# PROJECT REPORT

# THE TRAGEDY OF FLIGHT- A COMPREHENSIVE CRASH ANALYSIS

# ST. JOHN'S COLLEGE PALAYAMKOTTAI

# DEPARTMENT OF PHYSICS

# TEAM MEMBERS

M. MUTHULAKSHMI
MAYAKANNAN
MILTON JACOB
E. MURUGAMMAL
R. MUTHU RAMALAKSHMI

# THE TRAGEDY OF FLIGHT - A COMPREHENSIVE CRASH ANALYSIS

## **Introduction:**

# **Project Description:**

An airplane crash analysis is a detailed investigation into the cause of an aviation accident. The goal of an airplane crash analysis is to identify any factors that contribute to the accident, with the ultimate goal of improving safety and preventing future accidents. The process of conducting an airplane 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.

## **OVERVIEW**

The data has been collected, it is analysed through tableau, to identify any potential causes of the accident. The results of an airplane crash analysis are typically published in a report, which may include recommendations for improving safety and preventing similar accidents in the future. These recommendations may be implemented by the relevant authorities or industry organizations.

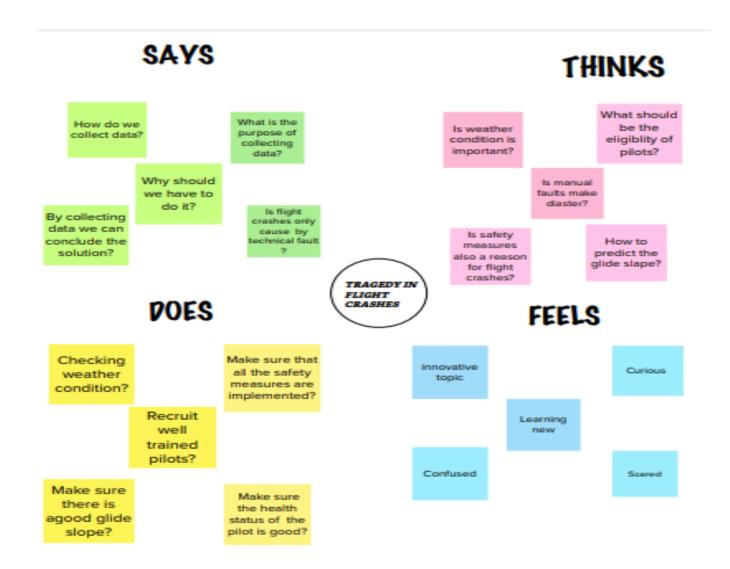
## **PURPOSE**

The primary purpose of air crash investigators is to determine the cause of the crash and any contributing factors involved in the crash. Investigative authorities also provide recommendations for safe operations.

# Problem Definition & Design Thinking:

# Empathy Map:

# EMPATHY MAP

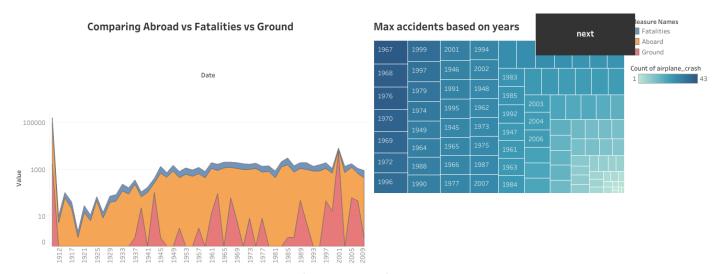


# Ideation & Brainstorming Map:

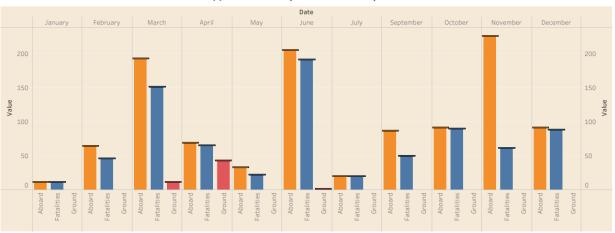
# BRAINSTORMING (TRAGEDY IN FLIGHT CRASHES)

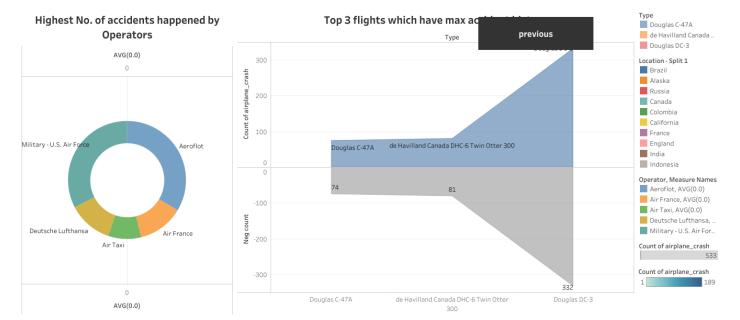
#### MAYAKANNAN MILTON JACOB Awold Perfect mistakes by Proper human alice cafft machinery errors in mornhors maintanence design aviation Good glide Smitable Proper Proper instrument slope weather communication flight factors indicators to the pilots conditions MURUGAMMAL Website that Focus in keeps flight tracking the research flight Investigation about Managing. the risks previous flight crash MUTHULAKSHMI MUTHU RAMALAKSHMI Computers Updated Good Good radios should be in electrical safety and landing good management system in systems condition system the flight Good air Make sure Good traffic Proper the engine is hydraulie: control maintenance under system system control

## **RESULT:**













#### Accidents based on regions



Story 1

Comparing Abroad vs Fatalities vs Ground b..

No. of accidents based on years.

No. of accidents based on accidents.

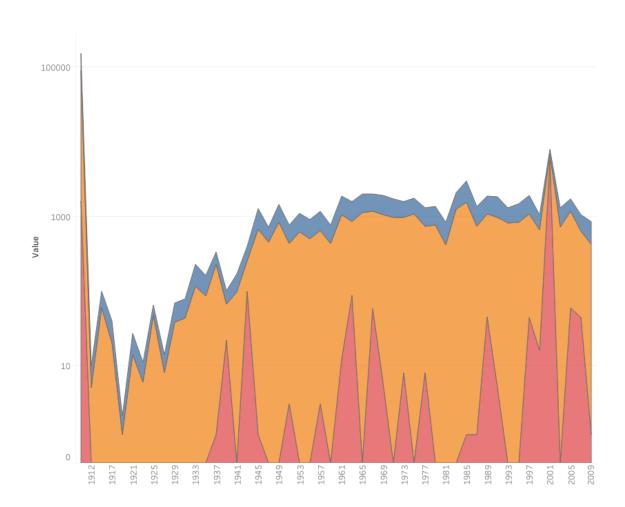
Top 10 locations based on accidents.

Top 3 flights which has happened by the oper..

Top 3 flights which has based on re..

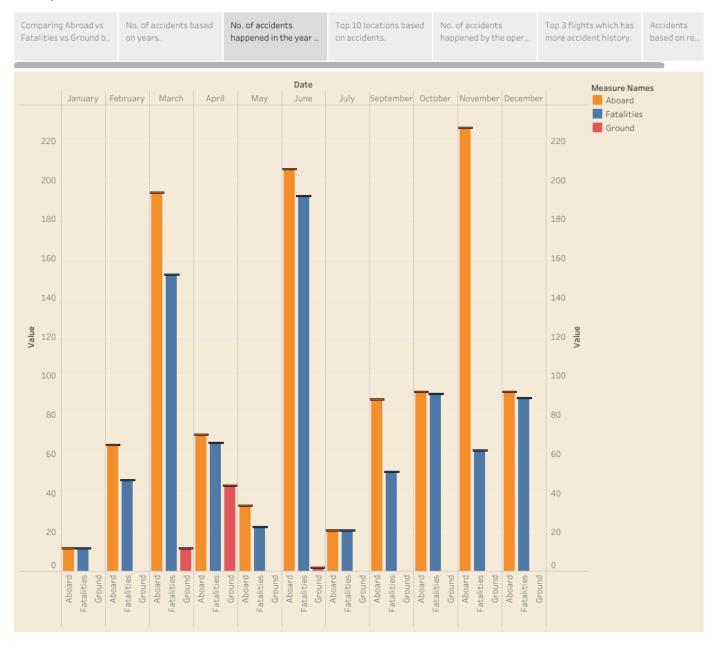
Date

Measure Names
Fatalities
Aboard
Ground



Comparing Abroad vs Fatalities vs Ground b		No. of accidents based on years.		No. of accidents happened in the year		Top 10 locations based on accidents.			ed	No. of accidents happened by the oper			Top 3 flights which has more accident history.		Accidents based on re		
1967	199	9	2001	1994	1982	19	89	2000	1	1958	19	38	1953	1	.978	Count of airp	ane_crash
1968	1997		1997 1946 2002		1983	1983		993 2008	)8	1951		1954		1	1998		
1976	197		1991	1948	1985												
	197		1995	1962	1992		2003		198	36	1952	2005	199	59	1950		
1970	194		1945	1973	1947		2004		198	31	199	66					
1969	196		1965	1975	1961		2006		193	1936		1934 20					
1972	198		1966	1987	1963		1955		194	1944		1933					
1996	199		1977	2007	1984		1071		196								
									192	0							

Story 1



Story 1

60

40

20

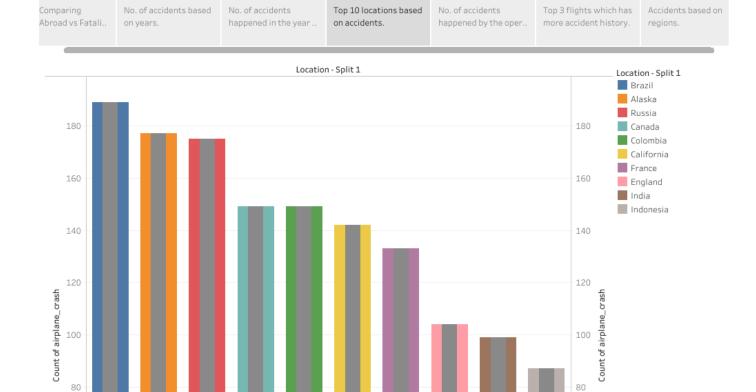
0

Brazil

Alaska

Russia

Canada



Colombia California

France

60

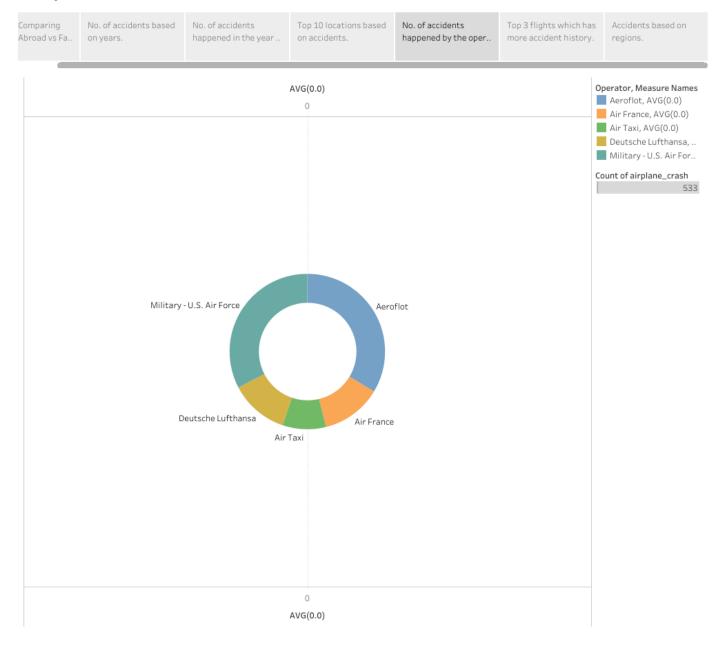
40

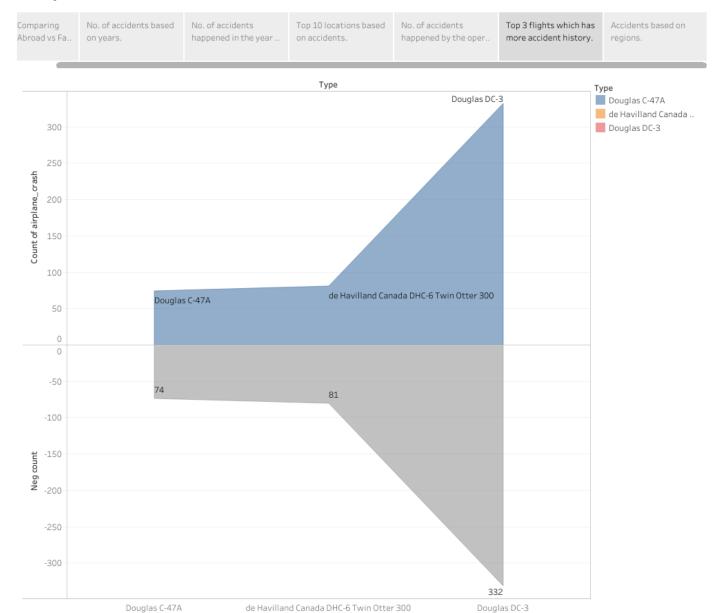
20

Indonesia

India

England





Comparing No. of accidents based on years.

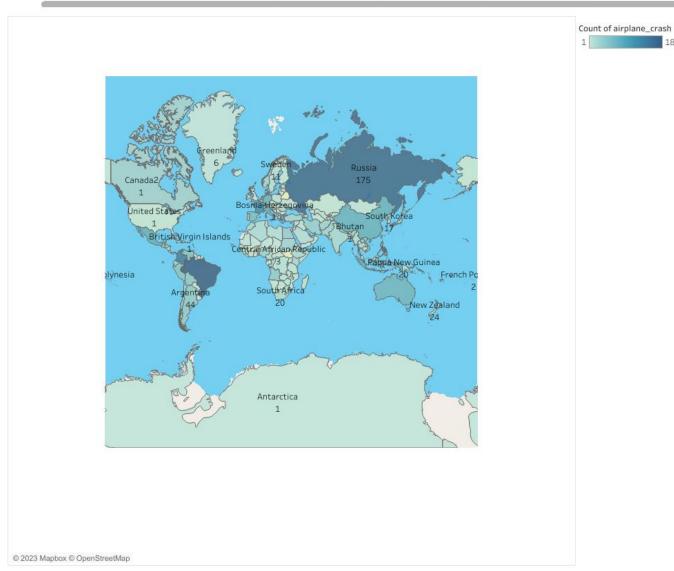
No. of accidents based on accidents on years.

No. of accidents No. of accidents happened in the year ...

Top 10 locations based on accidents happened by the oper...

No. of accidents nor accident history.

Accidents based on regions.



### **ADVANTAGES**

- ➤ Undoubtedly, one of the most advantageous features offered by air transport is its **speedy delivery times**.
- ➤ Air transport is the only means of transportation that **does not support physical limits**.
- ➤ One of the great advantages of air transport for both passengers and goods is its great **reliability**.

## **DISADVANTAGES**

- ➤ The cost of infrastructure, fuel... makes air transport economically superior to other alternatives.
- ➤ Storage capacity is lower than land and sea transport. This is a clear disadvantage, air transport is ideal for medium or low loads, but is not so attractive for large volumes of goods.

### **APPLICATIONS:**

This analysis of the flight crashes is useful for defining the problems in the air craft. This leads to minimize the air craft crashes. It is also used to investigate how the accidents are happened year by year and also in which flight and lot of information about the flight crashes happened from since 1908.

## **CONCLUSION:**

The conclusion of this project is to give some awareness and recommendation for improving safety and preventing similar accidents in the future.

## **FUTURE SCOPE:**

By this project of data analytics in the tragedy of flight crashes, it is a comprehensive crash analysis, so it should be useful for the future generations to be aware about the flight crashes and safety measures taken by the related management.

## **APPENDIX**

## **Source code:**

file:///C:/Users/home/Desktop/fligh%20crashes/Airplane%20crash%20a nalysis/index.html