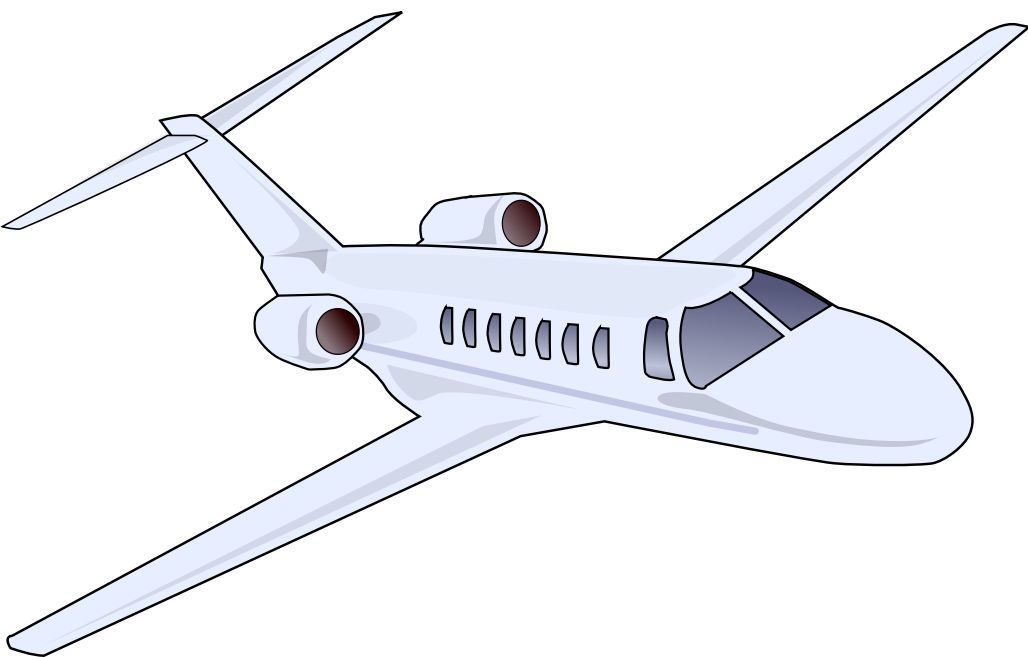


# PROJECT 2: PROTOTYPE IR SYSTEM

ITCS414 INFORMATION RETRIVAL AND STORAGE

## PRIVATE JET SEARCH ENGINE



By

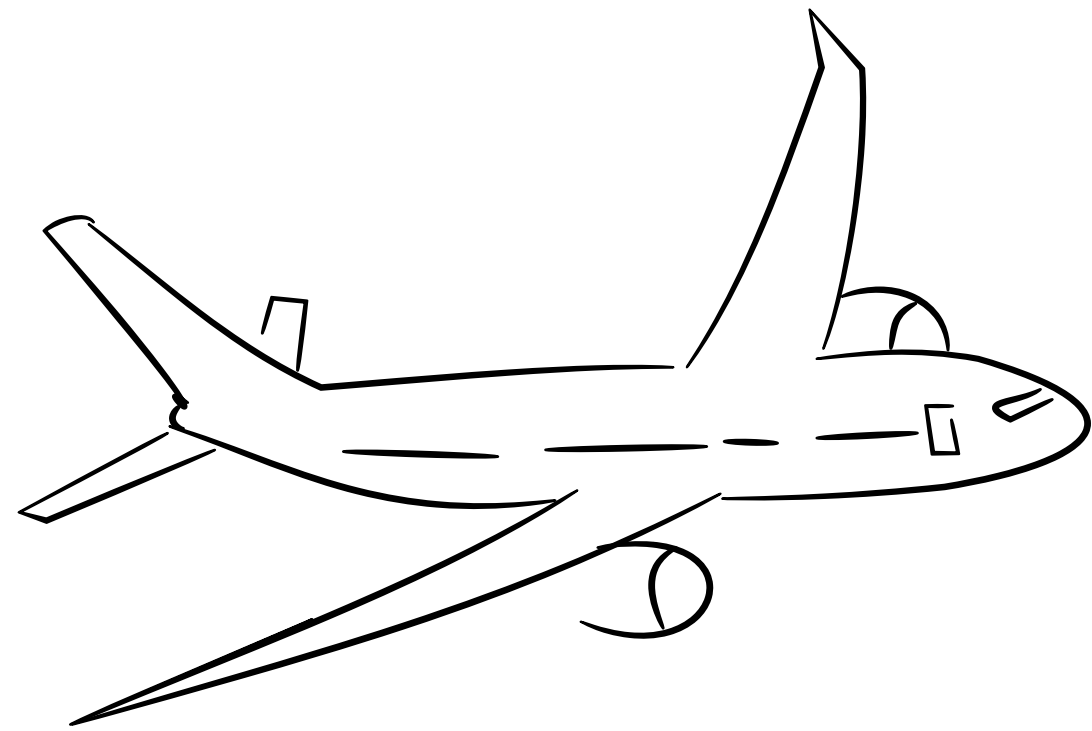
6488002 Sirasan Srihirapattanakul  
6488193 Thanapat Ritiluechai  
6488217 Pattaradnai Kaeodumkoeng



