Address:-

package Classes;

/\*\*

\*

\* @author new

\*/

public class Address {

private String street;

private String city;

public Address() {

}

public Address(String street, String city) {

this.street = street;

this.city = city;

}

public void setStreet(String street) {

this.street = street;

}

public void setCity(String city) {

this.city = city;

}

public String getStreet() {

return street;

}

public String getCity() {

return city;

}

@Override

public String toString() {

return street + "@" + city;

}

}

Airline:-

/\*\*

\* Class Name : Airline

\* @author Madhushi

\* Purpose : To maintain information of an Airline. The maintained

\* information are, the airline ID and the name of the airline.

\*/

package Classes;

import java.io.\*;

import java.util.Scanner;

public class Airline {

private String airlineID; //two-lettered ID

private String airlineName; //name of the airline

//constructor 01

public Airline() {

this.airlineID = "";

this.airlineName = "";

}

//constructor 02

public Airline(String airlineID, String name) {

this.setAirlineID(airlineID);

this.setAirlineName(name);

}

public void setAirlineID(String airlineID) {

if(airlineID.matches("[a-zA-Z]+$") && airlineID.length()==2){

this.airlineID = airlineID.toUpperCase();

}

else{

System.out.println("Invalid Airline ID");

}

}

public void setAirlineName(String airlineName) {

if (airlineName.matches("[a-zA-Z ]+$")) {

this.airlineName = airlineName;

}

else{

System.out.println("Invalid Airline Name");

}

}

public String getAirlineID() {

return airlineID; //returns airlineID in capitals

}

public String getAirlineName() {

return airlineName;

}

@Override

public String toString() {

return this.getAirlineID() + "," + this.getAirlineName();

}

}

Airport:-

package Classes;

/\*\*

\* Class Name : Airport

\* @author Madhushi

\* Purpose : To maintain information of an Airport. The maintained

\* information are, the airport ID, city and country.

\*/

public class Airport {

private String airportID; //three letters

private String city;

private String country;

//constructor01

public Airport() {

this.airportID = ""; //three letter ID

this.city = "";

this.country = "";

}

//constructor02

public Airport(String airportID, String city, String country) {

this.setAirportID(airportID);

this.setCity(city);

this.setCountry(country);

}

//Method name : setAirportID

//Purpose : To asign the variable airportID with and ID

//Pre condition : The variable airportID is not containing an ID

//Post condition : The variable airportID is containing an ID

public void setAirportID(String airportID) {

if(airportID.matches("[a-zA-Z]+$") && airportID.length()==3){

this.airportID = airportID.toUpperCase();

}

else{

System.out.println("Invalid Airport ID");

}

}

public void setCity(String city) {

if (city.matches("[a-zA-Z ]+$")) {

this.city = city;

}

else{

System.out.println("Invalid City Name");

}

}

public void setCountry(String country) {

if (country.matches("[a-zA-Z ]+$")) {

this.country = country;

}

else{

System.out.println("Invalid Airline Name");

}

}

public String getAirportID() {

return airportID; //returns airportID in capitals

}

public String getCity() {

return city;

}

public String getCountry() {

return country;

}

@Override

public String toString() {

return this.getAirportID() + "," + this.getCity() + "," + this.getCountry();

}

}

Flight:-

/\*\*

\* Class Name : Flight

\* @author Madhushi

\* Purpose : To maintain information about a flight. The maintained information are

\* the flight number, departure date,departure airport,

\* destination airport, departure time, arrival time and the flight sections.

\*/

package Classes;

import java.text.SimpleDateFormat;

import java.util.Calendar;

import java.util.Date;

import java.util.GregorianCalendar;

public class Flight {

private String flightNumber;

private String departureDate;

private String departureAirport;

private String destinationAirport;

private String departureTime;

private String arrivalTime;

// private FlightSection [] sections; //size of the array depends on the number of sections in the flight (1 to 3) //erase

//costructor 01

public Flight() {

}

//constructor 02

public Flight(String flightNumber, int day, int month, int year, String departureAirport, String destinationAirport, String departureTime, String arrivalTime) {

String airlineID = flightNumber.substring(0,2);

String number = flightNumber.substring(2);

this.setFlightNumber(airlineID, number);

setDepartureDate(day, month, year);

this.departureAirport = departureAirport.toUpperCase();

this.destinationAirport = destinationAirport.toUpperCase();

this.departureTime = departureTime;

this.arrivalTime = arrivalTime;

// this.sections = sections;

}

public void setFlightNumber(String airlineID, String number) {

if(airlineID.matches("[a-zA-Z]+$") && airlineID.length()==2 && number.matches("[0-9 ]+$")){

this.flightNumber = airlineID + number;

}

else{

System.out.println("Invalid Flight Number");

}

}

public void setDepartureDate(int day, int month, int year) {

SimpleDateFormat sdf = new SimpleDateFormat("d MMM yyyy"); //Defines the date format needed

Calendar calendar1 = new GregorianCalendar(year, month-1, day); //creates a date from Calendar class

this.departureDate = sdf.format(calendar1.getTime());

