

UK-TRAINS-PROJECT:



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Types of Trains in UK

Intercity Trains

- These are the fastest and cover long distances, such as:
- LNER: Connects London with Northern England and Scotland (e.g., Edinburgh).
- Avanti West Coast: Links London with cities like Manchester, Birmingham, and Liverpool.
- Great Western Railway: Runs between London and the South West (e.g., Bristol and Cornwall).

Regional Trains

These connect towns and cities within the same region. They are not as fast as Intercity trains but serve more local destinations.

Commuter Trains

Operate in major cities like London and Birmingham, mainly used by people going to work or university.

London Underground

The oldest and one of the largest metro systems in the world, with 11 lines covering almost all of London.

Ticketing System

Tickets can be purchased from

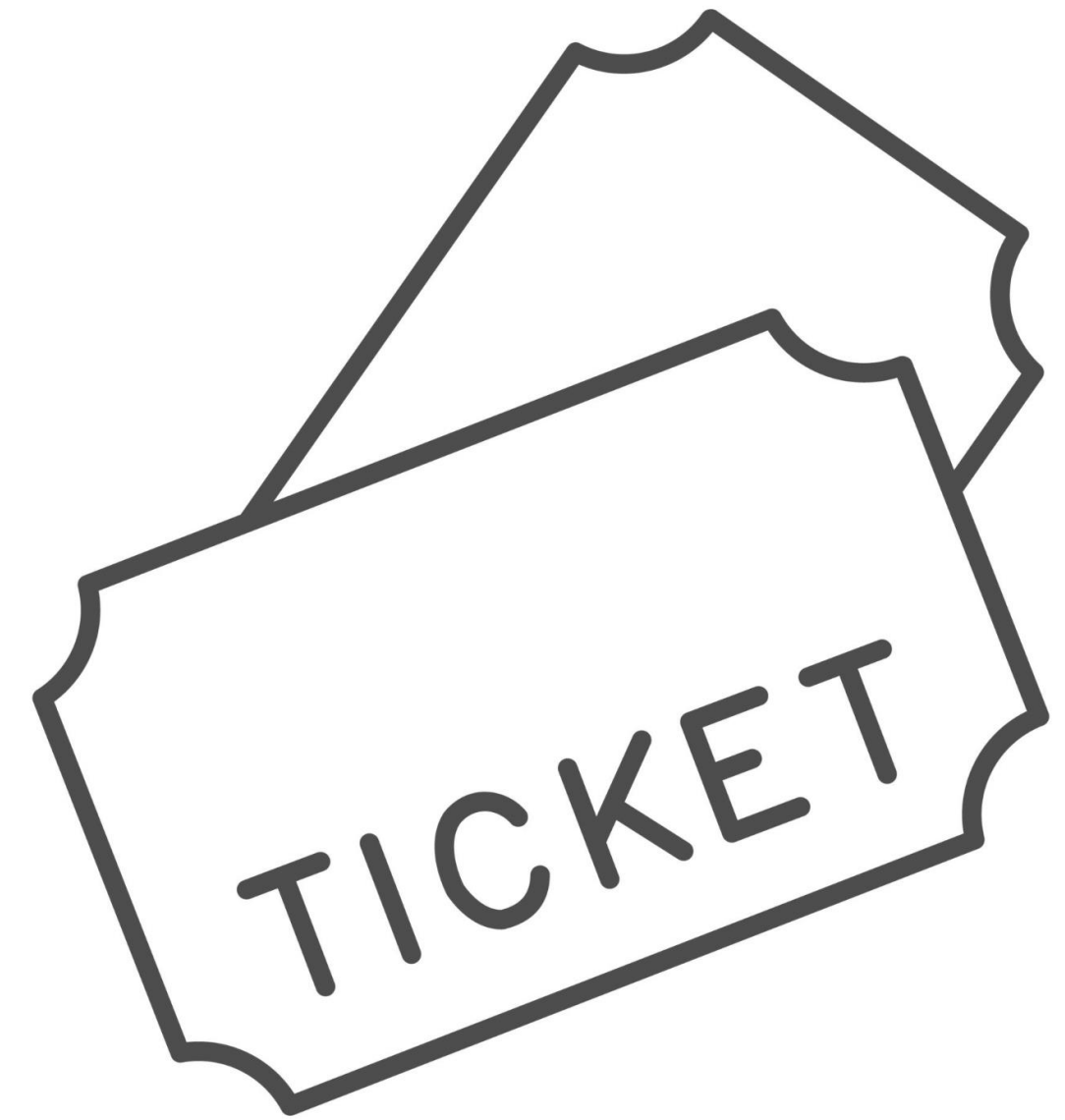
- Ticket offices at stations
- Self-service machines
- Online (most popular websites: National Rail or Trainline)

Here are three main types of tickets

- Advance: Cheaper but valid only for a specific time and date.
- Off-Peak: lower price/out of peak times.
- Anytime: More flexible with timing but slightly more expensive.

Discount cards available

- Railcard: Gives 30% discount for ages 16-25, 26-30, or 60+.
- Two Together Railcard: Ideal if you often travel with the same person.



Data set contents

We received 2 .csv files

first one contains the data of the project
which composed of 31,653 rows and 18 columns.

The other .csv file named dictionary which translates
the data headers in the data set file.

Data Preprocessing:

Tools used:



Data Visualization:



Forecasting



- 1- Campaign for Rail Cared**
- 2- Campaign for enhancing online purchase**
- 3- Corrective action for most delayed/cancelled routes**
- 4- Impact of advance on purchase (campaign for ticket type)**
- 5- First class reserving enhance campaign**
- 6- Operation decision for most used & unused routes**
- 7- Refund financial impact**