*Private Jet Search*

# WHAT IS OUR SEARCH ENGINE FOR?

The purpose of an airplane search is to help user find information about airplanes which will include Airplane specifications and performance of the plane.



# WHAT IS OUR TARGET USER GROUP?

## **Business Travelers**

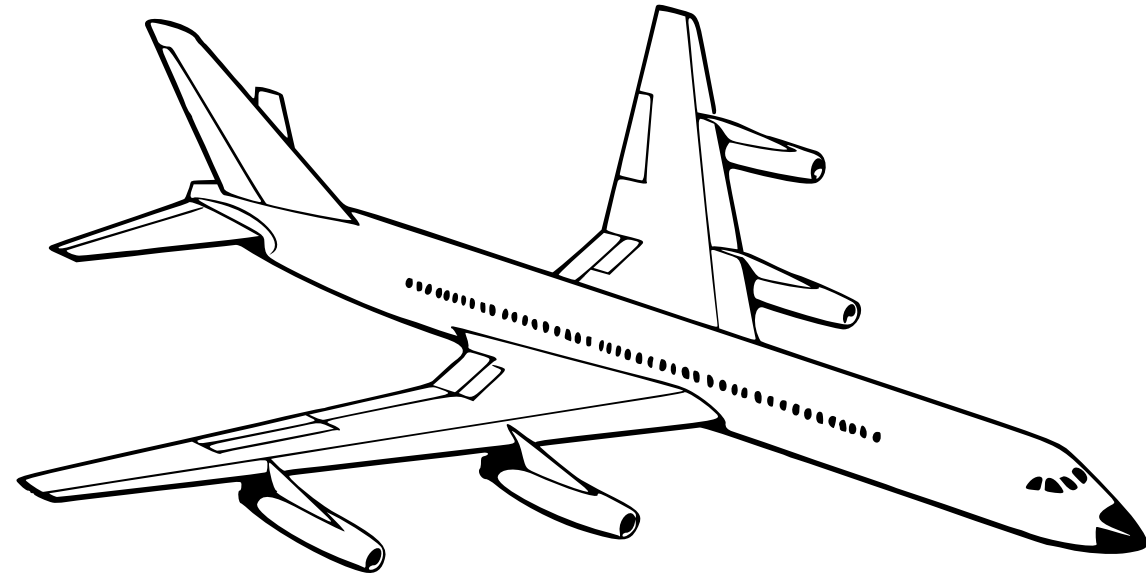
They rely on the platform for work-related trips and meetings. Generally, they have higher incomes due to corporate travel budgets.

## **Wealthy families**

Private jets provide a convenient and luxurious way for families to travel together for vacations or special events.

## **Sports teams**

Private jet allow sports teams to travel quickly and comfortably between venues, reducing fatigue and improving performance.



