

# **THE TRAGEDY OF FLIGHT: A COMPREHENSIVE CRASH ANALYSIS**

**A PROJECT REPORT**

**Submitted by**

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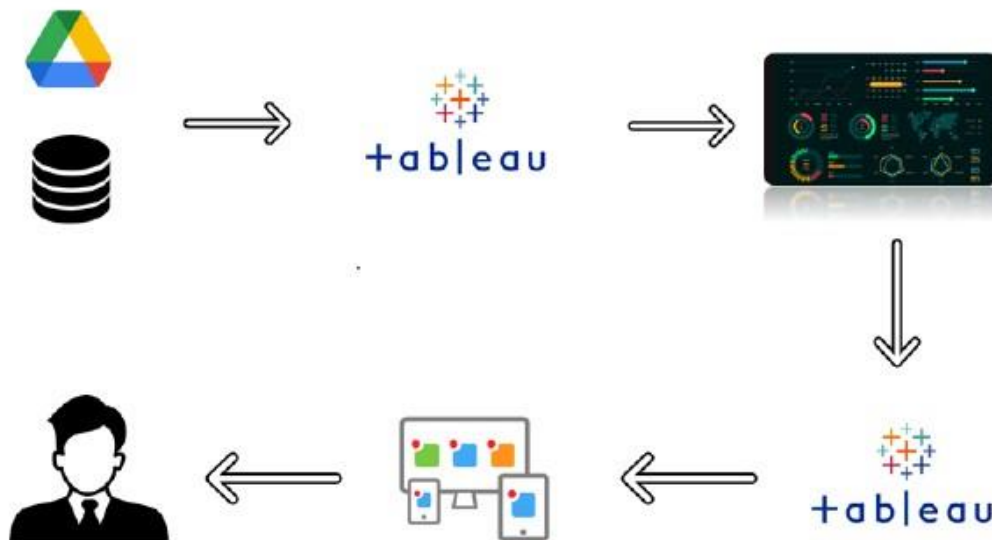
# **CHAPTER - 1**

## **INTRODUCTION**

## **1.INTRODUCTION:**

An airplane crash analysis 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. This data is typically collected from Kaggle. Once 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.

## Technical Architecture:



### 1.1. OVERVIEW:

The following is an overview of the contents related to the tragedy:

- Flight MH370: The Background - The circumstances leading up to the flight, including the flight path, passenger and crew list, and technical specifications of the aircraft.
- Disappearance - A detailed account of the flight's disappearance, including the initial response by air traffic control and the subsequent search and rescue operations.

- Theories and Speculations - A review of various theories and speculations on what happened to the flight, including hijacking, mechanical failure, and pilot suicide.
- Investigation and Search - A description of the extensive investigation and search efforts undertaken by multiple countries and organizations in an attempt to locate the missing aircraft and provide answers to the families of the passengers and crew.
- The Aftermath - An examination of the impact of the tragedy on the families of the victims, the aviation industry, and the wider community, as well as the ongoing efforts to improve aviation safety and prevent similar incidents in the future.
- These topics are likely to be covered in any comprehensive overview of the tragedy of Flight MH370.

## **1.2 PURPOSE:**

The purpose of accident analysis is to prevent accidents in the future. This statement is not as trivial as it looks to many the objective is to identify those who were responsible, or simply to fulfill a legal or organisational requirement.

# **CHAPTER - 2**

## **PROBLEM DEFINITION** **&DESIGN THINKING**



## **2.1. EMPATHY MAP:**

- An Empathy Map is a tool used to help understand and empathize with the perspective of a particular user or customer. It is a visual representation of the user's attitudes, behaviours, emotions, and experiences that can be used to gain a deeper understanding of their needs and motivations. The Empathy Map is typically divided into four quadrants: "Says," "Thinks," "Does," and "Feels." In each quadrant, the user's thoughts, feelings, actions, and spoken words are recorded to help build a more complete understanding of their perspective. The Empathy Map is often used in design thinking and user experience research to help inform the design of products or services that better meet the needs of the user.



