| **Class** | **Instance Variables** | **Constructors & Methods** |
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| PassengerVehicle  (Abstract) | String vehicleCode;  String make;  String model; String vehicleType;  Int passengerCapacity; | public PassengerVehicle(final String vehicleCode,  final String make,  final String model,  final int capacity)  public static void validCapacity (final int capacity)  public String destination();  getters and setters for all non-final fields  toString()  validation methods as needed |
| Airplane  extends PassengerVehicle  implements Bookable | String flightDest;  String headPilot; | public AirPlane(final String vehicleCode,  final String make,  final String model,  final int capacity,  final String flightDest,  final String headPilot)  getters and setters for all non-final fields  toString()  validation methods as needed  override the abstract methods |
| CruiseShip  extends PassengerVehicle  implements Bookable | String cruiseLiner;  String rout;  String shipCaptain; | public CruiseShip(String vehicleCode,  String make,  String model,  int capacity,  String cruiseLiner,  String route,  String shipCaptain)  getters and setters for all non-final fields  toString()  validation methods as needed  override the abstract methods |
| Train  extends PassengerVehicle  implements Bookable | String railWayCompany;  Boolean isHighSpeed;  String cityDest  String trainDriver; | public Train(String vehicleCode,  String make,  String model,  int capacity,  String railWayCompany,  Boolean isHighSpeed,  String cityDest,  String trainDriver)  getters and setters for all non-final fields  toString()  validation methods as needed  override the abstract methods |
| Bus  extends PassengerVehicle  implements Bookable | String busLiner;  String busType;  String route  String busDriver; | public Bus(String vehicleCode,  String make,  String model,  int capacity,  String busLiner,  String busType,  String route,  String busDriver)  getters and setters for all non-final fields  toString()  validation methods as needed  override the abstract methods |
| Person | String firstName;  String lastName;  String gender  String ageGroup | public Person(final String firstName,  final String lastName,  final String ageGroup)  getters and setters for all non-final fields  toString()  validation methods as needed |
| Bookable (Interface) |  | void book(Person passenger); |
| TravelAgency | String name;  Map<String, Passenger> Person;  List<PassengerVehicle> vehicleDB; | public TravelAgency(final String name)  void addPassenger( String vehicleCode, Person Passenger)  void addVehicleDB (final PassengerVehicle vehicle)  getters and setters for all non-final fields  validation methods as needed |
| StringValidator |  | public static String validString (final String string)  check all the strings in the package to not be null or blank |
| AgencyGui | private final TravelAgency agency; | MenuBar:  **File:**  Save Data  Exit  **Agency:**  Passenger(Vehicle code, first name, lastname, group age)(being able to edit, save, delete, and clear)  Vehicle(Vehicle code, make, model, vehicle type.etc)(explain where the destionation is)  New Passenger: adding the new passenger  About:  Write about the writer and assignment |
| Other Considerations |  | Your solution will utilize some of the various techniques we have been discussing in class. These include proper validation of all constructor and method parameters, try with resources, initialization blocks, Exception Handling, etc. |