

PROJECT REPORT TEMPLATE

INTRODUCTION

1.1 Overview

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.

Aviation accidents can be traced to a variety of causes, including pilot error, air traffic controller error, design and manufacturer defects, maintenance failures, sabotage, or inclement weather.

1.2 Purpose

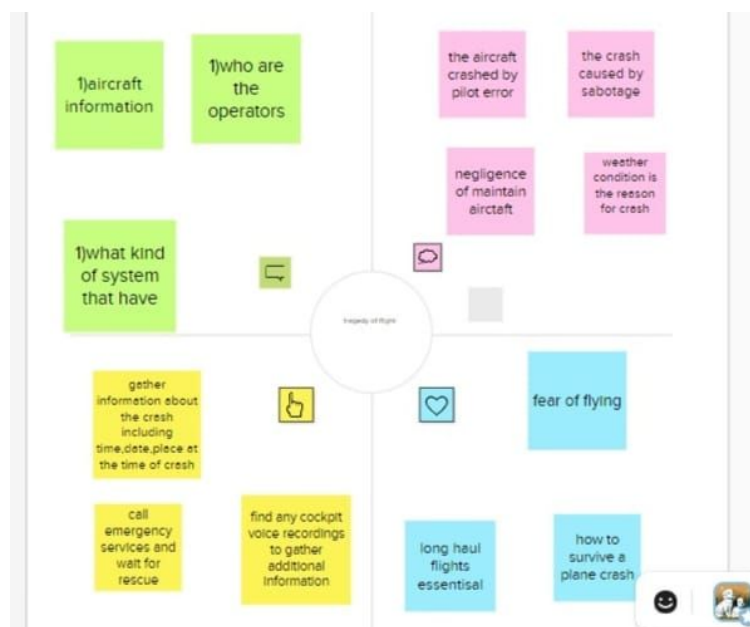
The objective of safety management in the aviation industry is to prevent human injury or loss of life, and to avoid damage to the environment and to property

The primary focus of safety management in aviation is on safety of flights encompassing also all associated and support services, which can have an impact on safety, for example air navigation services, aerodrome operations management, etc.

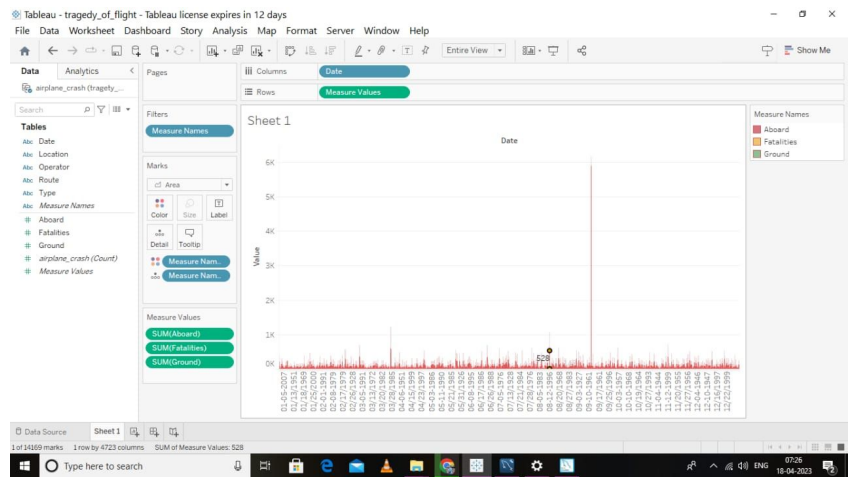
A Flight Data Monitoring Program assists an operator to identify, quantify, assess and address operational risks. It can be effectively used to support a range of airworthiness and operational safety tasks.