}

public void setDepartureAirport(String departureAirport) {

if(departureAirport.matches("[a-zA-Z]+$") && departureAirport.length()==3){

this.departureAirport = departureAirport.toUpperCase();

}

else{

System.out.println("Invalid Airport ID");

}

}

public void setDestinationAirport(String destinationAirport) {

if(destinationAirport.matches("[a-zA-Z]+$") && destinationAirport.length()==3){

this.destinationAirport = destinationAirport.toUpperCase();

}

else{

System.out.println("Invalid Airport ID");

}

}

public void setDepartureTime(int hour, int minute) {

SimpleDateFormat sdf = new SimpleDateFormat("HH:mm "); //Defines the date format needed

Calendar calendar1 = new GregorianCalendar(2016, 12, 5, hour, minute); //creates a date from Calendar class

this.departureTime = sdf.format(calendar1.getTime());

}

public void setArrivalTime(int hour, int minute) {

SimpleDateFormat sdf = new SimpleDateFormat("HH:mm "); //Defines the date format needed

Calendar calendar1 = new GregorianCalendar(2016, 12, 5, hour, minute); //creates a date from Calendar class

this.arrivalTime = sdf.format(calendar1.getTime());

}

/\*public void setSections(FlightSection[] sections) {

this.sections = sections;

}\*/ //erase

public String getFlightNumber() {

return flightNumber;

}

public String getDepartureDate() {

return departureDate;

}

public String getDepartureAirport() {

return departureAirport;

}

public String getDestinationAirport() {

return destinationAirport;

}

public String getDepartureTime() {

return departureTime;

}

public String getArrivalTime() {

return arrivalTime;

}

/\*public FlightSection[] getSections() {

return sections;

}\*/

@Override

public String toString() {

return flightNumber + "," + departureDate + "," + departureAirport + "," + destinationAirport + "," + departureTime + "," + arrivalTime ;

}

}

Flight section:-

package Classes;

/\*\*

\*

\* @author Madhushi

\*/

public class FlightSection {

private SeatClass seatClass;

//constructor 01

public FlightSection() {

this.seatClass = null;

}

//constructor 02

public FlightSection(SeatClass seatClass) {

this.seatClass = seatClass;

}

public void setSeatClass(SeatClass seatClass) {

this.seatClass = seatClass;

}

public SeatClass getSeatClass() {

return seatClass;

}

// public void setSeatClass(String seatID) {

// //this.seatClass = seatClass;

// String columnChar = ""; //Character of the seat column

// int rawNumber = 0; //consists of two numbers

//

// columnChar = String.valueOf(seatID.charAt(0));

// rawNumber = Integer.parseInt(seatID.substring(1));

//

// if(rawNumber>=1 && rawNumber<=4){

// switch(columnChar){

// case "A":

// case "B":

// case "G":

// case "H":

// this.seatClass = SeatClass.FIRST;

// break;

// default:

// System.out.println("Invalid Seat ID");

// break;

// }

// }

// else if(rawNumber>=5 && rawNumber<=12){

// switch(columnChar){

// case "A":

// case "B":

// case "C":

// case "F":

// case "G":

// case "H":

// this.seatClass = SeatClass.BUSINESS;

// break;

// default:

// System.out.println("Invalid Seat ID");

// break;

// }

// }

// else if(rawNumber>=13 && rawNumber<=60){

// switch(columnChar){

// case "A":

// case "B":

// case "C":

// case "D":

// case "E":

// case "F":

// case "G":

// case "H":

// this.seatClass = SeatClass.ECONOMY;

// break;

// default:

// System.out.println("Invalid Seat ID");

// break;

// }

// }

//

// }

@Override

public String toString() {

return "Seat Class: " + seatClass ;

}

}

Name:-

package Classes;

/\*\*

\*

\* @author new

\*/

public class Name {

private String firstName;

private String lastName;

public Name() {

}

public Name(String firstName, String lastName) {

this.firstName = firstName;

this.lastName = lastName;

}

public void setFirstName(String firstName) {

this.firstName = firstName;

}

public void setLastName(String lastName) {

this.lastName = lastName;

}

public String getFirstName() {

return firstName;

}

public String getLastName() {

return lastName;

}

@Override

public String toString() {

return firstName + "@" + lastName;

}

}

Passenger:-

package Classes;

/\*\*

\*

\* @author new

\*/

public class Passenger {

private Name name;

private Address address;

private String telephoneNumber;

public Passenger() {

name = new Name();

address = new Address();

this.telephoneNumber = "";

}

public Passenger(Name name, Address address, String telephoneNumber) {

this.name = name;

this.address = address;

this.telephoneNumber = telephoneNumber;

}

public void setName(Name name) {

this.name = name;

}

public void setAddress(Address address) {

this.address = address;

}

public void setTelephoneNumber(String telephoneNumber) {

this.telephoneNumber = telephoneNumber;

}

public Name getName() {

return name;

}

public Address getAddress() {

return address;

}

public String getTelephoneNumber() {

return telephoneNumber;

}

@Override

public String toString() {

return name + "@" + address + "@" + telephoneNumber;

}

}