19CSP14 - PROFESSIONAL READINESS FOR INNOVATION, EMPLOYABILITY AND ENTREPRENEURSHIP

AIRLINES DATA ANALYTICS FOR AVIATION INDUSTRY

FACULTY MEMBER NAME : S.Siva saravana Babu

TEAM MEMBER

1. R.Saranya
2. L.Deepalakshmi
3. T.Priyadharshini
4. Tippani Lavanya

PROBLEM STATEMENT:

To build a user interface application to analyze delays so that the airport organization can adjust and allocate resources (airports) in the vicinity quickly.

ABSTRACT

Delays in air transportation are a major concern affecting the economy, passengers and the aerospace industry. This problem requires a specific estimation of future flight delays which can be implemented to improve airport operations and customer satisfaction.. For example, we offer an interactive dashboard where users can log their contact details to book flights and anticipate delays, if they occur.

LITERATURE SURVEY

1.Predictive Analytics Platform For Airline Industry

(P.H.K Tissera ,M.A.L.Perera , K.T. Waduge **,** D. Kasthurirathna **,2020)**

- In this study, inquire about saying to plan and create the most excellent fit forecast flight OD level passenger request based on the verifiable information.
- An precise instrument to anticipate income for future months of OD(Origin Goal) is done utilizing admission and traveler information .

- The income is inferred by the number of traveler and the fare they pay which shif for each flight.

2)Development of the approach to the analysis of aviation industry's adaptation to seasonal disruptions

(Sofiyat Bakreena, Elizaveta Markovskayaa,*, Igor Merzlikinb, Asiiat Mottaeva 2022)

- In this,study is to develop a model that will forecast the stability of the aviation industry to various failures.
- The focus is primarily on the COVID-19 period as it has had a significant impact on the work of airlines and has had a huge economic impact depressed conditions.
- From analysis using a model of predictive machine learning, we can see that it is a dependable approach when it comes to choosing an operator for Managing failures, and the model could help air carriers identify likely risk factors and optimizing their business strategy**.**

3)Flight Delay Prediction: Data Analysis and Model Development

(Azib Anees , Wei Huang 2021)

- This paper develops a prediction version through analysing the facts of domestic flights.
- The proposed version profits perception into elements inflicting flight delays, cancellations and the connection among departure and arrival put off the use of exploratory statistics analysis.
- The Random Forest (RF) set of rules is used to educate and take a look at the huge dataset to assist the version development.

4)Exploratory Data Analysis on Aviation Dataset

(Saba Firdous, Haseeba Fathiya, Lipsa Sadath -2021)

- In this work, Saba Firdous, Haseeba Fathiya and Lipsa Sadath collected aviation information and carried out analyses.
- The first stage was to categorize all events according to their level of risk. The second stage wasto use a SVM to learn inter-event relationships.

- The Final stage consisted of combining the results of the two models to improve the precision of the forecasts made.

5)Airline Member Customer Value Analysis: Data Visualization

(Haipei Zhong ,2021)

- for the airlines, the pressure of competition has increased year after year and there are also conflicting relations between the multiple and different airlines.
- The use of the different customer factors provided by the existing customer information set may make use of data visualization methods for data analysis.
- Furthermore, relevant marketing strategies can be offered to enhance the level of the company as much as possible.

REFERENCES

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2) Sofiyat Bakreena, Elizaveta Markovskayaa,*, Igor Merzlikinb, Asiiat Mottaeva "Development of the approach to the analysis of aviation industry's adaptation to seasonal disruptions"2020 The Authors. Published by ELSEVIER B.V.
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3) **Azib Anees , Wei Huang "Flight Delay Prediction: Data Analysis and Model Development"Published in:** 2021 26th International Conference on Automation and Computing (ICAC) **Publisher:** IEEE

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