author: @timusfed ... [⬦ - relation]

1. Person(email, phone num., <u>serial num.</u>, name, surname, DOB, nationality, sex) *// (1, 1) : (1, 1)*

   Address(<u>person, city, street, house</u>)
     FK: (person) ⊆ Person(serial num.)

2. Driver(<u>passport</u>, <u>driver licence</u>)
     FK: (passport) ⊆ Person (serial num)

   ⬦ Colleague(<u>driver licence</u>, colleague) *// (0, n) : (0, 1)*
     FK: (driver licence) ⊆ Driver (driver licence)
     FK: (colleague) ⊆ Driver (driver licence)

   Passenger(<u>passport</u>, discount)
     FK: (passport) ⊆ Person (serial num)

3. Carrier(<u>reg. num.</u>, name)

   ⬦ Worker(carrier, <u>driver</u>) *// (1, n) : (1, 1)*
     FK: (driver) ⊆ Driver(licence)
     FK: (carrier) ⊆ Carrier(reg. num.)

4. Ticket(<u>book num.</u>, seat, type)

   ⬦ Has(passenger, <u>ticket</u>) *// (1, n) : (1, 1)*
     FK: (passenger) ⊆ Passenger (passport)
     FK: (ticket) ⊆ Ticket (book num.)

5. Train(<u>prefix</u>, seat count, type)

   ⬦ Property(carrier, <u>train</u>) *// (1, n) : (0, 1)*
     FK: (carrier) ⊆ Carrier(reg. num.)
     FK: (train) ⊆ Train(prefix)

6. Station(<u>city, street, building</u>, title)

   Platform(<u>city, street, building, code</u>, status, station)
     FK: (city, street, building) ⊆ Station(city, street, building)

   ⬦ Has(<u>city, street, building, code</u>) *// (1, n) : (1, 1)*
     FK: (city, street, building) ⊆ Station(city, street, building)
     FK: (city, street, building, code) ⊆ Platform(city, street, building, code)

7. Ride(<u>train, date, time</u>, remark)
      FK: (train) ⊆ Train(prefix)

◊ Assigned_d(<u>train, date, time, driver,</u> position, licence) *// (0, n) : (1, n)*
    FK: (train, date, time) ⊆ Ride(train, date, time)
    FK: (driver) ⊆ Driver(licence)

◊ Assigned_t(<u>train, time, date</u>) *// (0, n) : (1, 1)*
    FK: (train) ⊆ Train(prefix)
    FK: (train, time, date) ⊆ Ride(train, time, date)

◊ Assigned_p(<u>train, date, time,</u> city, street, building, code) *// (0, n) : (1, 1)*
    FK: (train, date, time) ⊆ Ride(train, date, time)
    FK: (city, street, building, code) ⊆ Platform(city, street, building, code)

◊ Registered(<u>train, date, time, ticket</u>) *// (1, n) : (1, n)*
    FK: (train, date, time) ⊆ Ride(train, date, time)
    FK: (ticket) ⊆ Ticket (book num.)

◊ Departure(<u>train, date, time</u>, city, street, building) *// (0, n) : (1, 1)*
    FK: (train, date, time) ⊆ Ride(train, date, time)
    FK: (city, street, building) ⊆ Station(city, street, building)

◊ Destination(<u>train, date, time</u>, city, street, building) *// (0, n) : (1, 1)*
    FK: (train, date, time) ⊆ Ride(train, date, time)
    FK: (city, street, building) ⊆ Station(city, street, building)