

# Project Report (Airplane Crash Analysis)

## 1. INTRODUCTION

### 1.1 Overview

Airplanes, the most efficient form of modern transportation, make the world a small place by quickly delivering people and cargo from one place to another. As more and more people use airplanes as a means of transportation, the number of passengers and flight routes have expanded in recent years. The scale of airplane crashes varies according to the type of airplane involved, ranging from small-scale cargo planes that only involve a few pilots to large scale passenger jets that involve hundreds of people.

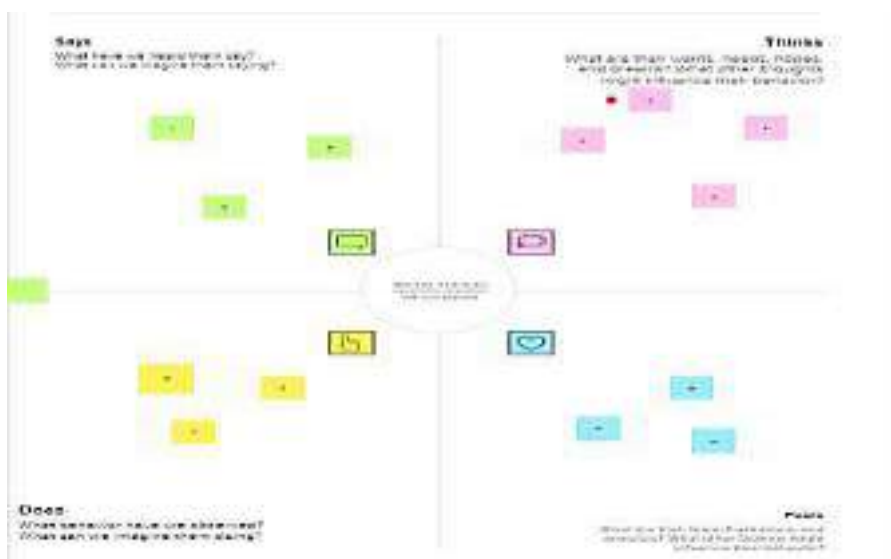
Airplane Crash Analysis is a big data project that involves discovering and examining airplane crash patterns. It is a detailed investigation into the causes of an aviation accident. The goal of an airplane crash analysis is to identify any factors that contributed to the accident, with the ultimate goal of improving safety and preventing future accidents. The process of conducting an airplane crash analysis typically involves the collection and analysis of a wide range of data, including information about the aircraft and its systems, the operators, and any other relevant factors.

### 1.2 Purposes

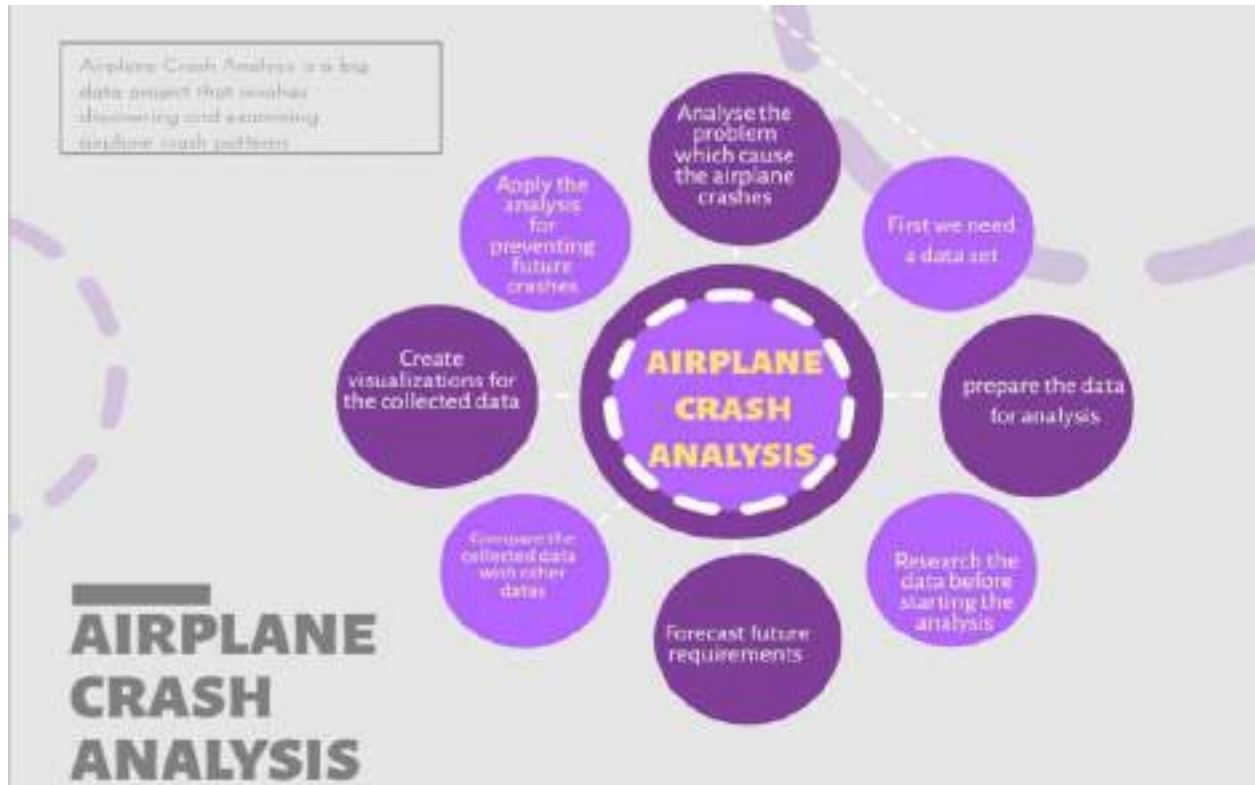
- (1) Find some factors that contribute to crashes,
- (2) Analyse patterns of the data collected from all over the world in the past decades, and
- (3) Find replicable solutions for both aviation industry and customers

