

**Gestão de um metropolitano**

**Segunda Entrega**

Bases de Dados

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Modelo Relacional

**SubwayTrack**(id, name, color, letter, initialStationID -> MetroStation, finalStationID -> MetroStation)

**StationBelongs**(trackID -> SubwayTrack, stationID -> MetroStation)

**MetroStation**(id, name, numberOfTracks)

**TrainTime**(id, source, destination, departureDate, arrivalDate, journeyID -> Journey)

**Journey**(id, departureDate, arrivalDate, trainTimeID -> TrainTime, trainID -> Train)

**Train**(id, type, maxSpeed, maxLoad, maxNumberOfPassengers)

**TicketMachine**(id)

**TicketMachineBelongs**(ticketMachineID -> TicketMachine, metroStationID -> MetroStation)

**ValidationMachine**(id)

**ValidationMachineBelongs**(validationMachineID -> ValidationMachine, metroStationID -> MetroStation)

**Validation**(validationMachineID -> ValidationMachine, ticketID -> Ticket, validationDate, terminationDate)

**Ticket**(id, type, numberOfTrips, price)

**BuyTicket**(ticketID -> Ticket, ticketMachineID -> TicketMachine)

**ReloadTicket**(ticketID -> Ticket, ticketMachineID -> TicketMachine, reloadDate)

**Person**(id, name, nif, dateOfBirth, birthPlace)

**Passenger**(id, discount, personID -> Person)

**Employee**(id, wage, socialSecurityID, personID -> Person)

**TrainOperator**(id, licenseNumber, employeeID -> Employee)

**TicketInspector**(id, employeeID -> Employee)

**OperateTrain**(journeyID -> Journey, trainOperatorID -> TrainOperator)

**TicketInspection**(journeyID -> Journey, ticketInspectorID -> TicketInspector)

Diagrama UML Atualizado

