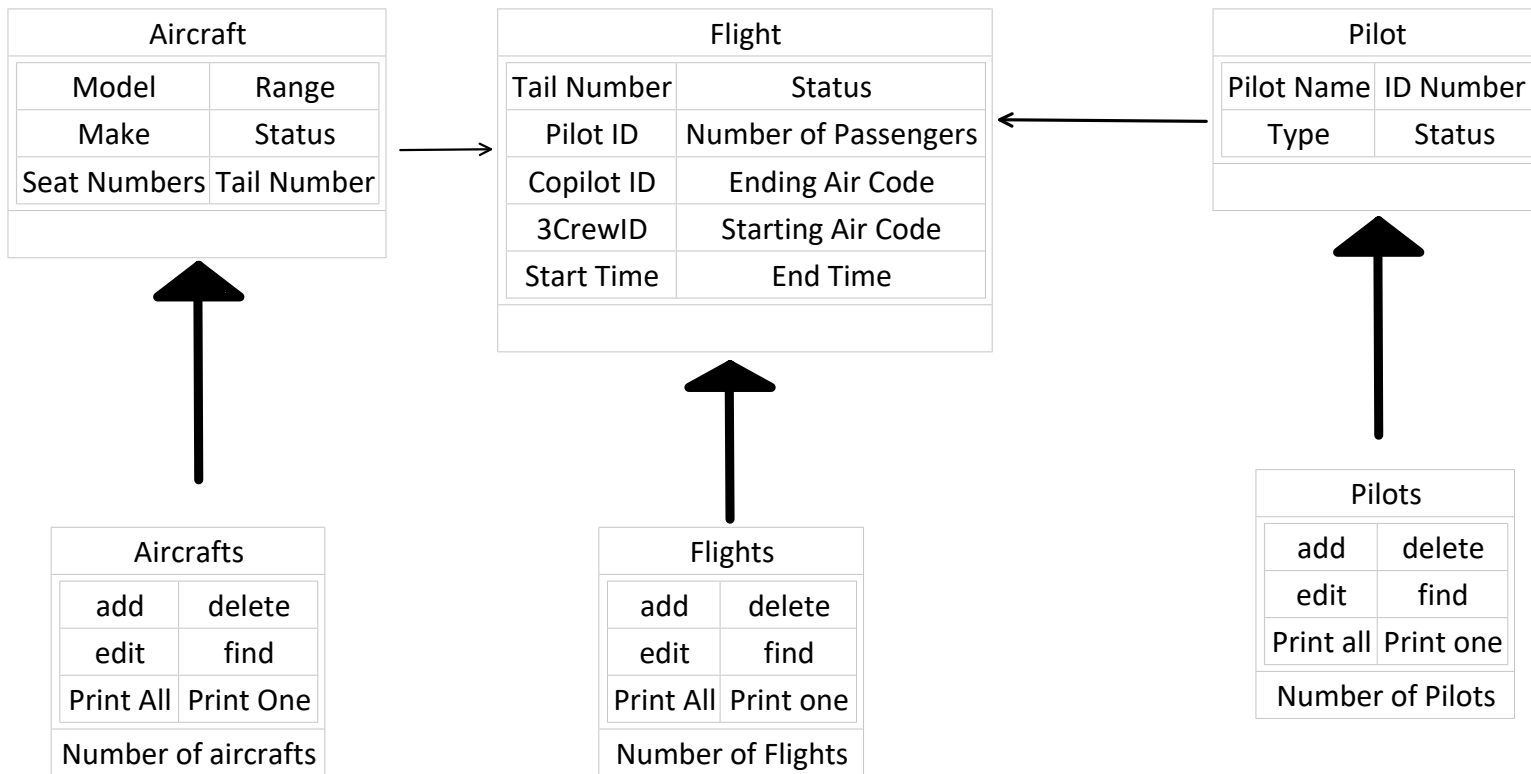


Ricardo A. Garza  
Mean Green Airlines Homework  
4  
CSCE 1040.001

## Homework 3 class Diagrams

Tuesday, October 31, 2017 12:38 PM



# Aircraft Class

Wednesday, November 1, 2017

9:42 AM

Aircraft	
Get Model	Get Status
Get Make	Get Range
Get Seat Numbers	Get Tail Number
Add Model	Add Range
Add Make	Add Status
add Seat Numbers	Add Tail Number
Print Data	
String Model	Int Range
String Make	String Status
Int Seat Numbers	Int Tail Number

# Aircrafts Class

Wednesday, November 1, 2017

9:51 AM

Aircrafts	
add	delete
edit	find
Print All	Print One
Number of Aircrafts	
<input type="text"/>	

# Crew Class

Wednesday, November 1, 2017

10:03 AM

Crew	
Add Crew Name	Add ID Number
Add Type	Add Status
Get Crew Name	Get Id number
Get Type	Add Status
Print	
String Name	Int Id
String Type	String Status