# WHAT IS OUR DATA SOURCE?



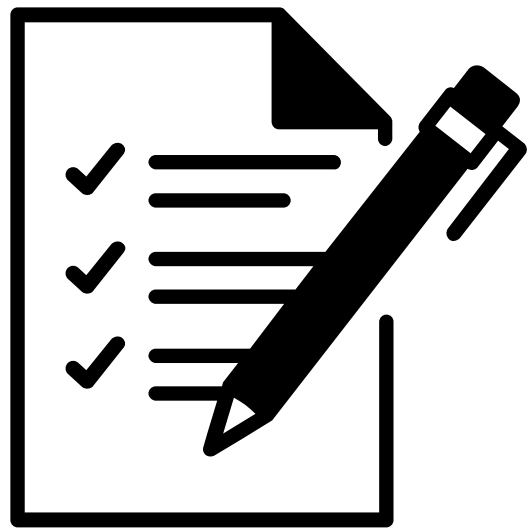
## **AERO TRADER**

Aero Trader is an online marketplace for buying and selling aircraft. It is one of the largest and most popular online resources for aircraft buyers and sellers. The website lists a wide variety of aircraft for sale, including airplanes, helicopters, and jets.

## **ADN - AIRCRAFT SEARCH ENGINE**

ADN - Aircraft Search Engine is a comprehensive platform for finding and researching aircraft. It provides a vast collection of aircraft listings, advanced search filters, in-depth aircraft information, and valuable resources for buyers, sellers, and aviation enthusiasts.

# HOW TO PREPROCESS PRIVATEJET DATA?



## **ENCODE CATEGORICAL DATA**

Categorical data, such as airplane specifications and performance, must be encoded before it can be used by machine learning algorithms. This can be done using a variety of methods.

## **CONVERT DATA TYPES**

Some machine learning algorithms require that the data be in a specific format.

## **SCALE THE DATA**

Some machine learning algorithms are sensitive to the scale of the data. This means that you may need to scale the data so that all of the features are on the same scale.

## **CLEAN THE DATA**

This involves identifying and removing any errors or inconsistencies in the data.



## ☰ How to Index the document

*Private Jet Search*

### Document Collection

We have compiled and organized aircraft information from Aero Trader and ADN - Aircraft Search Engine which include aircraft names, production years, descriptions, and image links. This dataset is collected using Excel spreadsheets.

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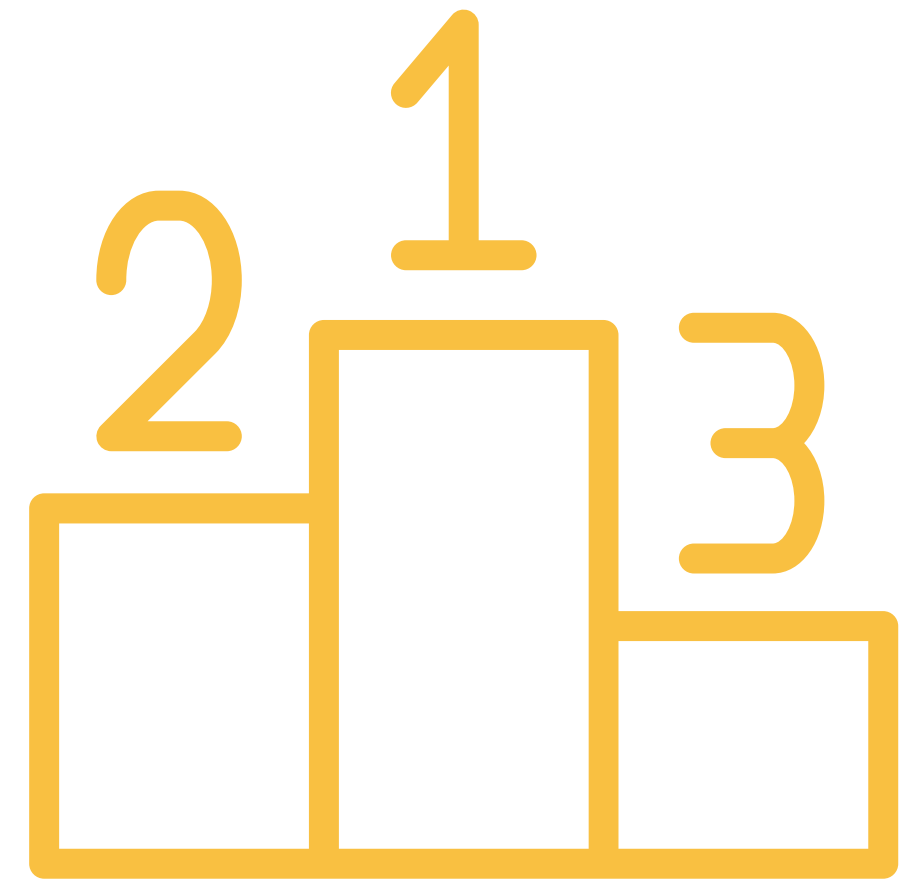
## HOW TO RANK THE DOCUMENTS?