## Empathy map

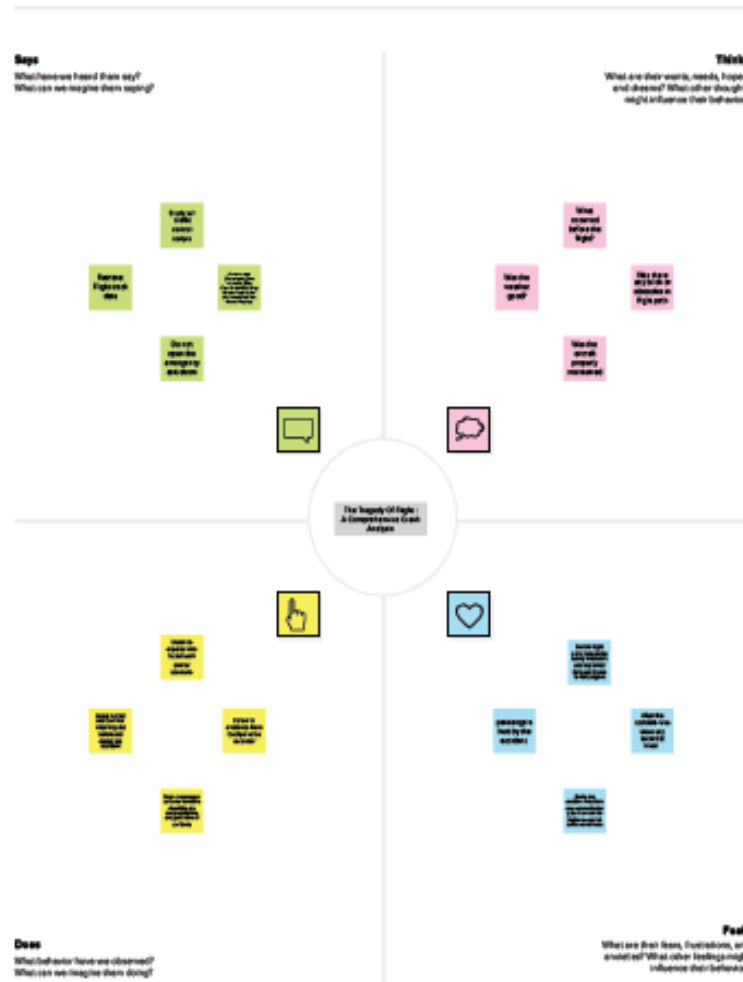
Use this framework to develop a deep, shared understanding and empathy for other people. An empathy map helps describe the aspects of a user's experience, needs and pain points, to quickly understand your users' experience and mindset.

[Share your latest feedback](#)



### Build empathy

The information you add here should be representative of the observations and research you've done about your users.