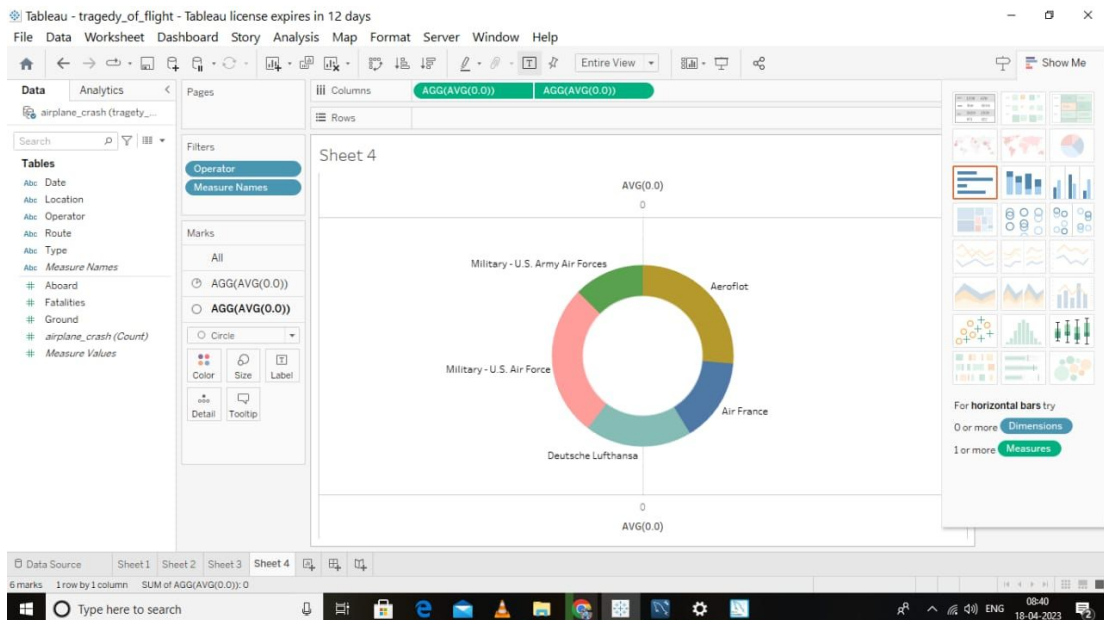
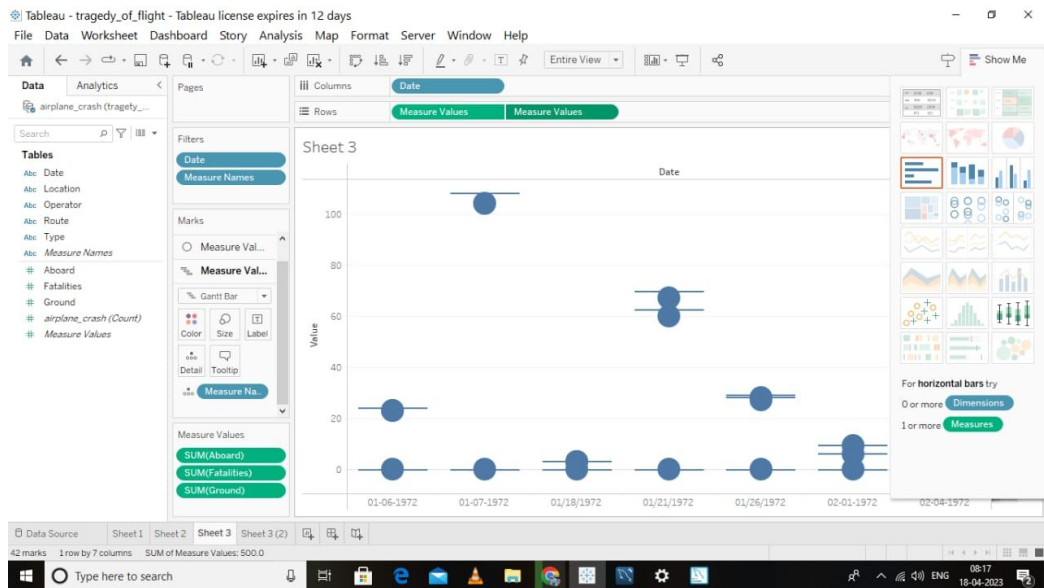
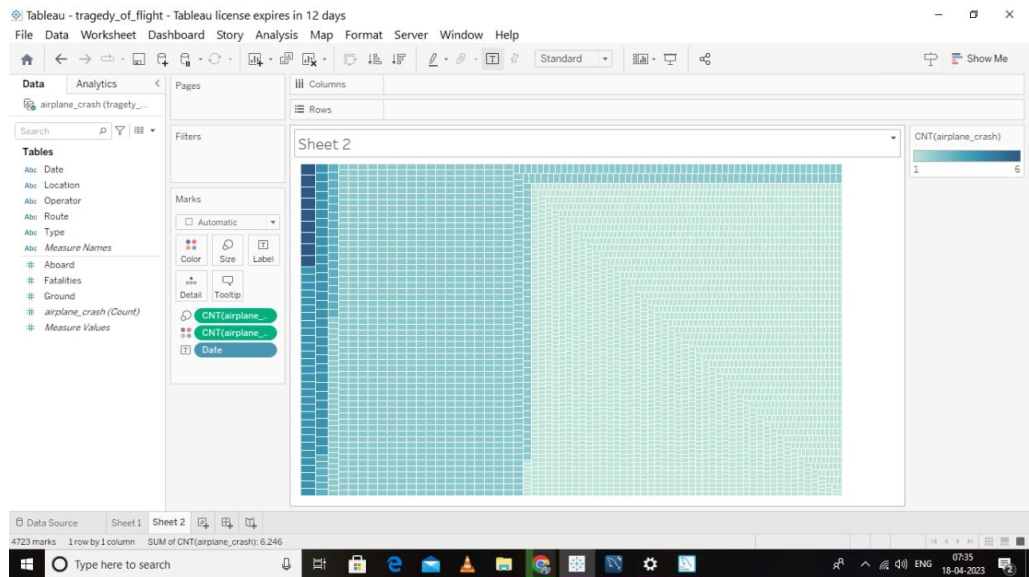
PROBLEM DEFINITION & DESIGN THINKING