### ONE WORD QUERY

One-word queries are short and concise search terms that users type into search engines to find information. They are typically used when users have a clear idea of what they are looking for and want to quickly narrow down their search results.

### MULTIPLE WORD QUERY

Multiple word query are search terms that consist of more than one word. They are often used when users have a broader or more complex search intent and want to refine their search results to find more specific information.



# HOW TO RANK THE DOCUMENTS?

## PARTIAL MATCH

A partial match occurs when the search engine returns results that contain only a subset of the keywords entered by the user. This can be helpful in cases where the user is unsure of the exact spelling or phrasing of a term, or where the user is looking for information on a broad topic and wants to see a variety of perspectives.

## RANKING

Ranking is the process of improving the visibility of a website or web page in search engine results pages (SERPs). The goal is to rank higher in the SERPs for relevant keywords, which can lead to more traffic and conversions for the website.





# TECHNICAL DIFFICULTIES



## KIBANA

- Timeout
- Installation



## ELASTICSEARCH

- Ranking
- Scoring
- Installation



## DATASET

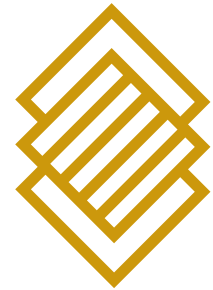
- CSV Table
- CSV to NDJSON



## WEB CODING

- Review Web programming
- Fix bugs

# CHALLENGE



**CHANGING  
TOPIC**

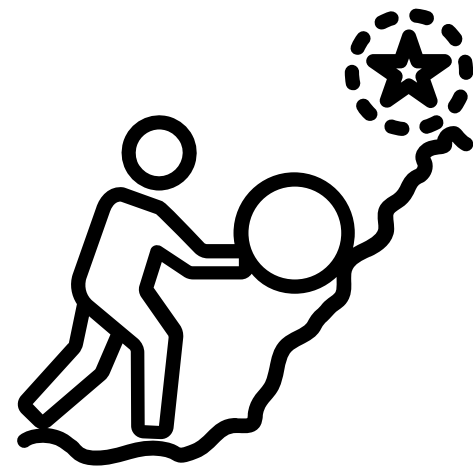


**MISS  
UNDERSTANDING**

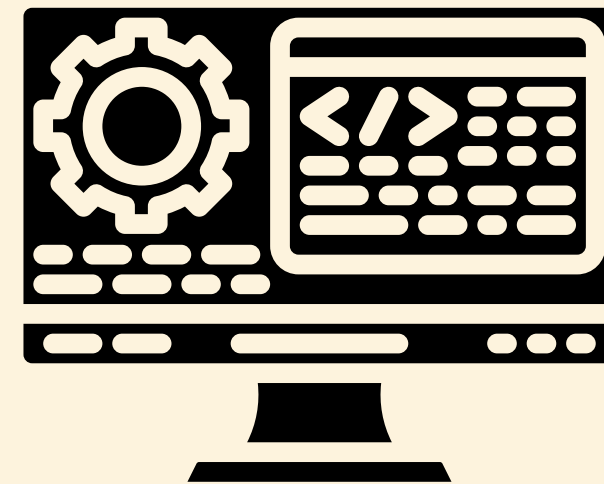
# LESSONS LEARNED



**TEAMWORK**



**ENDEAVOR**



**WEB  
PROGRAMMING  
SKILLS**



**COMMUNICATION**