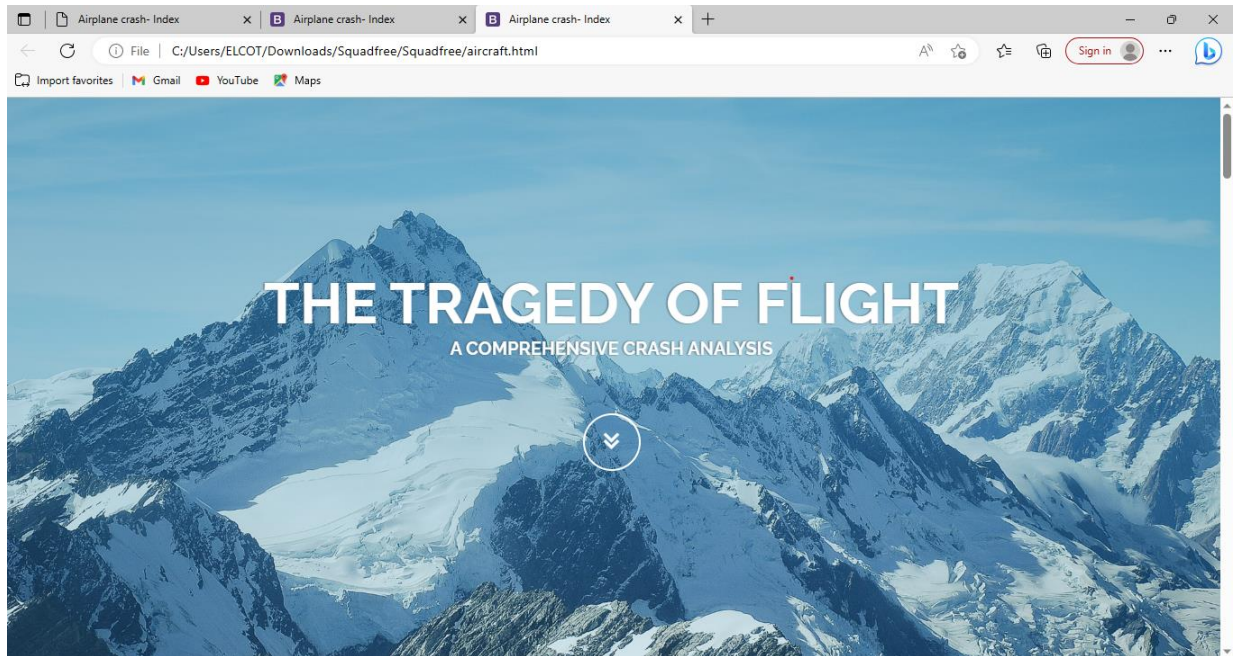
**Need some inspiration?**  
See a list of examples of this template to inspire your work.

[Open example](#)



## 2.2. IDEATION & BRAINSTORMING MAP:

- Ideation and Brainstorming Maps are tools used to generate



and organize ideas in a structured and visual way. They are commonly used in creative problem solving, innovation, and product design to generate a large number of ideas and then organize them into meaningful categories.

- Ideation and Brainstorming Maps typically start with a central theme or problem statement in the center of the map. From there, branches are drawn out to represent different categories or subtopics related to the central theme. These categories can then be further expanded with additional branches to represent specific ideas.
- The purpose of an Ideation and Brainstorming Map is to encourage free thinking and generate as many ideas as possible. It allows participants to visually see how ideas are connected and to build upon each other's ideas. The map

can then be used to prioritize and refine the most promising ideas. There are many variations of Ideation and Brainstorming Maps, including Mind Maps, Spider Maps, and Fishbone Diagrams.



# **CHAPTER – 3**

## **DATA COLLECTION & EXTRACTION FROM DATABASE IN MYSQL**

### **3.1.: Collect the dataset:**

✚ Data collection is the process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, evaluate outcomes and generate insights from the data.

#### **3.1.1: Understand the data:**

✚ Data contains all the meta information regarding the columns described in the CSV files

#### **Column Description of the Dataset:**

1. Date: This column represents the dates.
2. Location: This column represents the accident locations.
3. Operators: This column represents the accidents which made by operators
4. Route: This column represents the airplane route.
5. Type: This column represents the airplane type.
6. Aboard: This column represents the count of people aboard.
7. Fatalities: This column represents the count of death.
8. Ground: This column represents the count of people grounded.