## 2. PROBLEM DEFINITION & DECISION MAKING

### 2.1 Empathy map



## 2.2 Ideation & Brainstorming Map



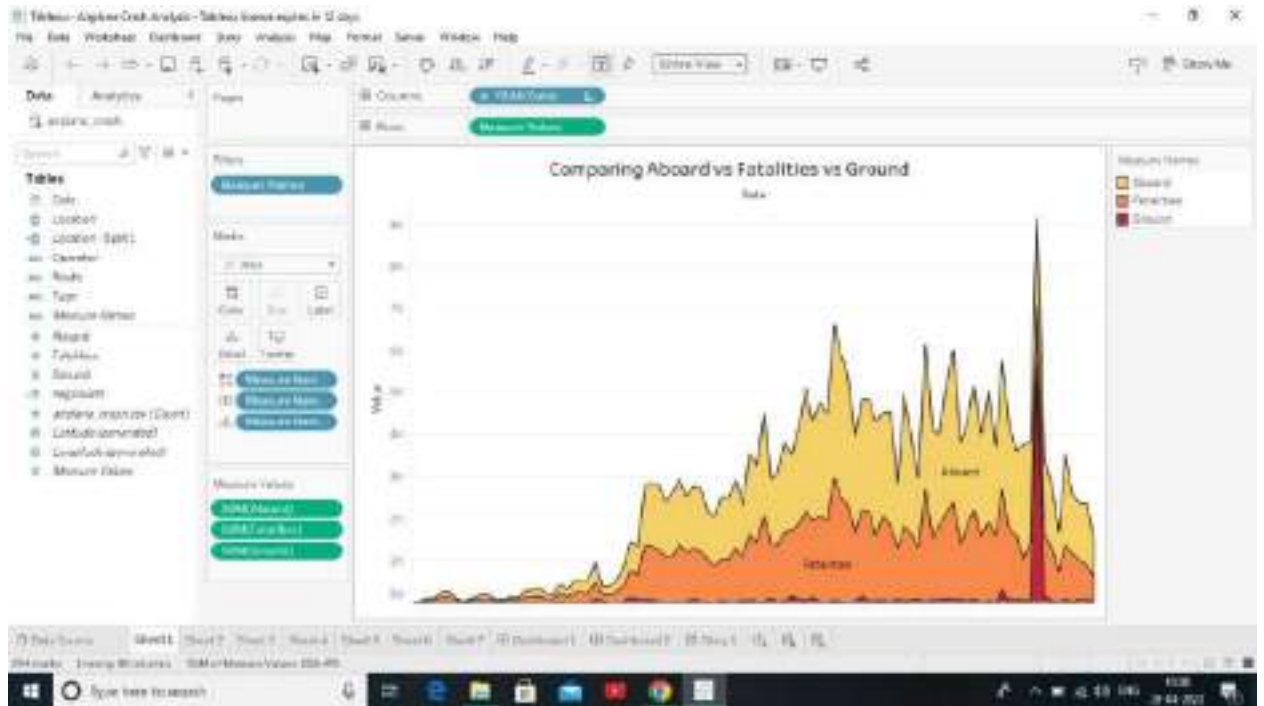
## 3. RESULT

**Social Impact:** The analysis can provide closure to the families and loved ones of the victims of the crash, as well as to the broader public. It can also help to improve public confidence in the aviation industry by identifying and addressing any safety issues that may have contributed to the incident.

