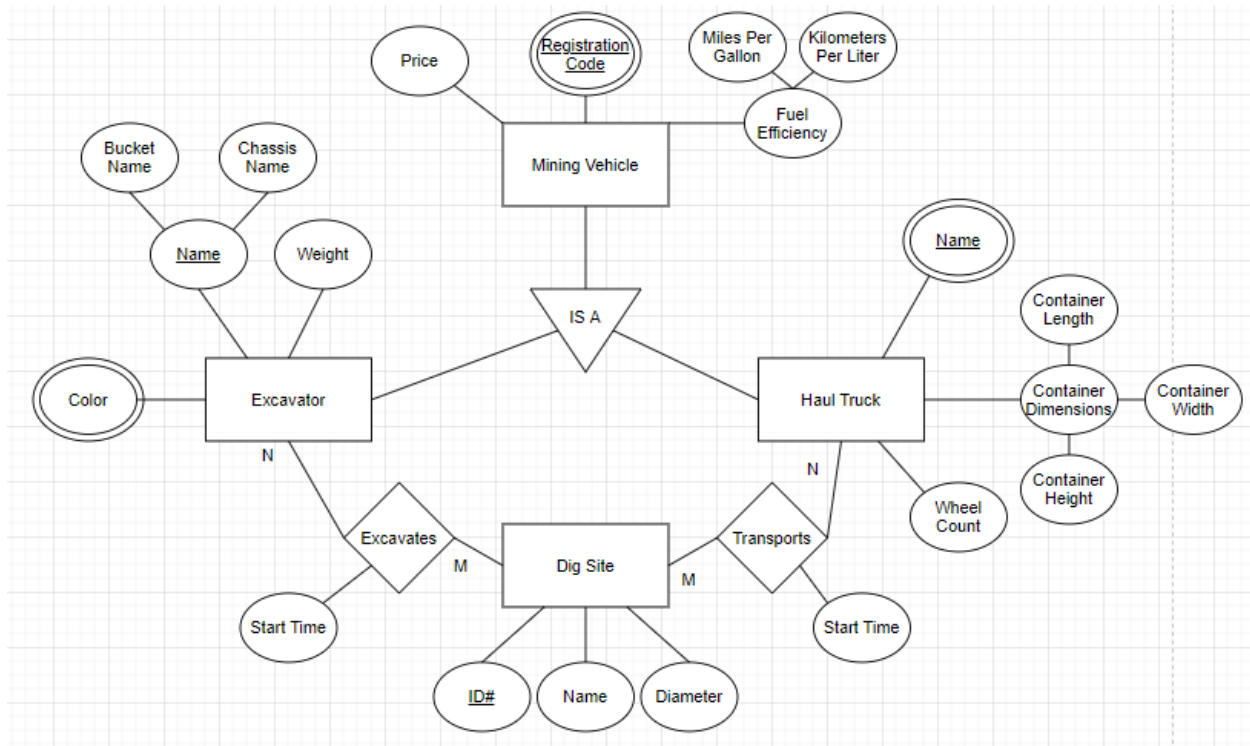


Jacob Hreshchyshyn

1.

A mining company wants to modernize by tracking its mining equipment in a database. This database would keep track of the two main vehicles that help a mine run: excavators and haul trucks. In addition to cataloguing the prices and fuel efficiency of each vehicle, the database will keep record specific vehicle attributes that can help determine whether a vehicle is suitable to operate at a dig site. Vehicles are generally designated with a Registration Code, but also have specific names that indicate whether a vehicle is an excavator or a haul truck.

2.



3.

- Each Mining Vehicle has a price, an identifying registration code, and a fuel efficiency level, which is specified by both miles per gallon and kilometers per liter.
- Both Excavators and Haul Trucks are Mining Vehicles.

- Excavators have a weight.
- Excavators have an identifying name, which is broken down into a bucket name and a chassis name.
- Excavators have a color, which can be one of many.
- Haul Trucks have an identifying name of multiple values.
- Haul Trucks have container dimensions, which are broken down into a container height, a container length, and a container width.
- Haul Trucks have a wheel count.
- Dig Sites have an identification number, a name, and a diameter.
- Many Haul Trucks can transport material from many Dig Sites. The time a Haul Truck transports material is recorded at its start time.
- Many Excavators can dig at many Dig Sites. The time an Excavator excavates at a Dig Site is recorded at its start time.