Package Мар # intersections[]:List<Intersection> # roads[]:List<Road> # vehicles[]:List<Vehicle> + createIntersection(String, Road):boolean + addVehicle(Vehicle):boolean + removeVehicle(Vehicle):boolean + getNumberOfVehiclesOnMap():int + getAllVehiclesOnMap():Vehicle[] + getBoardState:Intersection, Road + doesIntersectionExist(String):boolean Attributes Intersection Road - intersectionName:String - roadName:String - intersectionID:int roadID:int - roadsAttachedTo[]:Road - maxLanes:int = 3 trafficLights[]:TrafficLight maxVehiclesPerLane:int - currLanesGoing[]:int - topIntersection:Intersection - vehiclesHere[]:Vehicle - bottomIntersection:Intersection - vehiclesOnThisRoad:Vehicle[] + changeTrafficLight() + attachRoad(Road) + Road(String,) + removeRoad(Road) + addVehicle(lane):boolean + isRoadAttached(Road) + removeVehicle(Vehicle):boolean - updateVehiclesOnRoad(Vehicle) + addVehicle(Vehicle):boolean + removeVehicle(Vehicle):boolean + setTopIntersection(Intersection):boolean isVehicleInThisSection(Vehicle):boolean + setBottomIntersection(Intersection):boolean + isVehicleOnThisRoad(Vehicle):boolean «enumeration» TrafficLightColor TrafficLight + lightColor:TrafficLightColor = RED _ «use» – 🗦 • RED YELLOW + changeLightColor(TrafficLightColor) GREEN + getLightColor():TrafficLightColor

Assignment 1 UML

Abhijeet Prajapati | February 4, 2022