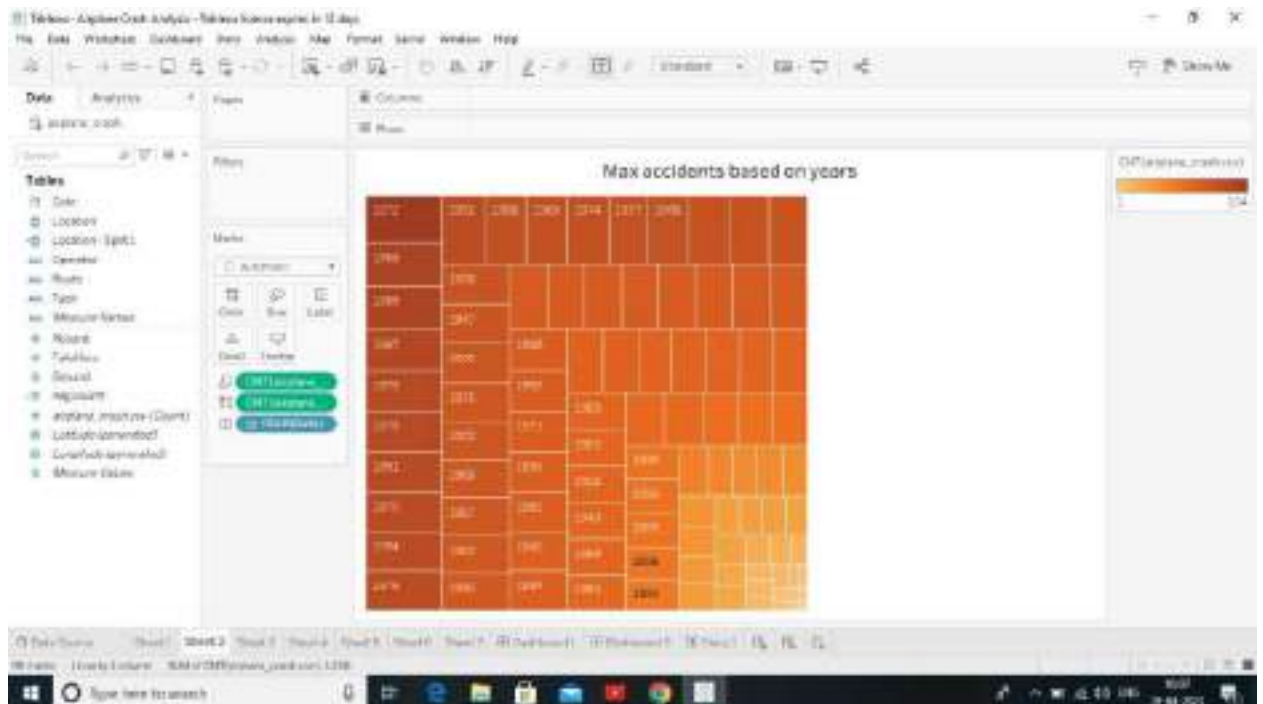
**Business Impact:** The analysis can have significant business implications for the airline and aircraft manufacturer involved in the incident. If the analysis finds that the crash was caused by mechanical or design issues, the manufacturer may be liable for damages and may face significant financial losses. The airline may also face legal claims and reputational damage

### 3.2 ACTIVITY SCREENSHOT

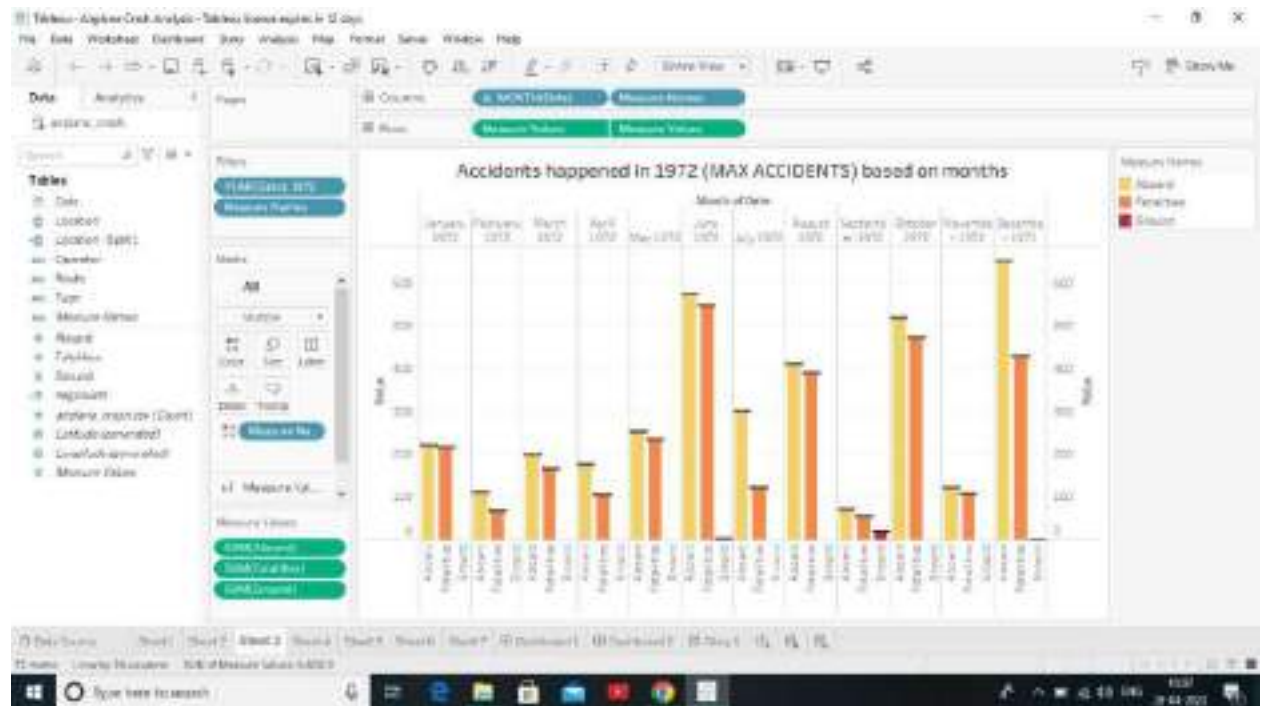
#### SHEET-1



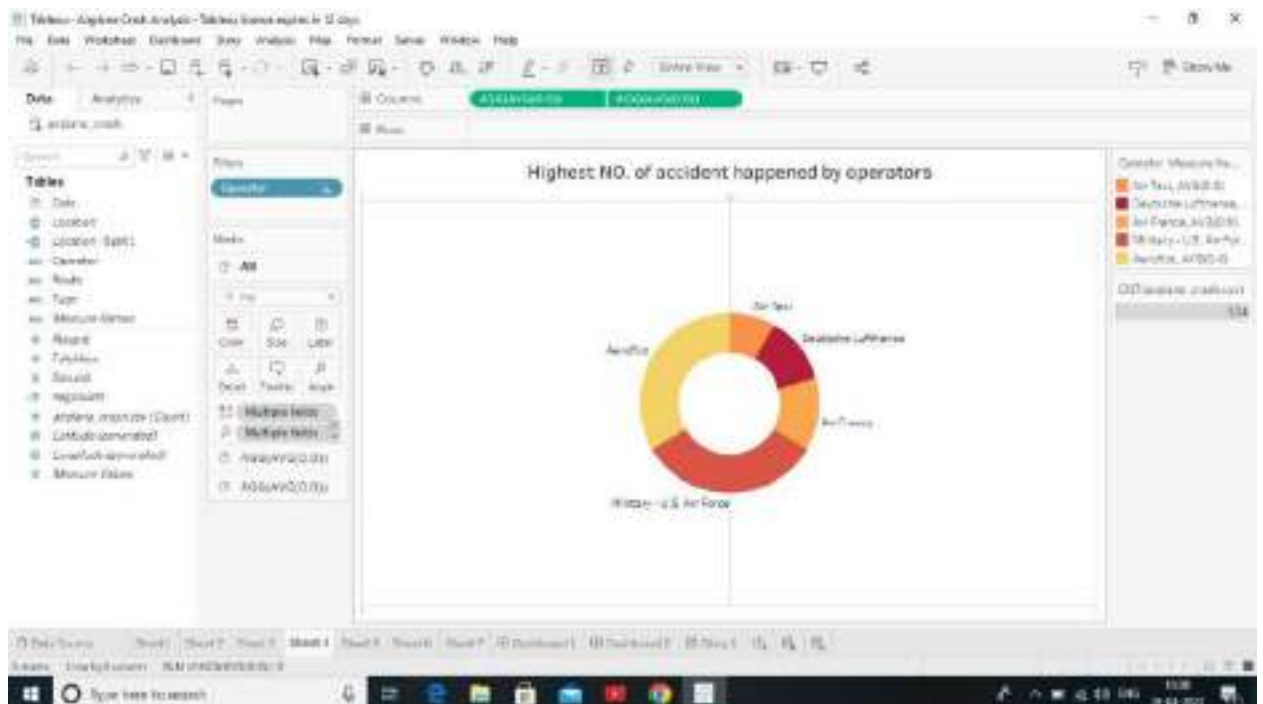
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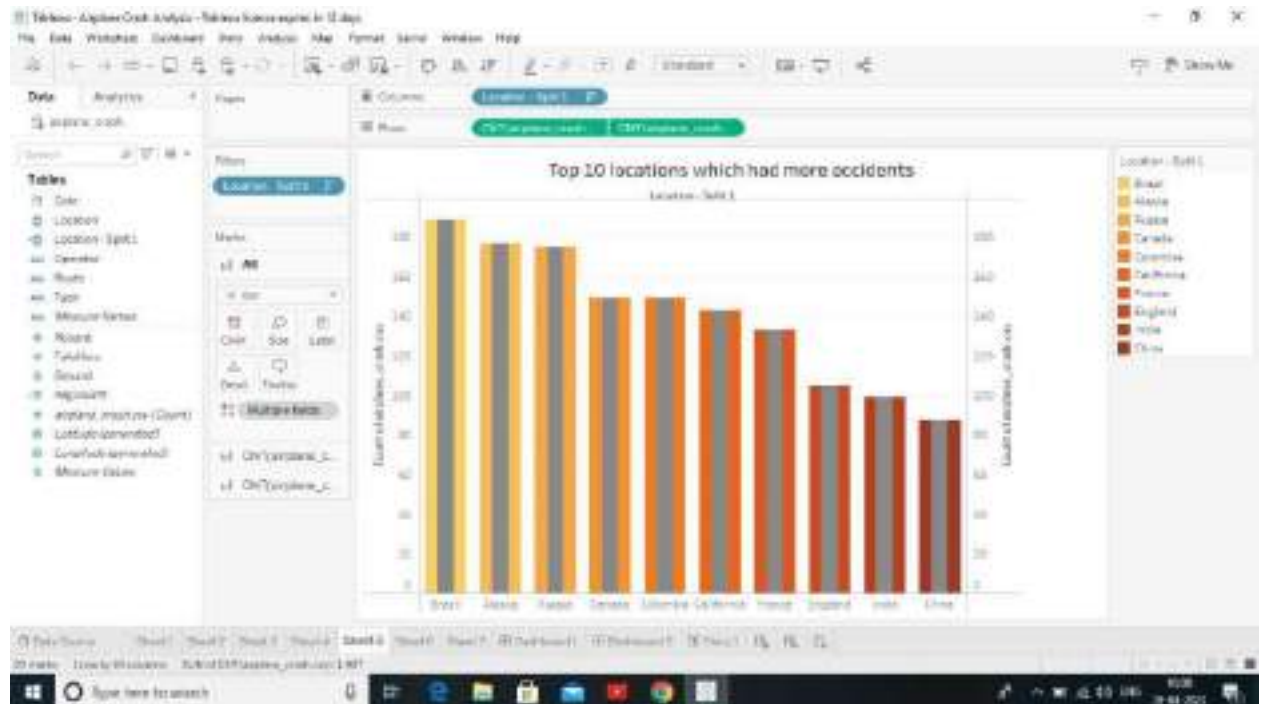
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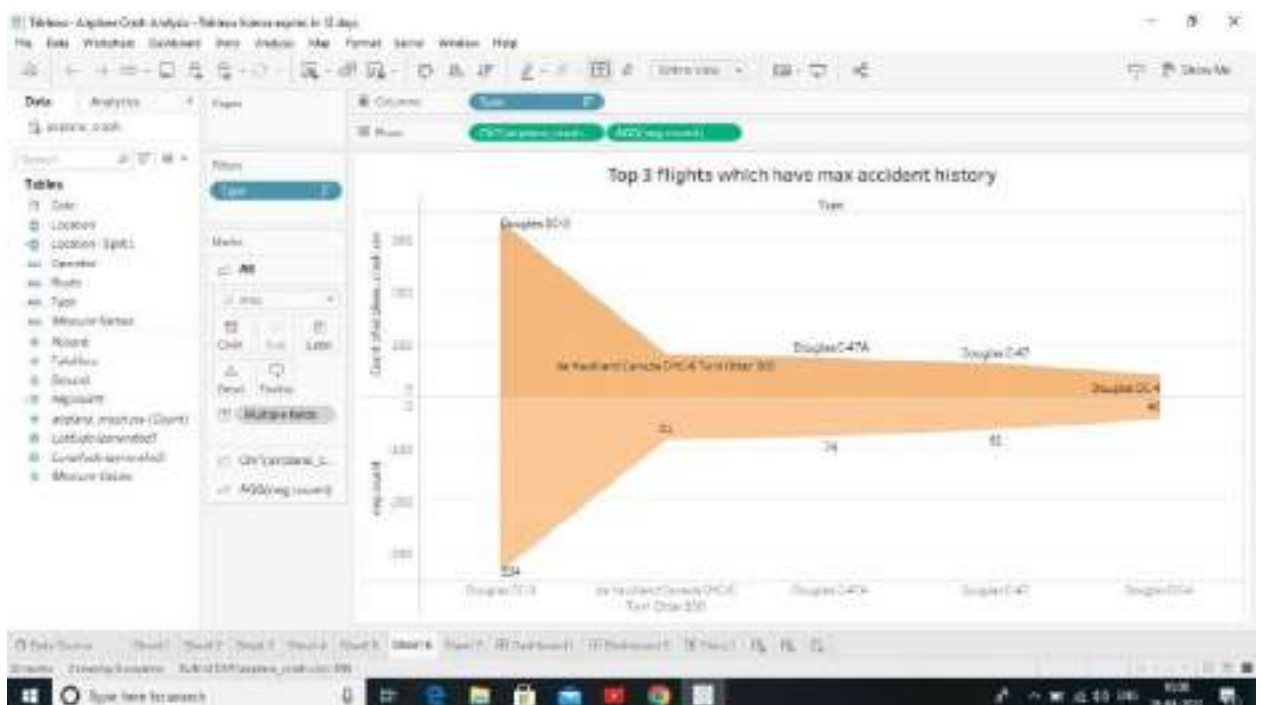
## SHEET-4



**SHEET-5**

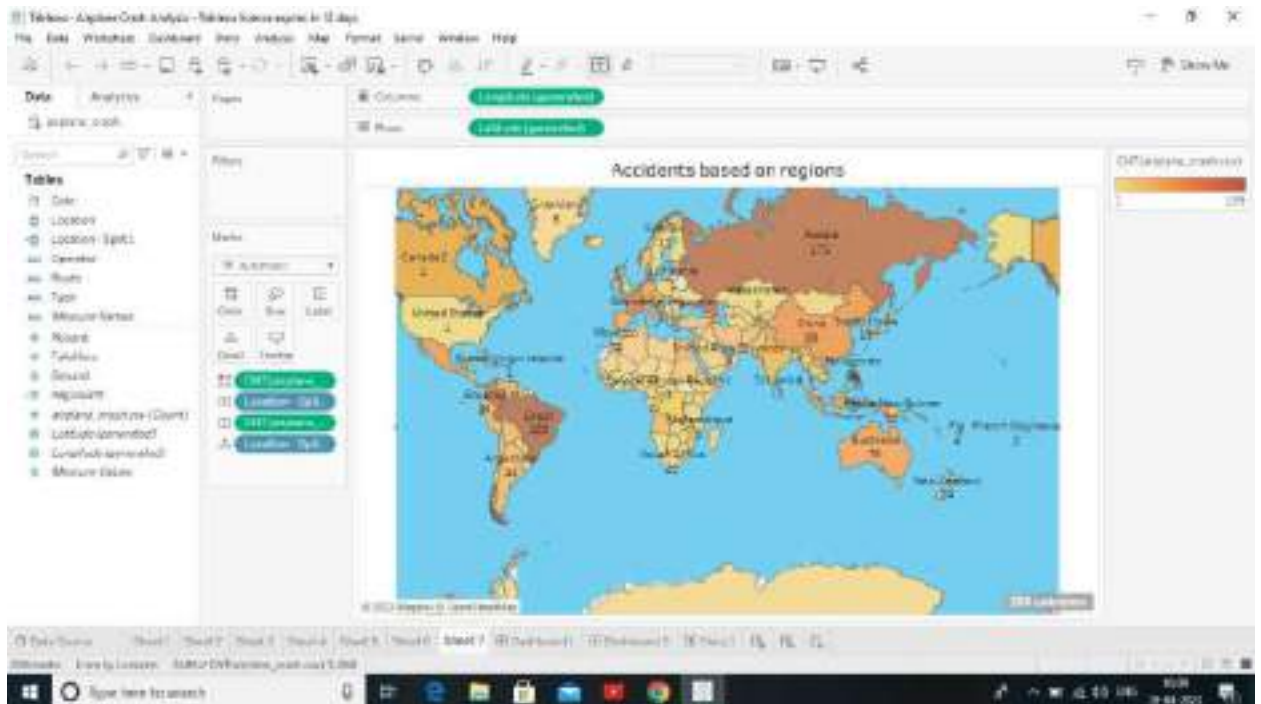


**SHEET-6**

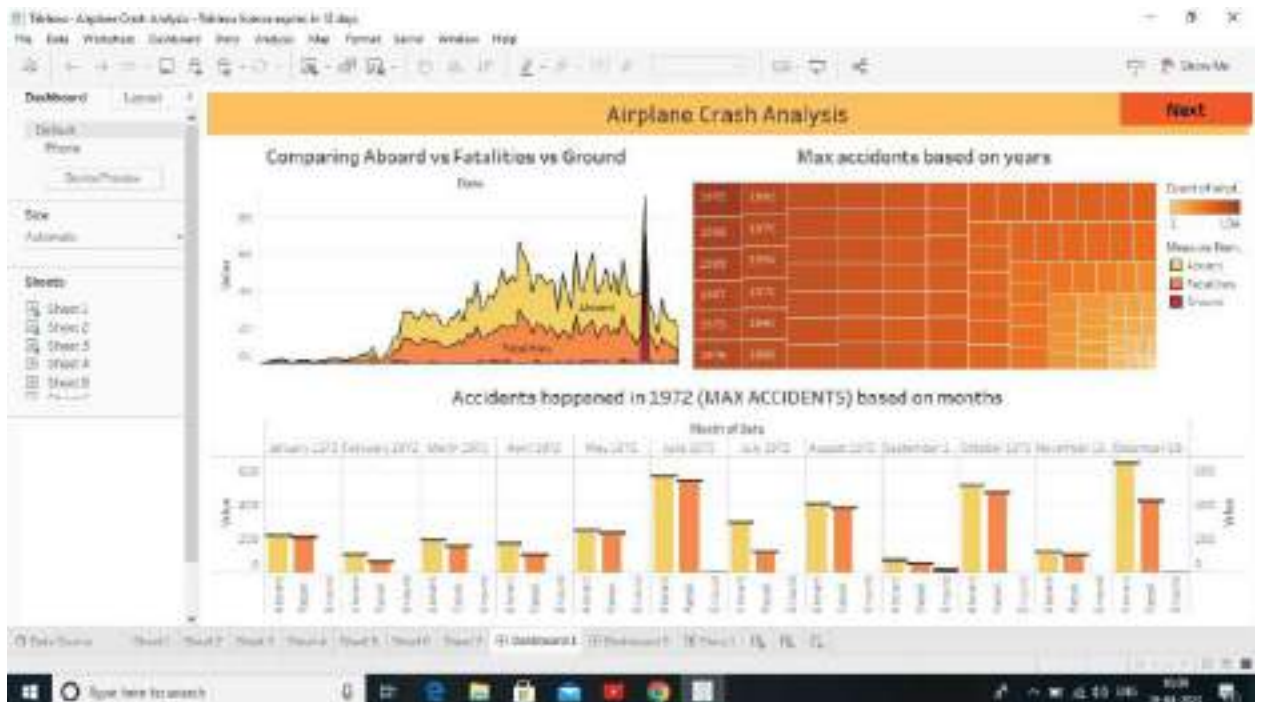




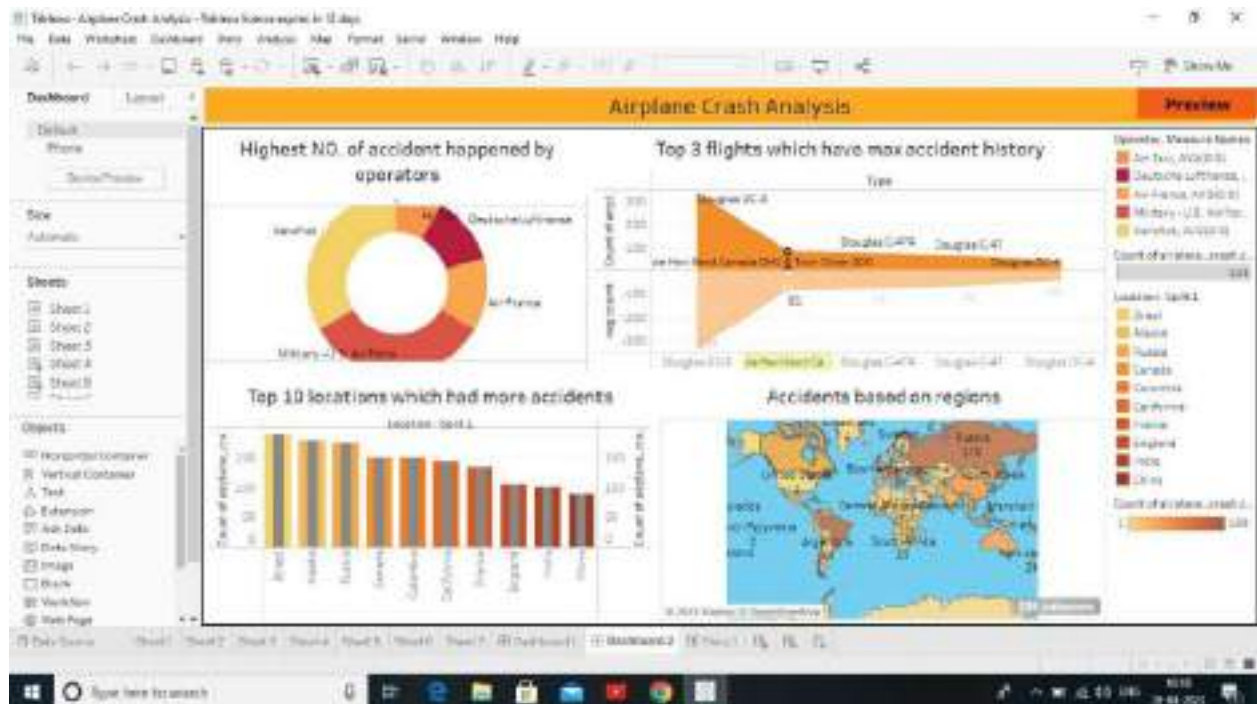
## SHEET-7



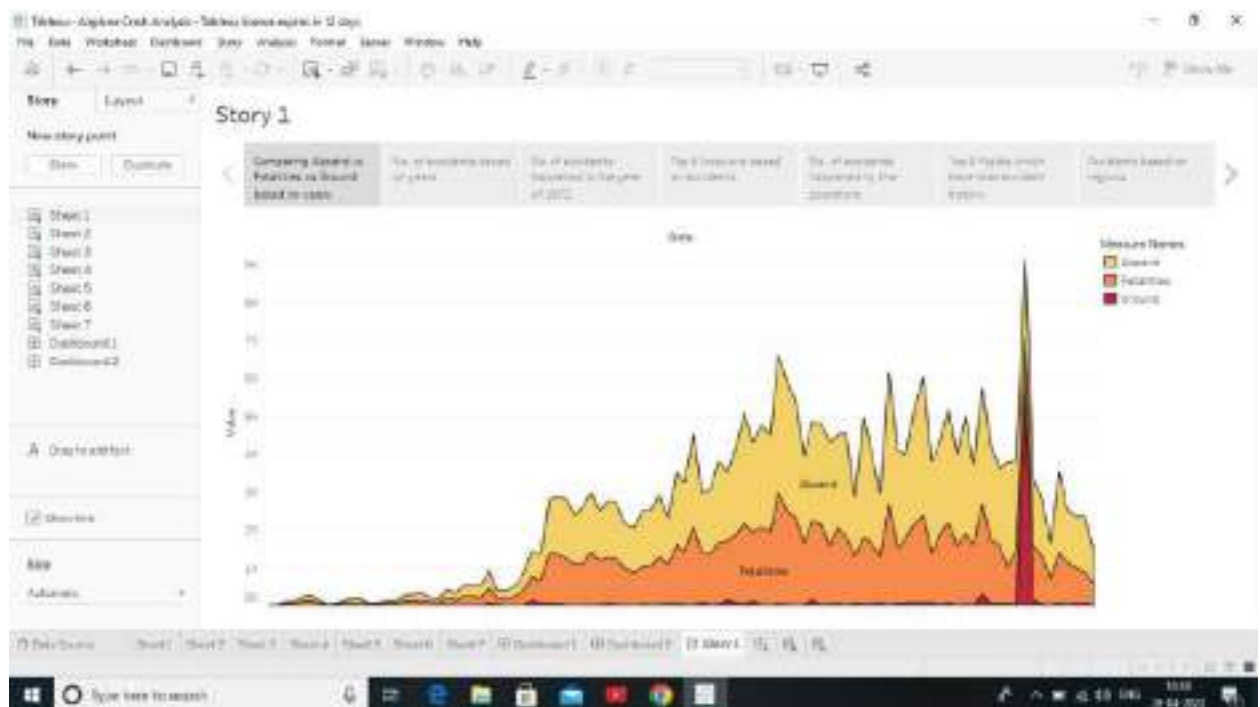
## DASHBOARD-1



## DASHBOARD-2



## STORY



#### **4. TEAM DETAILS**

- **TEAM HEAD: S.Sameema Afrin**
- **MEMBER 1:N.Wajeetha Shenass**
- **MEMBER 2:B.Keerthana**
- **MEMBER 3:K.R.Kanchana**
- **MEMBER 4:C.Kanaga Santhiya**

#### **5. ADVANTAGES & DISADVANTAGES**

##### **ADVANTAGES**

- It has the advantages that the sample does not follow a certain distribution, is not interfered by individual abnormal values
- It helps to analyses the large data easily

##### **DISADVANTAGES**

- It requires large data for accurate results
