

GrandParent Class:

| Transportation |
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| <ul style="list-style-type: none">- name : String- averageSpeed : double- cost : double- purchaseType : String- purchased : boolean- numPurchased : int- maxPassengers : int- travellInstructions : String |
| <p>Constructor: Transportation(name: String, averageSpeed: double, cost: double, purchaseType : String, purchased : boolean, numPurchased : int, maxPassengers : int, travellInstructions : String)</p> <ul style="list-style-type: none">+ getName() : String+ setName(name : String)+ getAverageSpeed() : double+ setAverageSpeed(averageSpeed : double)+ getCost() : double+ setCost(cost : double)+ getPurchaseType() : String+ setPurchaseType(purchaseType : String)+ getPurchased() : boolean+ setPurchased(purchased : boolean)+ getMaxPassengers() : int+ setMaxPassengers(maxPassengers : int)+ getNumPurchased() : int+ setNumPurchased(numPurchased : int)+ getTravellInstructions() : String+ setTravellInstructions(travellInstructions : String)+ computeCost(numPassengers : int, cost : double)+ toString() : String |

Parent Classes:

| WaterTransportation |
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| Inherits from : Transportation <ul style="list-style-type: none">- waterType : String |
| Constructor : WaterTransportation(name: String, averageSpeed: double, cost: double, purchaseType : String, purchased : boolean, numPurchased : int, maxPassengers : int, travelInstructions : String, waterType : String) <ul style="list-style-type: none">+ getWaterType() : String+ setWaterType(waterType : String)+ Overridden toString() : String |

| LandTransportation |
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| Inherits from : Transportation <ul style="list-style-type: none">- terrainType : String- numWheels : int |
| Constructor : LandTransportation(name: String, averageSpeed: double, cost: double, purchaseType : String, purchased : boolean, numPurchased : int, maxPassengers : int, travelInstructions : String, terrain : String, numWheels : int) <ul style="list-style-type: none">+ getTerrain() : String+ setTerrain(terrain : String)+ getNumWheels() : int+ setNumWheels(numWheels : int)+ Overridden toString : String |

| AirTransportation |
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| Inherits from : Transportation <ul style="list-style-type: none">- altitude : int |
| Constructor : AirTransportation(name: String, averageSpeed: double, cost: double, purchaseType : String, purchased : boolean, numPurchased : int, maxPassengers : int, travelInstructions : String, altitude : int) <ul style="list-style-type: none">+ getAltitude() : int+ setAltitude(altitude : int)+ Overridden toString() : String |

LandTransportation Child Classes:

| Automobile |
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| Inherits from : LandTransportation <ul style="list-style-type: none">- make : String- model : String- year : int |
| Constructor : Automobile(name: String, averageSpeed: double, cost: double, purchaseType : String, purchased : boolean, numPurchased : int, maxPassengers : int, travelInstructions : String, terrain : String, numWheels : int, make : String, model : String) + getMake() : String + setMake(make : String) + getModel() : String + setModel(model : String) + getYear() : int + setYear(year : int) + toString() : String |

| Bike |
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| Inherits from : LandTransportation <ul style="list-style-type: none">- brand : String- numGears : int |
| Constructor : Bike(name: String, averageSpeed: double, cost : double, purchaseType : String, purchased : boolean, numPurchased : int, maxPassengers : int, travelInstructions : String, terrain : String, numWheels : int, brand : String, numGears : int) + getBrand() : String + setBrand(brand : String) + getNumGears() : int + setNumGears(numGears : int) + toString() : String |

| Bus |
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| Inherits from : LandTransportation <ul style="list-style-type: none">- routeNum : int |
| Constructor : Bus(name: String, averageSpeed: double, cost: double, purchaseType : String, purchased : boolean, numPurchased : int, maxPassengers : int, travelInstructions : String, terrain : String, numWheels : int, routeNum : int) + getRouteNum() : int + setRouteNum(routeNum : int) + toString() : String |

| Train |
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| Inherits from : LandTransportation <ul style="list-style-type: none">- fuelType : String |
| Constructor : Train(name: String, averageSpeed: double, cost: double, purchaseType : String, purchased : boolean, numPurchased : int, maxPassengers : int, travelInstructions : String, terrain : String, numWheels : int, fuelType : String) + getFuelType() : String + setFuelType(fuelType : String) + toString() : String |

WaterTransportation Child Classes:

| Boat |
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| Inherits from : WaterTransportation <ul style="list-style-type: none">- boatName : String- numEngines : int |
| Constructor : Boat(name: String, averageSpeed: double, cost: double, purchaseType : String, purchased : boolean, numPurchased : int, maxPassengers : int, travelInstructions : String, waterType : String, numEngines : String, boatName : String) + getNumEngines() : int + setNumEngine(numEngines : int) + getBoatName() : String + setBoatName(boatName : String) + toString() : String |

| Ship |
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| Inherits from : WaterTransportation <ul style="list-style-type: none">- shipName : String- cargoType : String |
| Constructor : Boat(name: String, averageSpeed: double, cost: double, purchaseType : String, purchased : boolean, numPurchased : int, maxPassengers : int, travelInstructions : String, waterType : String, cargoType : String, shipName : String) + getCargoType() : String + setCargoType(cargoType : String) + getShipName() : String + setShipName(shipName : String) + toString() : String |

| Submarine |
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| Inherits from : WaterTransportation <ul style="list-style-type: none">- depth : double |
| Constructor : Boat(name: String, averageSpeed: double, cost: double, purchaseType : String, purchased : boolean, numPurchased : int, maxPassengers : int, travelInstructions : String, waterType : String, depth : double) + getDepth() : double + setDepth(depth : double) + toString() : String |

AirTransportation Child Classes:

| Plane |
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| Inherits from : AirTransportation - airline : String |
| Constructor : Plane(name: String, averageSpeed: double, cost: double, purchaseType : String, purchased : boolean, numPurchased : int, maxPassengers : int, travelInstructions : String, altitude : int, airline : String) + getAirline() : String + setAirline(airline : String) + toString() : String |

| Dirigible |
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| Inherits from : AirTransportation - color : String |
| Constructor : Dirigible(name: String, averageSpeed: double, cost: double, purchaseType : String, purchased : boolean, numPurchased : int, maxPassengers : int, travelInstructions : String, altitude : int, color : String) + getColor() : String + setColor(color : String) + toString() : String |

| Helicopter |
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| Inherits from : AirTransportation - numBlades : int |
| Constructor : Helicopter(name: String, averageSpeed: double, cost: double, purchaseType : String, purchased : boolean, numPurchased : int, maxPassengers : int, travelInstructions : String, altitude : int, numBlades : int) + getNumBlades() : int + setNumBlades(numBlades : int) + toString() : String |

| HotAirBalloon |
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| Inherits from : AirTransportation - basketMaterial |
| Constructor : HotAirBalloon(name: String, averageSpeed: double, cost: double, purchaseType : String, purchased : boolean, numPurchased : int, maxPassengers : int, travelInstructions : String, altitude : int, basketMaterial : String) + getBasketMaterial() : String + setBasketMaterial(basketMaterial : String) + toString() : String |