Low-Level Design (LLD)
Flight Ticket Price Prediction

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Document Version control

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20/12/2022	1.0	Introduction, Why this Low-Level Design? , Scope	Varun Salunkhe
3/1/2023	1.1	Project Introduction, Problem Statement	Saurabh Jumnalkar
15/1/2023	1.2	Data Information, Data Requirement, Data Content, About this File	Saurabh Jumnalkar
28/1/2023	1.3	Architecture	Sourabh Hawale

Contents

Document Version Control

1. Introduction

1.1 Why this Low-Level Design?

The goal of the Low-level design document (LLDD) is to give the internal logic design of the actual program code for the Heart Disease Diagnostic Analysis dashboard. LLDD describes the class diagrams with the methods and relations between classes and program specs. It describes the modules so that the programmer can directly code the program from the document.

1.2 Scope

Low-level design (LLD) is a component-level design process that follows a step-by-step refinement process. The process can be used for designing data structures, required software architecture, source code, and ultimately, performance algorithms. Overall, the data organization may be defined during requirement analysis and then refined during data design work.

1.3 Project Information

For purchasing an airplane ticket, the traditional purchase approach is to buy a ticket far in advance of the flight's departure date to avoid the risk that the price may increase quickly before the date of departure. However, this is not always the case; if airline corporations wish to increase sales, they can lower prices. Airlines employ a variety of factors to decide flight ticket rates, including whether the trip is around the holidays, the quantity of available seats on the plane, and even the month. Some of the variables can be seen, while others are hidden. In this context, customers are attempting to discover the best day to purchase a ticket, while airline firms, on the other hand, are attempting to maximize overall revenue.

2. Problem Statement

Flight ticket prices can be something hard to guess, today we might see a price, check out the price of the same flight tomorrow, it will be a different story. We might have often heard travelers saying that flight ticket prices are so unpredictable. As data scientists, we are gonna prove that given the right data anything can be predicted. Here you will be provided with prices of flight tickets for various airlines between the months of March and June of 2019 and between various citie

3. Data Information

3.1 Data Requirements

Although this dataset was originally contributed to the UCI Machine Learning repository nearly 30 years ago, mushroom hunting (otherwise known as "shrooming") is enjoying new peaks in popularity. Learn which features spell certain death and which are most palatable in this dataset of mushroom characteristics. And how certain can your model be?

3.2 Data Content

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3.3 About this File
- Size of test set: 2671 records

- FEATURES: Airline: The name of the airline.

- Date_of_Journey: The date of the journey

- Source: The source from which the service begins.

- Destination: The destination where the service ends.

- Route: The route taken by the flight to reach the destination.

- Dep_Time: The time when the journey starts from the source.

- Arrival_Time: Time of arrival at the destination.

- Duration: Total duration of the flight.

- Total_Stops: Total stops between the source and destination.

- Additional_Info: Additional information about the flight

- Price: The price of the ticket

4. Architecture

```
START → Get Data From Source → Convert to Pandas DF → Data Validation
                    ↑                                          ↓
Model Training ← Ceating Model ← Statistical Analysis ← Data cleaning
        ↓
    validation → Prediction → UI Developement
                                    ↓
Push to GITHUB ← Deployment
        ↓
      END
```