- Mistake of one data may result in wrong results

#### **6. APPLICATIONS**

- Airplane crash analysis is performed to determine the cause of errors once an accident has happened.
- In the modern airplane dustry, it is also used to analyze a database of past accidents in order to prevent an accident from happening.
- Many models have been used not only for the accident investigation but also for educational purpose.

#### **7. CONCLUSION**

We conclude from this project Brazil has the most number of accidents. Douglas DC-3 flight has maximum accident in the history and Aeroflot operator has highest numbers of accidents in the history.

#### **8. FUTURE SCOPE**

- Reduce the cause of airplane crashes
- Eliminate the operators in which cause more accidents
- Improve the safety measurements of passengers
- Eliminate the factors that contributed the accident

#### **APPENDIX**

**Source code - Dashboard**



Link: [https://public.tableau.com/views/AirplaneCrashAnalysis\\_16824798769830/Dashboard1?:language=en-US&:display\\_count=n&:origin=viz\\_share\\_link](https://public.tableau.com/views/AirplaneCrashAnalysis_16824798769830/Dashboard1?:language=en-US&:display_count=n&:origin=viz_share_link)

### **Source code – story**

Link: [https://public.tableau.com/views/Story\\_16824802581200/Story1?:language=en-US&:display\\_count=n&:origin=viz\\_share\\_link](https://public.tableau.com/views/Story_16824802581200/Story1?:language=en-US&:display_count=n&:origin=viz_share_link)