

## STUDY BOARD

**WORK TYPE** (*Internship*)

**STUDENT NAME:** DHYEY BHATT

**DEPARTMENT/SCHOOL:** SCHOOL OF TECHNOLOGY (BTech CSE)

**INDUSTRY NAME:** FORAGE

**DURATION:** 1 MONTH

**TITLE:** BRITISH AIRWAYS DATA SCIENCE

### 1. Area of work:

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|  | <ul style="list-style-type: none"><li>• <i>Exploratory Data Analysis</i></li><li>• <i>Web Scraping</i></li><li>• <i>Build Predictive Model</i></li></ul> |
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### 2. Area of discipline:

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|  | <ul style="list-style-type: none"><li>• <i>Data Analysis.</i></li><li>• <i>Data Visualization</i></li><li>• <i>Data Science.</i></li></ul> |
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### 3. Abstract :

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|  | <ul style="list-style-type: none"><li>• <i>Data scientists at British Airways leverage their analytical expertise to deliver tangible impact by offering insightful recommendations, developing cutting-edge tools, and constructing advanced models.</i></li><li>• <i>These contributions play a pivotal role in steering crucial business decisions towards greater success.</i></li><li>• <i>Utilizing data and predictive models enables British Airways to proactively engage and attract customers prior to their holiday journeys, enhancing the customer acquisition process.</i></li></ul> |
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## 4. Highlights:

### TASK-1:

- *Scrape and Collect Customer Feedback:* Employ web scraping techniques to gather valuable customer feedback from various third-party sources.
- *Analysis of Third-Party Data:* Utilize advanced analytical tools and methods to extract meaningful insights from the collected customer feedback.
- *Insightful Presentation in PowerPoint:* Effectively communicate and visualize key findings using PowerPoint, presenting a comprehensive overview of the analyzed third-party data.

### TASK-2:

- *Prepare a Dataset:* Gather and organize relevant data, ensuring its completeness and cleanliness for effective machine learning model training.
- *Train a Machine Learning Model:* Utilize the prepared dataset to train a robust machine learning model, leveraging algorithms suitable for the specific problem or task at hand.
- *Evaluate and Present Findings:* Assess the model's performance through rigorous evaluation metrics and present comprehensive findings, providing insights into its effectiveness and potential implications for decision-making.

## 5. Key learnings/ Takeaways:

- *Throughout my internship, I gained invaluable insights into the practical aspects of Data Science, focusing on Exploratory Data Analysis.*
- *The exposure to real-world projects at British Airways sharpened my ability to frame and address business problem statements effectively.*
- *Working within the data science team, I learned to collaborate with different departments, particularly Data Engineering, to create strategic plans.*
- *The experience not only enhanced my technical skills but also improved my problem-solving skills.*

## 6. Future scope of the study :

### ❖ *Exploratory Data Analysis (EDA):*

- o *Future exploration includes advanced statistical methods, enhanced data visualization, and integration with machine learning for more insightful preprocessing.*

### ❖ *Web Scraping:*

- o *Explore advanced web scraping techniques to enhance data collection efficiency, potentially incorporating dynamic content extraction or handling more complex website structures.*

### ❖ *Data Manipulation:*

- o *Deepen skills in data manipulation by incorporating more complex transformations, handling large datasets efficiently, and exploring automation tools for streamlined processes.*

### ❖ *Python:*

- o *Continue expanding proficiency in Python by exploring more advanced libraries and frameworks relevant to data science, such as TensorFlow or PyTorch for machine learning tasks.*

### ❖ *Machine Learning:*

- o *Delve into advanced machine learning algorithms, including deep learning models, reinforcement learning, and transfer learning, to enhance predictive capabilities and model accuracy.*

### ❖ *Data Science:*

- o *Explore broader applications of data science within the airline industry, such as optimizing flight operations, demand forecasting, or personalizing customer experiences through advanced analytics.*

### ❖ *Data Visualization:*

- o *Enhance data visualization skills by exploring more interactive and dynamic visualization tools, such as Plotly or Bokeh, to create compelling and insightful visual representations of complex datasets.*