## **3.2: Storing Data in DB & Perform SQL Operators:**



### **3.2.1: Introduction to Database:**



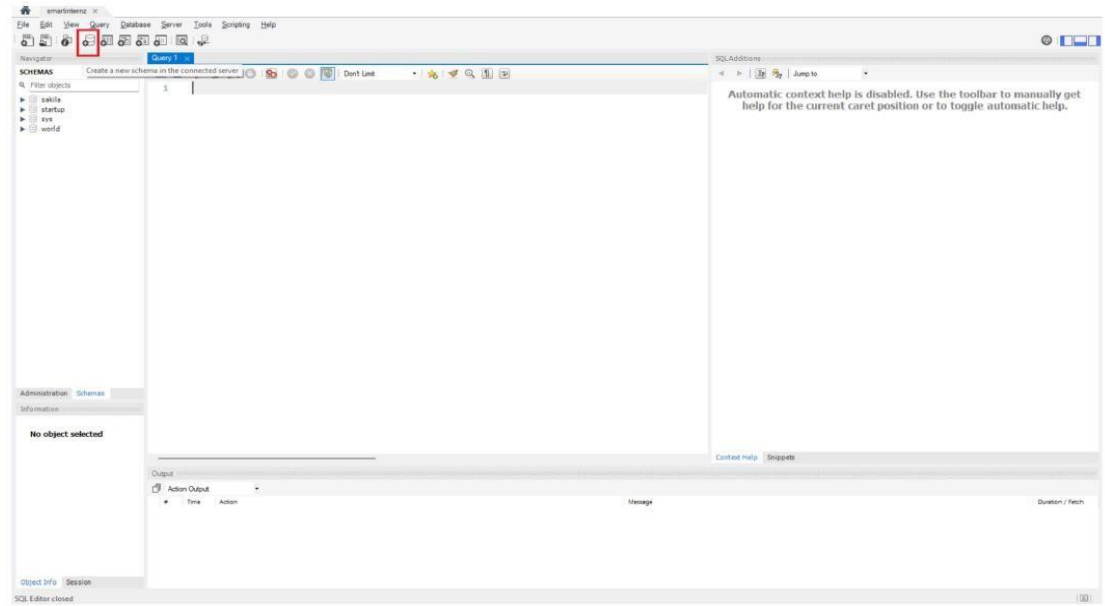


A database is an organized collection of data generally stored and accessed electronically from a computer system. It supports the storage and manipulation of data.

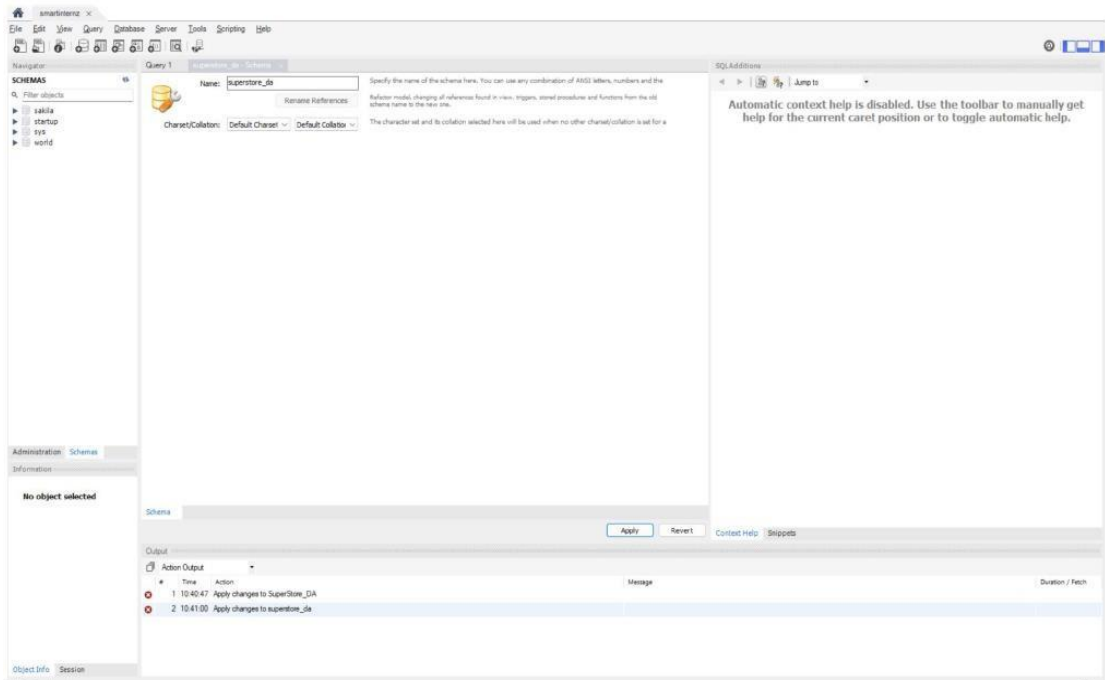
- ✚ Its ability to organize, process and manage information in a structured and controlled manner is the key to many aspects of modern business efficiency.

