Project5 Specifications: Airline Reservation System

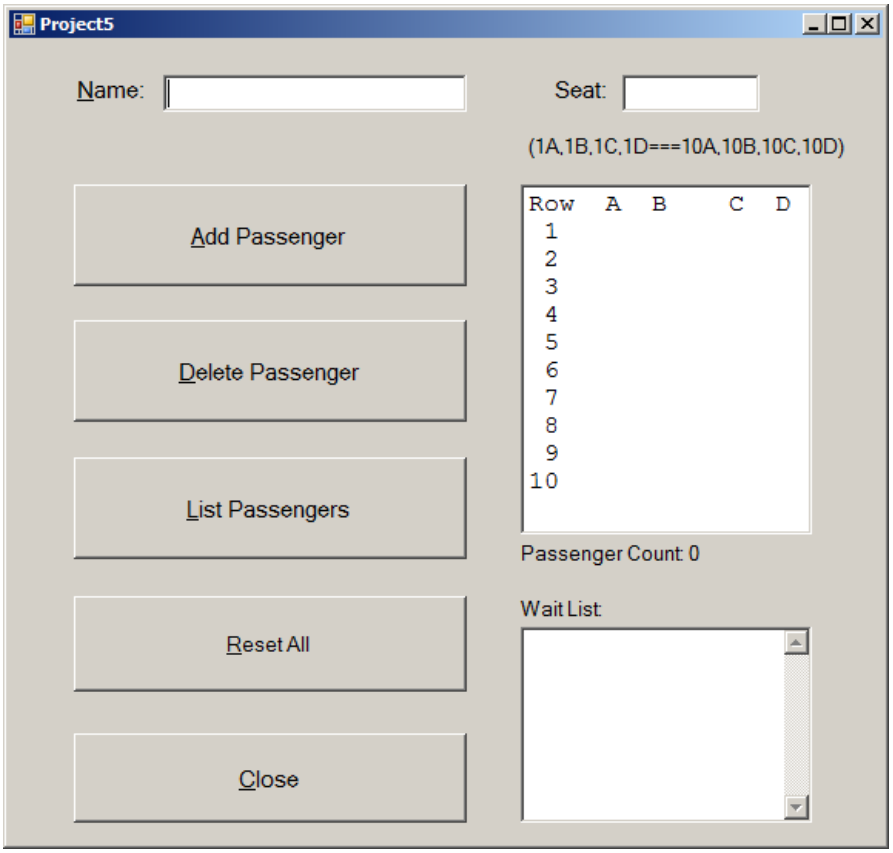
Write a reservation system for an airline flight. Assume the airplane has 10 rows with 4 seats in each row. Use a 2-dimensional array of strings to maintain a seating chart. In addition, create an array to be used as a waiting list in case the plane is full.
The waiting list should be "first come, first served"; that is, people who are added early to the list get priority over those added later. Allow the user the following options:

A. Add a passenger to the flight or waiting list.
   1. Request the passenger's name
   2. Display a chart of the seats in the airplane in tabular form.
   3. If seats are available, let the passenger choose a seat. Add the passenger to the seating chart.
   4. If no seat preference specified, assign an open seat to them.
   5. If not seats are available, place the passenger on the waiting list.
B. Remove a passenger from the flight.
   1. Request the passenger's name.
   2. Search the seating chart for their name and delete it.
   3. If the waiting list is empy, update the array so the seat is available.
   4. If the waiting list is not empty, remove the first person from the list, and give him/her the newly vacated seat.
C. List the passengers on the flight.
   1. Using a new form, display the passenger list in tabular form showing their name and Assigned Seat. Include in the display the waiting list.
   2. Allow the list to be: printed, previewed, print setup, and font changed. Examine DisplayText.zip project to use the frmDisplay.zip files
D. In order to easily test the Waitlist, include in the "command" line a number from 1 to 40 which will automatically create passengers named: Pass1, Pass2, etc. when the program starts.
   1. Use the Commmand() to get the value.
   2. Create a Batch file in your ...Bin\Debug folder that will test this.
      In this example the program was named project5.exe.
      Example: the file "Program5.Bat" would contain this:
      @echo off
      echo Close this cmd window after program starts.
      cmd /c "project5.exe 40"
E. Allow the flight to be reset to empty to start new flight.