# Employees Class

Wednesday, November 1, 2017

10:06 AM

Employees	
Add crew member	Delete crew member
Edit crew member	Find crew member
Print all	Print one
Number of Crew	

# Flights Class

Wednesday, November 1, 2017

10:15 AM

Flights	
Add Flights	Delete Flights
Edit Flights	Find Flights
Print All	Print one
Number of Flights	

# Flight Class

Wednesday, November 1, 2017

10:09 AM

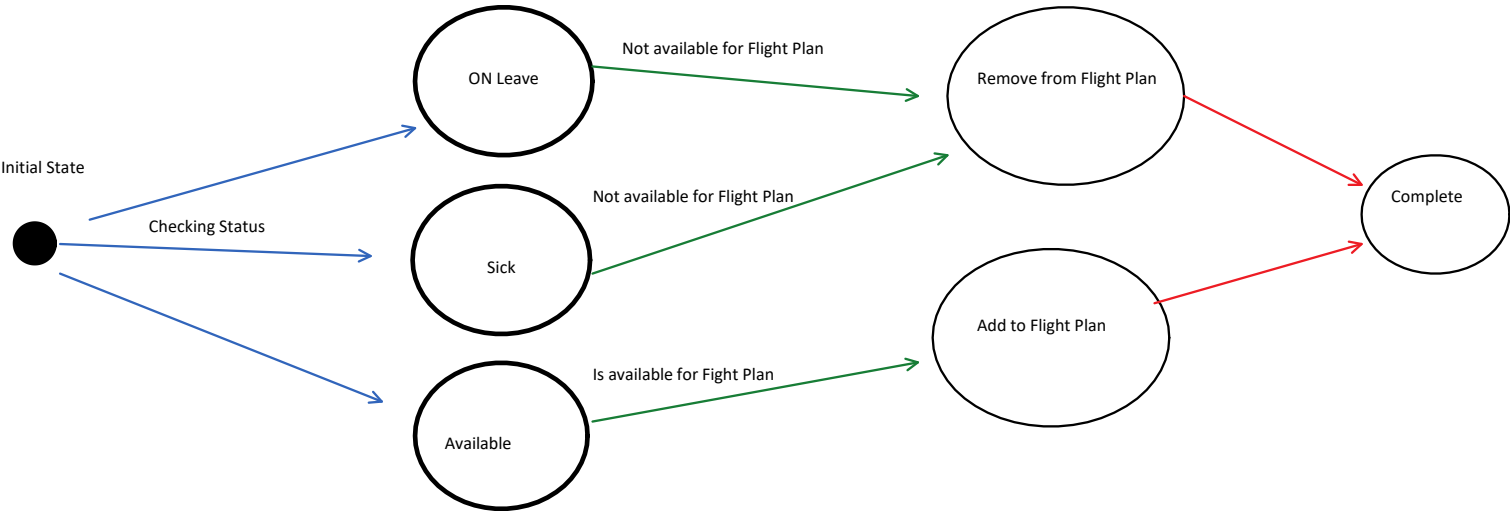
Flight	
Add Tail Number	Add Status
Add Pilot ID	Add Number of Passengers
Add Copilot ID	Add Ending Air Code
Add 3CrewID	Add Starting Air Code
Add Start Time	Add End Time
Get Tail number	Get status
Get Pilot Id	Get number of passengers
Get copilot id	Get Starting Air code
Get crew id	Get Ending Air Code
Get start time	Get End time
Int Tail Number	Int number of passengers
Int Pilot Id	Int End code
Int Copilot Id	Int Start code
Vector<int> crew id	String Status
String time start	String Time End