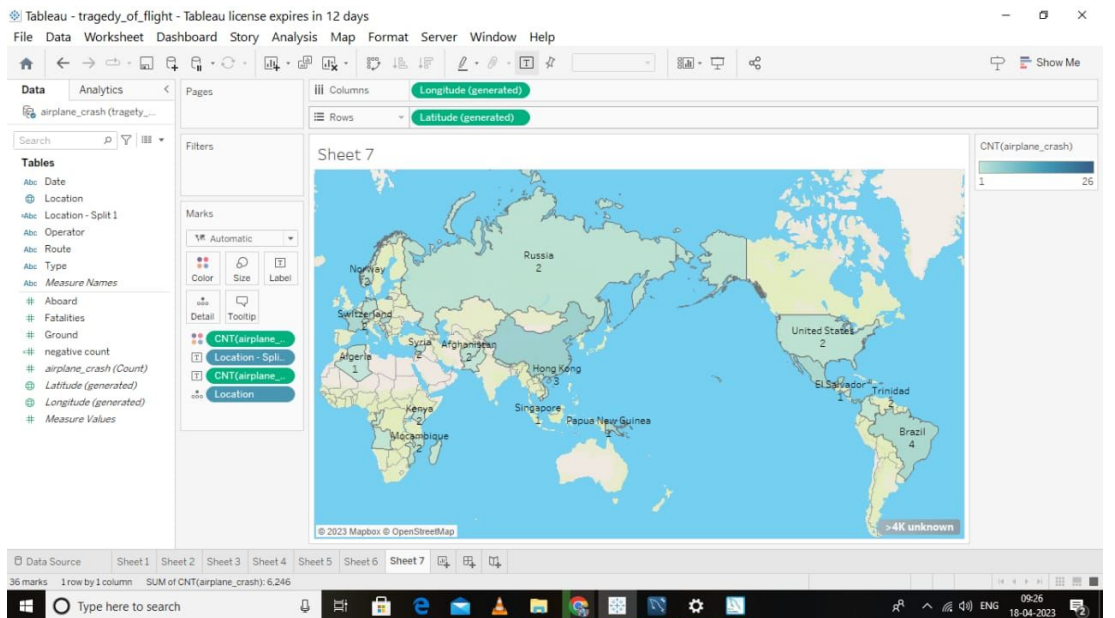
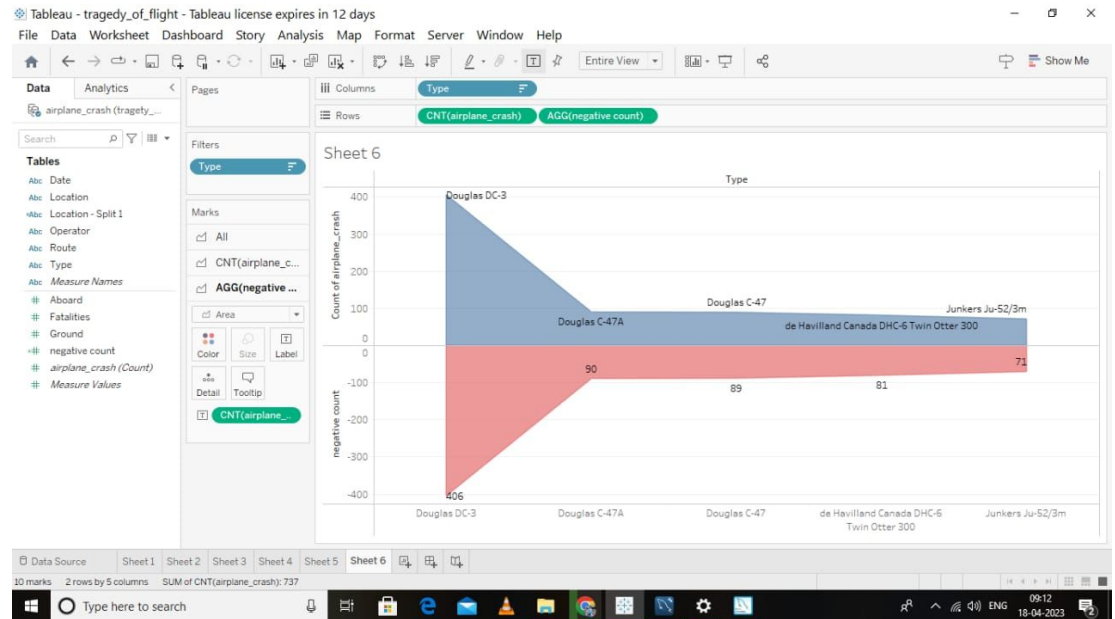
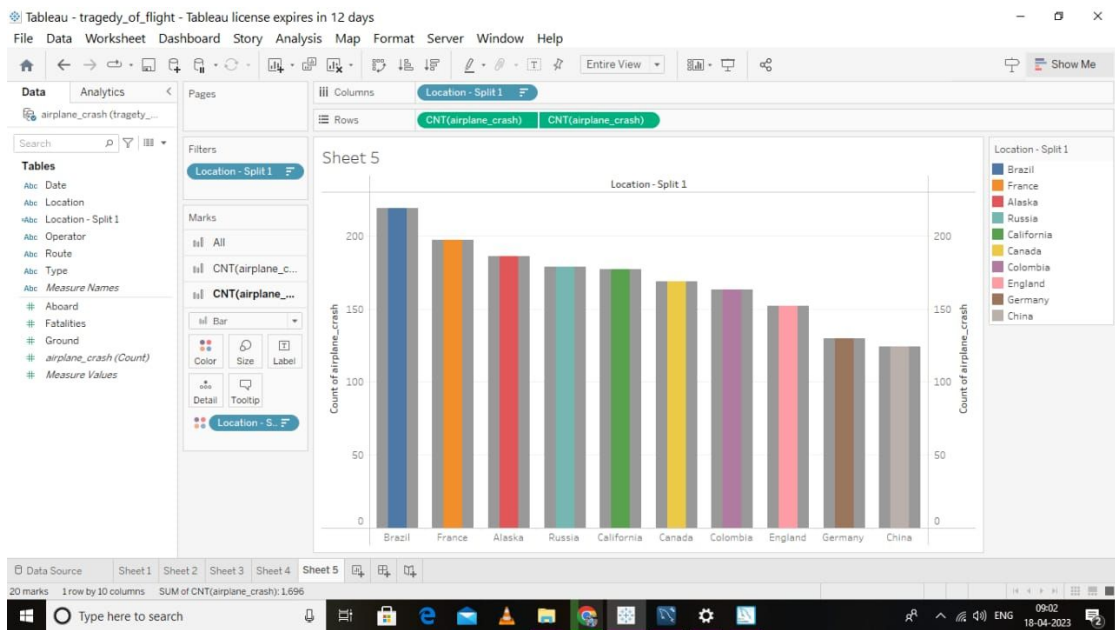
2.1 Empathy map