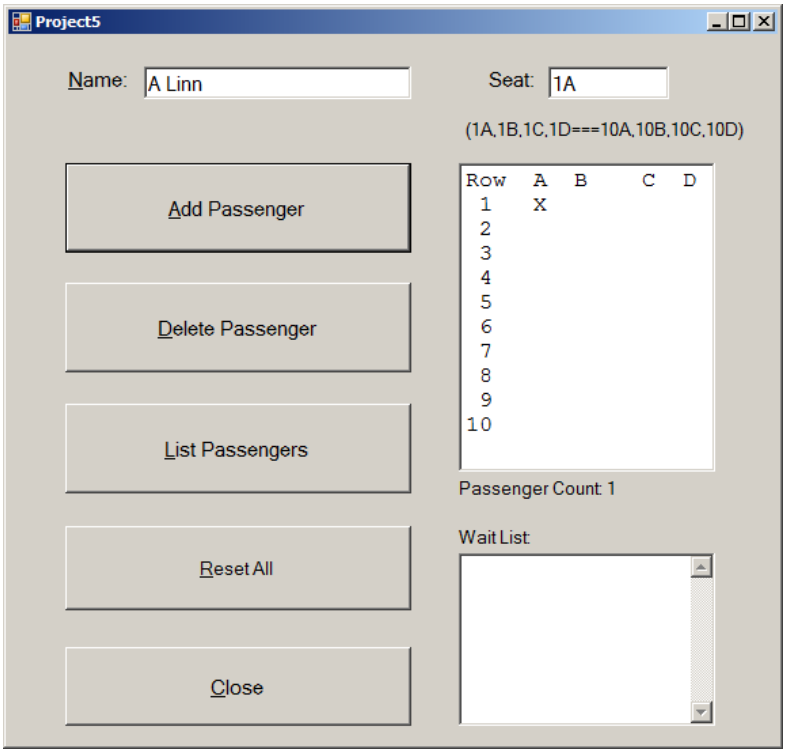
Points:	Earned	(Max)
1) Every procedure has a comment	_____	(1)
2) Block comment at beginning of Class Form	_____	(1)
3) All objects follow the naming convention	_____	(1)
4) Forms constructed correctly (Appearance only)	_____	(1)
6) Program validates names when adding or deleting	_____	(1)
7) Program validates seating assignment when entered	_____	(1)
8) Program uses 2-D Array to store information	_____	(2)
9) Program uses at least 3 Sub or Function calls	_____	(2)
10) Program correctly adds passenger to plane/waitlist	_____	(2)
11) Program correctly deletes passenger from plane and If waitlist not empty assigns 1st to that seat	_____	(2)
12) Program lists passengers correctly.	_____	(3)
13) Program Uses frmDisplay.vb correctly.	_____	(3)
14) Program Reset works correctly.	_____	(2)
15) Program can start up with passengers assigned	_____	(3)

TOTAL _____ (25)

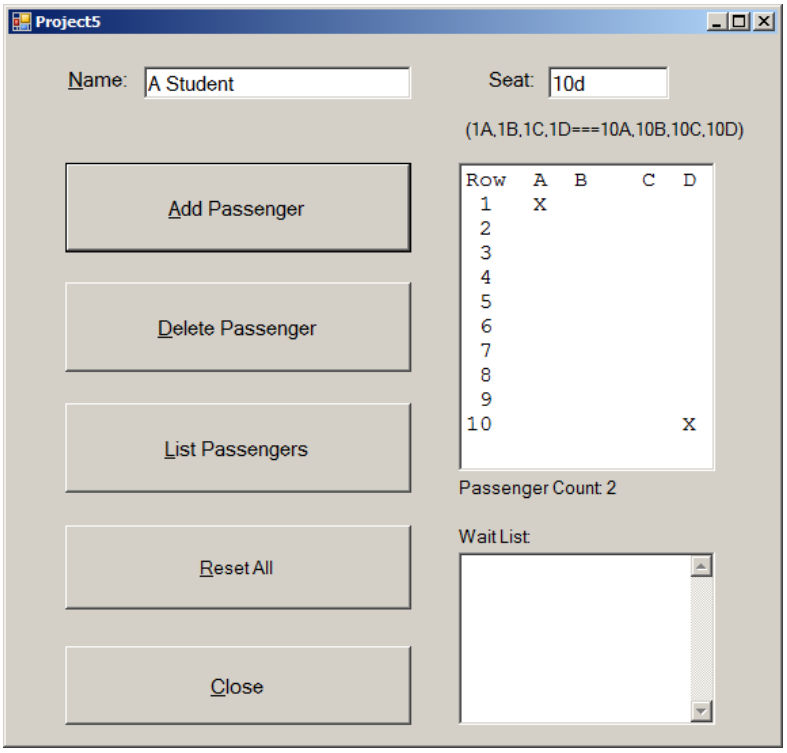
Shown at start up with empty plane:



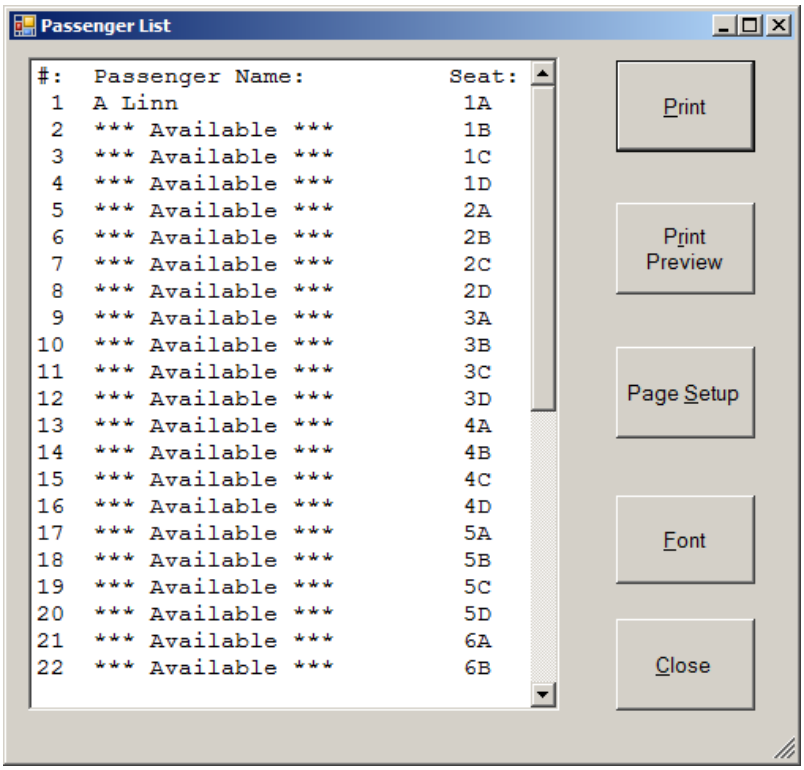
Shown after adding 1st passenger allowing program to select an open seat:

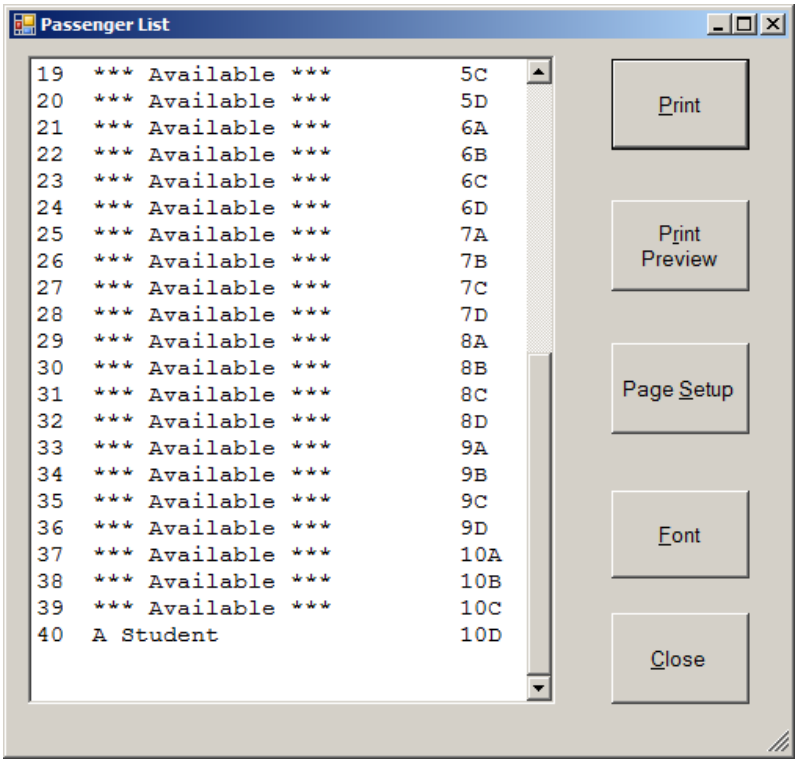


Shown after adding a passenger selecting a specific seat: 10D

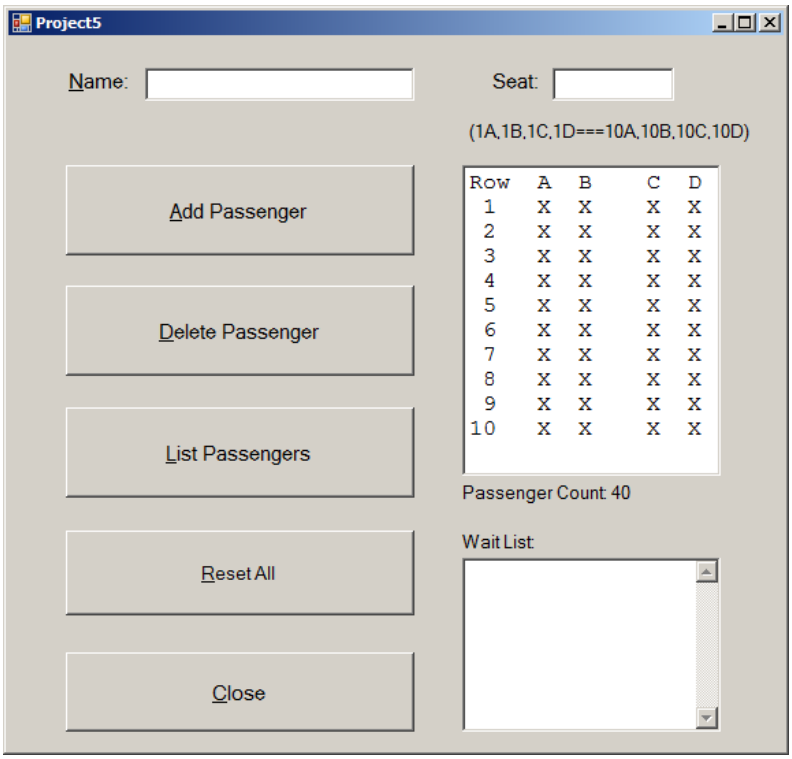


List of Flight is shown below in 2 screen shots:

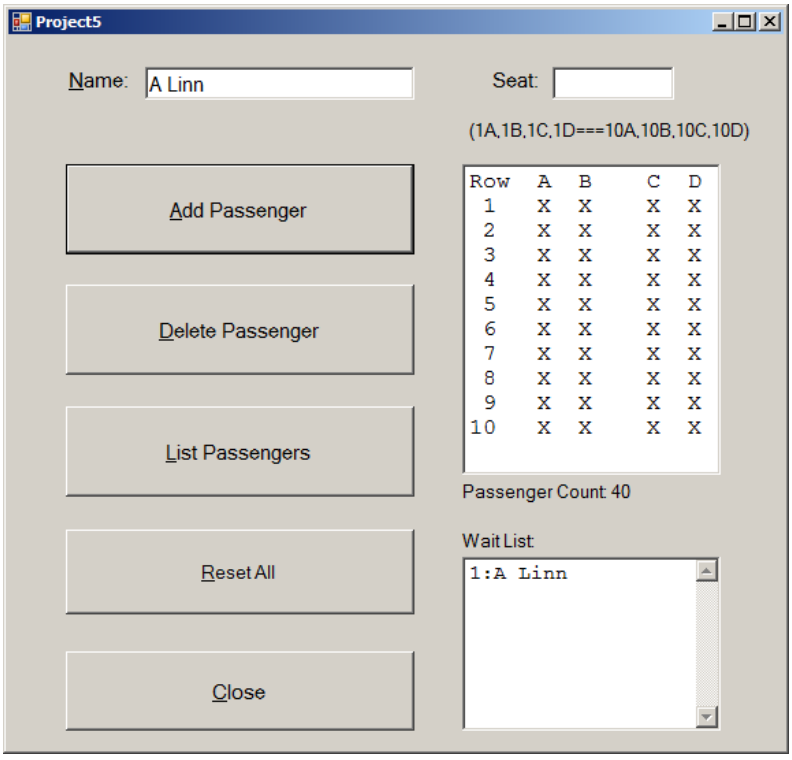




Shown at start up with 40 passengers assigned:



Shown after adding passenger: A Linn



List of Flight is shown below in 2 screen shots: