Regional delta of Ticket - Departure date trend Team Akira

Delta of ticket issue and departure date is mostly based on ticket price.

But there are other factors like regional and seasonal preferences.

My solution allows the user to select a origin and destination (GPS location) and the system predicts delta of average customer's ticket booking date ahead of their departure date.

Use Cases

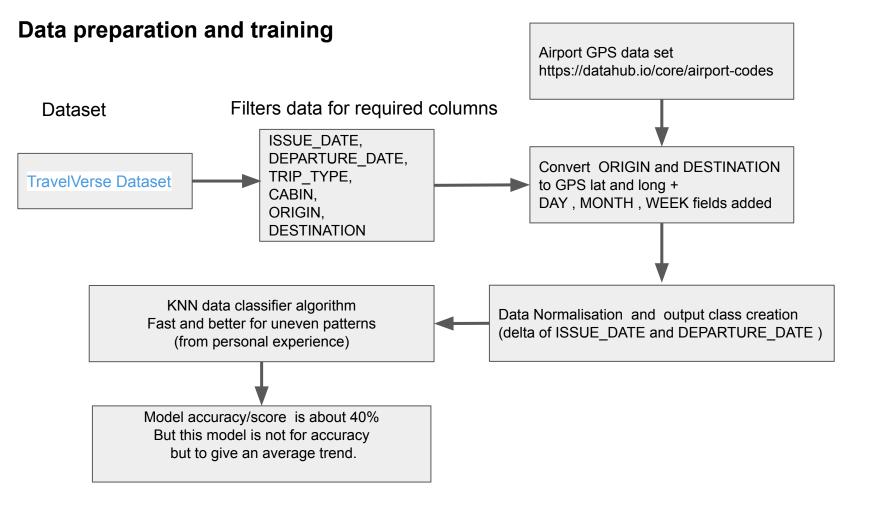
B₂B

- The solution can be tuned for each flight company to plan their flights in advance.
- can be plugged into other ML models for predicting type of trip (holiday trip or work trip, etc..)

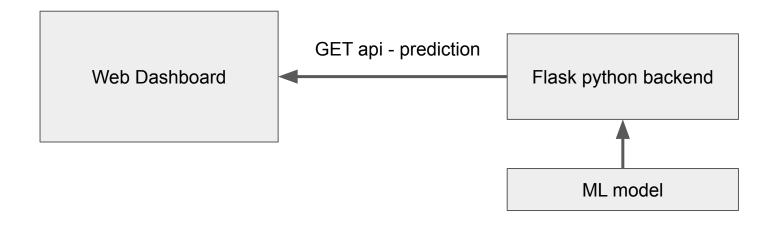
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- The prediction can be used by the marketing / tour companies to plan their fares and offers

There are more use-case possibilities and insights we can get from these predictions like, how regional mindset is related to booking time . seasonal booking, etc..



Usage Architecture



Datasets used

Airport code dataset - gives GPS information and location information https://datahub.io/core/airport-codes

TravelVerse Sample Dataset -

My laptop was not keeping up with the full-dataset so used sample dataset

Tools used

Data preparation

- Pandas
- Python
- Pickle

ML Training

- Sklearn
- Python

Backend API

- Sklearn
- Python
- Flask

Frontend Dashboard

- Web based (HTML, CSS, JS)
- HERE maps
- Chart js