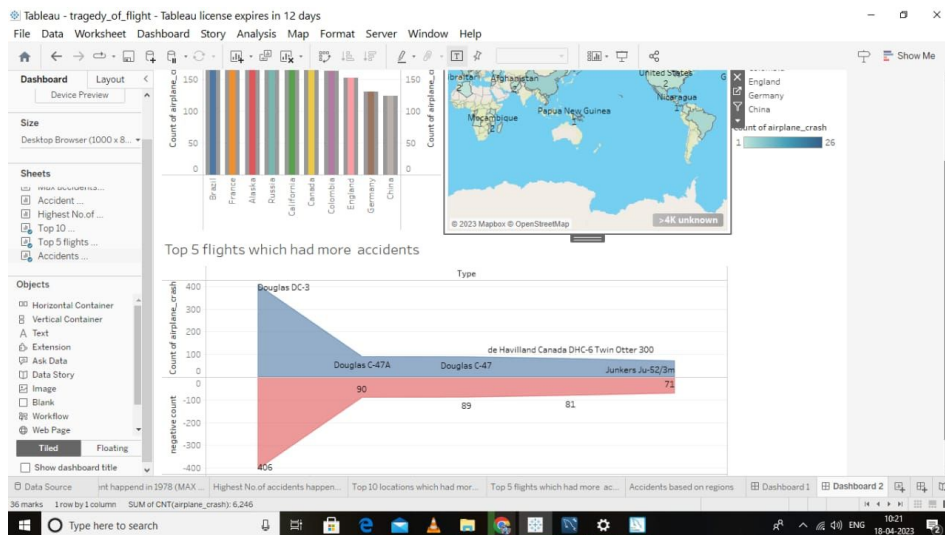
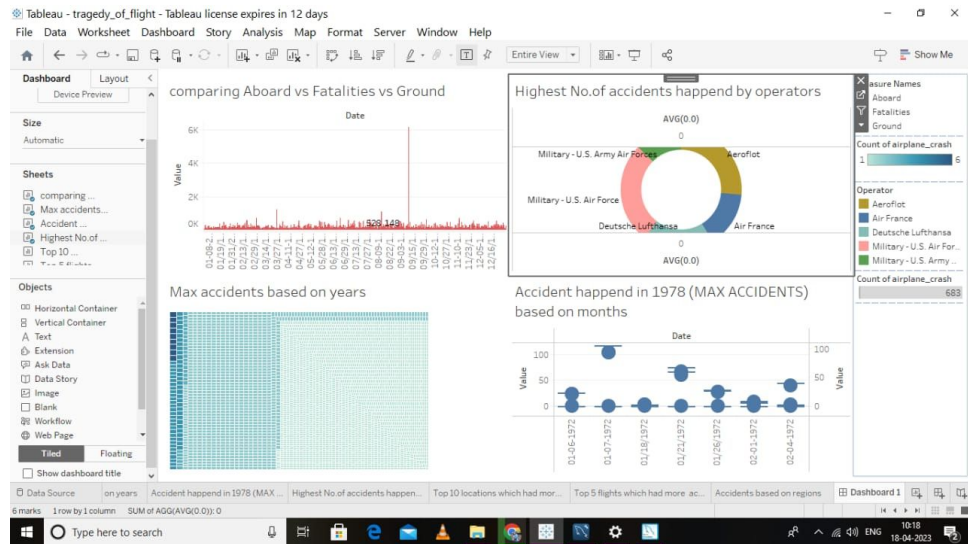


RESULT









ADVANTAGES AND DISADVANTAGES

Advantages of aviation safety

To keep passengers and flight crew safe while flying, Safety always comes first. Aviation safety is important because there are lives involved in every operation of aircraft. Safety must be the number one priority for any airline in all aspects of air transportation.

Financial Benefits of Aviation Safety Management System Reduced cost of lost/damaged equipment. Lower insurance premiums. Reduced damage claims.

Aviation provides the only rapid worldwide transportation network, which makes it essential for global business. It generates economic growth, creates jobs, and facilitates international trade and tourism

Disadvantages of flight travelling

The three disadvantages of using air transport are: Air transport is a costly service. Its operational cost is very high. Air transport is prone to accidents as a small mistake can be very dangerous to passengers.

Emissions from aviation are a significant contributor to climate change. Airplanes burn fossil fuel which not only releases CO₂ emissions but also has strong warming non-CO₂ effects due to nitrogen oxides (NO_x), vapour trails and cloud formation triggered by the altitude at which aircraft operate.

Additional effects that occur as a result of flight include motion, vibration, noise, lack of space, and fatigue, for example, from “jet lag”. Of these physical effects, it is the fall in oxygen levels that is associated with the most potentially serious consequences.

APPLICATION

Commercial applications :

Commercial aviation is the part of civil aviation that involves operating aircraft for remuneration or hire, as opposed to private aviation.

Commercial aviation is the part of civil aviation (both general aviation and scheduled airline services) that involves operating aircraft for hire to transport passengers or multiple loads of cargo. American, United, Delta, FedEx, UPS, and Southwest Airlines are just a few examples of Commercial Aviation companies.

COMMERCIAL AVIATION USES INCLUDE THE FOLLOWING :

- Transportation of employees
- Transportation of customers.
- Transportation of cargo, parts and mail.
- Medical and emergency transport.
- Mapping and surveying.
- Aerial photography.
- Agricultural applications.

Military application :

Military aviation comprises military aircraft and other flying machines for the purposes of conducting or enabling aerial warfare, including national airlift (air cargo) capacity to provide logistical supply to forces stationed in a war theater or along a front.

Military aviation includes both transport and warcraft and consisting of fixed wing aircraft, rotary-wing aircraft (RWA) and unmanned aerial vehicle (UAV). From the early days of world war, it has been realized that air power supremacy is vital for winning a war as well as maintaining the sovereignty of any country.

CONCLUSION

In this project , I have explained about the project named that “ THE TRAGEDY OF FLIGHT: A COMPREHENSIVE CRASH ANALYSIS “ in a detailed manner. In this project I have also worked on empathy map and brainstorming with my team members as a whole emphasize on main ideas

related to the project. And also worked on tableau to complete the whole project , that are displayed above in the RESULT as a output.

FUTURE SCOPE

The most recent estimates suggest that demand for air transport will increase by an average of 4.3% per annum over the next 20 years. If this growth path is achieved by 2036 the air transport industry will then contribute 15.5 million in direct jobs and \$1.5 trillion of GDP to the world economy.

Over the next 20 years, India will need 2,210 new aircraft. The fleet might include 440 medium and large aircraft and 1,770 additional light aircraft. Given India's expanding population, passenger traffic will increase at a rate of 6.2% annually by 2040, the highest rate among the major nations and far higher than the world average of 3.9%. By 2040, India would need 34,000 more pilots and 45,000 more technicians.

For the following ten years, Airbus will send more than one aircraft to India each week, according to a statement from the firm. By 2040, India will need an extra 34,000 pilots and 45,000 technicians to serve the country's expanding aviation market, according to an Airbus estimate.