Budget and Financials of MBTA

Milestone: Logical Model (Relational model)

Group 21
Gouru Karthikeya Reddy
Giri Manohar Vemula

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Percentage of Effort Contributed by Student 1: 50
Percentage of Effort Contributed by Student 2: 50

Signature of Student 1: Gouru Karthikeya Reddy Signature of Student 2: Giri Manohar Vemula

Submission Date: 02-26-2023

Logical Model (Relational model)

Expense (Invoice no, Billing date, Amount quater)

Electricity (Station code, Invoice no)

Fuel (<u>Invoice no, Vehicle type</u>, Charge type, charge per unit, quantity)

Salary (Invoice No, Employee id, Start date, End date, No of hours, Amount)

Maintenance (<u>Invoice no</u>, Advertisement, Repairs, Renovation)

Train Station (Station code, station name, Commuter type)

Commuter (Vehicle ID, Station name, Machines, Dashboards)

Pass Generator (Gen_id, Station_code, Location)

Pass (Pass id, Gen id, Balance, Expiry date, Type)

Scanner <u>id</u>, Gen id, Location)

Transaction (<u>Transaction_id</u>, <u>Pass_id</u>, <u>Scanner_id</u>, <u>Transaction_date</u>, Quarter, <u>Transaction_time</u>, Amount)

Vehicles (Vehicle id, Model, Color, Filling)

Subway (Vehicle id, Ticket Price, Type)

Bus (Vehicle id, Ticket Price, Route no)

Commuter Rail (<u>Vehicle_id</u>, Ticket_Price, Type)

Employees (<u>Employee_id, Dept_id, SSN</u>, DOB, Hours, Wage_per_hour, Address, Last_Name, First_Name, *WorkFor*)

Department(<u>Department_id</u>, Department_name, Location)