

## -GrandParent Class:

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

## Parent Classes:

WaterTransportation
Inherits from : Transportation - waterType : String
<<Constructor>> WaterTransportation(name: String, averageSpeed: double, cost: double, purchaseType : String, purchased : boolean, numPurchased : int, maxPassengers : int, travelInstructions : String, waterType : String)  + getWaterType() : String + setWaterType(waterType : String) + Overridden toString() : String

LandTransportation
Inherits from : Transportation - 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)  + getTerrain() : String + setTerrain(terrain : String) + getNumWheels() : int + setNumWheels(numWheels : int) + Overridden toString() : String

AirTransportation
Inherits from : Transportation - altitude : int
<<Constructor>> AirTransportation(name: String, averageSpeed: double, cost: double, purchaseType : String, purchased : boolean, numPurchased : int, maxPassengers : int, travelInstructions : String, altitude : int)  + getAltitude() : int + setAltitude(altitude : int) + Overridden toString() : String

## LandTransportation Child Classes:

Automobile
Inherits from : LandTransportation - 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
Inherits from : LandTransportation - 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
Inherits from : LandTransportation - 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
Inherits from : LandTransportation - 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
Inherits from : WaterTransportation - 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
Inherits from : WaterTransportation - 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
Inherits from : WaterTransportation - 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
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
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
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
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