# Crew State Diagram

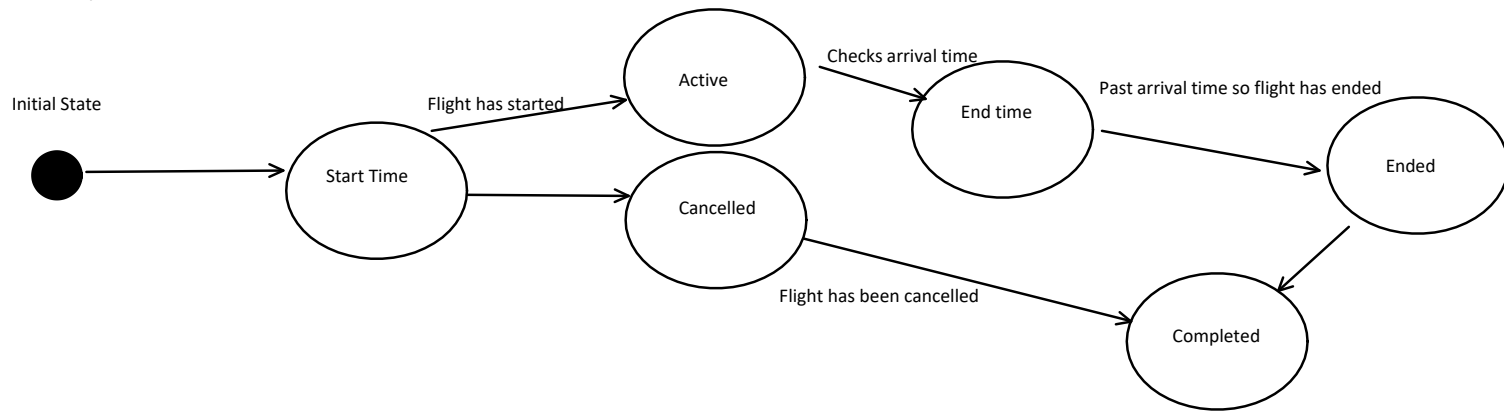
Wednesday, November 1, 2017 9:40 AM

Crew Status



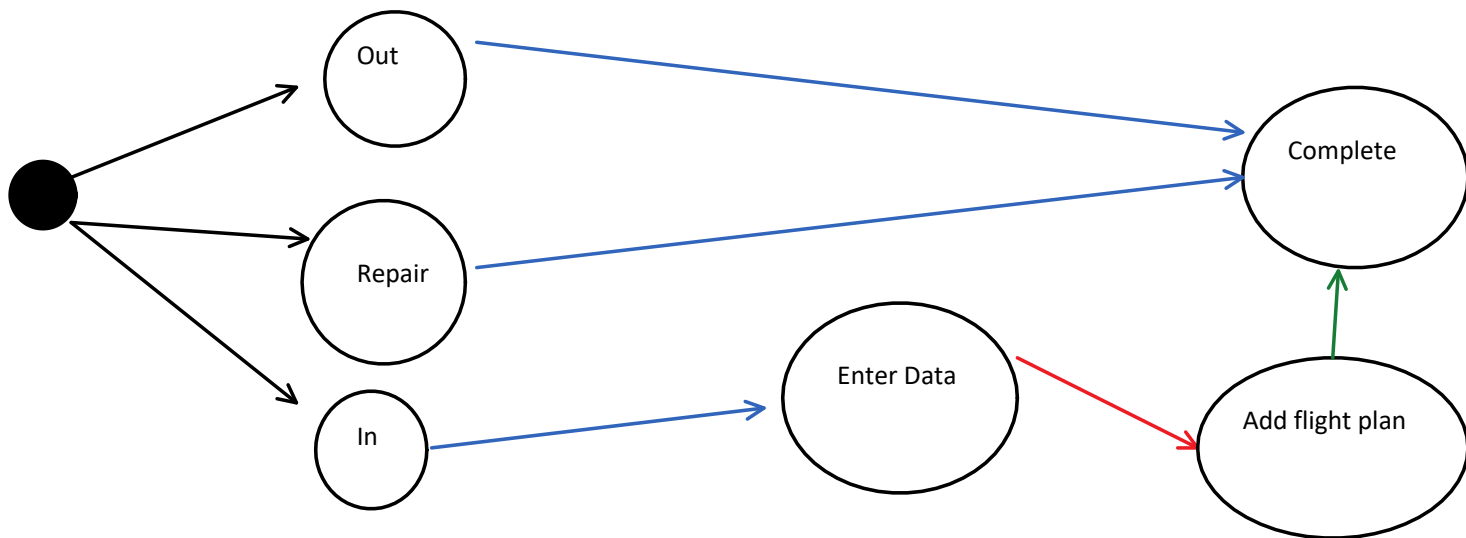
# Flight State Diagram

Wednesday, November 1, 2017 1:58 PM



# Aircraft State Diagram

Wednesday, November 1, 2017 1:58 PM



## Design Experience

Making the class diagram was easier to understand than writing out an entire algorithm. Usually when I write the algorithm I will not be able to see the whole picture even though I am the one writing it. Using the class and state diagram I can see better what I am trying to do. I can also see what is going to interact with what. The state diagram also shows what objects are going to be changing during the execution of the program. It made understanding that the entity was the one changing states and not the collection changing states.

## Homework 4 Report

This homework assignment was more difficult than the first two. The making of the add functions for crew and planes was not too difficult at all. It followed the same thing that was done in homework 2. What I had trouble with was the add function for the flight plan. I always thought that you had to make 3 separate lists. One list for just crew, plane, flight, and that you had to reenter the data every time. It was not until I realized that I somehow had to make sure that flight had to interact with the crew and plane somehow did I notice I was doing it wrong.

Then after that I had to go back in to my header files and add more function to crew and plane because I had no way of accessing the private data in the other classes. I needed to access the private data somehow so that I could make sure that whatever the user input was a valid input. The functions for my crew and plane work I say at about 90%. For some reason my search function in my crew only shows 1 crew member but says the correct size of list of crews. I only have an add function for my flights and all it adds is pilot id, copilot id, cabin crew id, and the plane tail number.