**Description of the project**

**Passengers** of the train system can look for available journeys based on predefined criteria like date, station, and other details. Information on journeys, trains, routes, stations, prices, services, and schedules is kept up to date by the system.

The **Trip object** has attributes like the trip ID, status, dates, days, and times that are available, as well as the origin and destination stations, and it represents a particular journey.

The **Trains object** represents specific trains and contains attributes like the train ID, the associated trip ID, the station where the train is boarded, the departure time, the arrival time, the number of segments, the capacity, and the number of open seats.

The **Route entity,** which comprises properties like the route ID, the associated station ID, the train ID, and the station name, indicates a particular path taken by a train.

The **Stops entity** contains characteristics like the stop ID, associated route ID, and stop name and represents each stop along a route.

With characteristics including station ID, station name, and station address, the **Station object** represents a train station. Trains and stations have connections.

The prices connected to routes and services are represented by the **Fares entity**. Along with fare ID, associated route ID, associated service ID, fare price, fare type, and fare rules, it also contains other features.

The **Service entity** has attributes like the service ID, associated train ID, type of service, and description. It reflects the many services provided on trains. Different service levels, such as business class and economy class, are available.

To hold data on the arrival dates for journeys, the system additionally has a **Schedule entity**.

**Passengers** can browse for available journeys, check train details, rates, and schedules, and book according to their preferences using this train system. It allows for flexibility when scheduling travel.

**Steps to get the list of trains given the dates and station names.**

1. Select station ID that match station name
2. Select the fare ID that have the selected station ID
3. Find the train ID that have schedules on the given date
4. Filter the train schedule based on the selected route ID
5. Select the train information for the selected route ID

Based on this information we can retrieve the train available for the passengers