### **3.2.2:Creating Database and Table in MYSQL:**

- ✚ Click on the database icon on the icon menu panel to create the schema.



✚ Give the name of the schema and click on apply

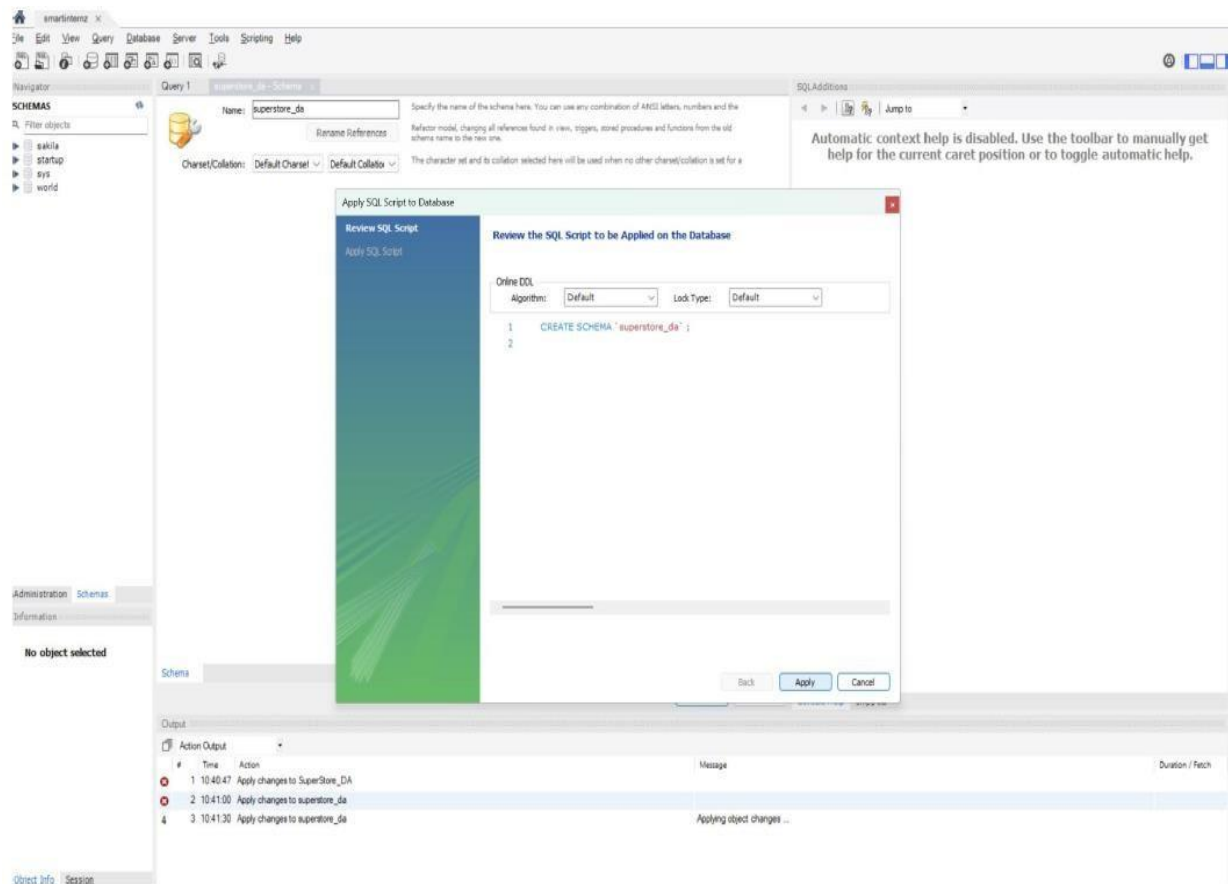


Here you can see SQL query in SQL script for creation of new schema. Click on Apply.

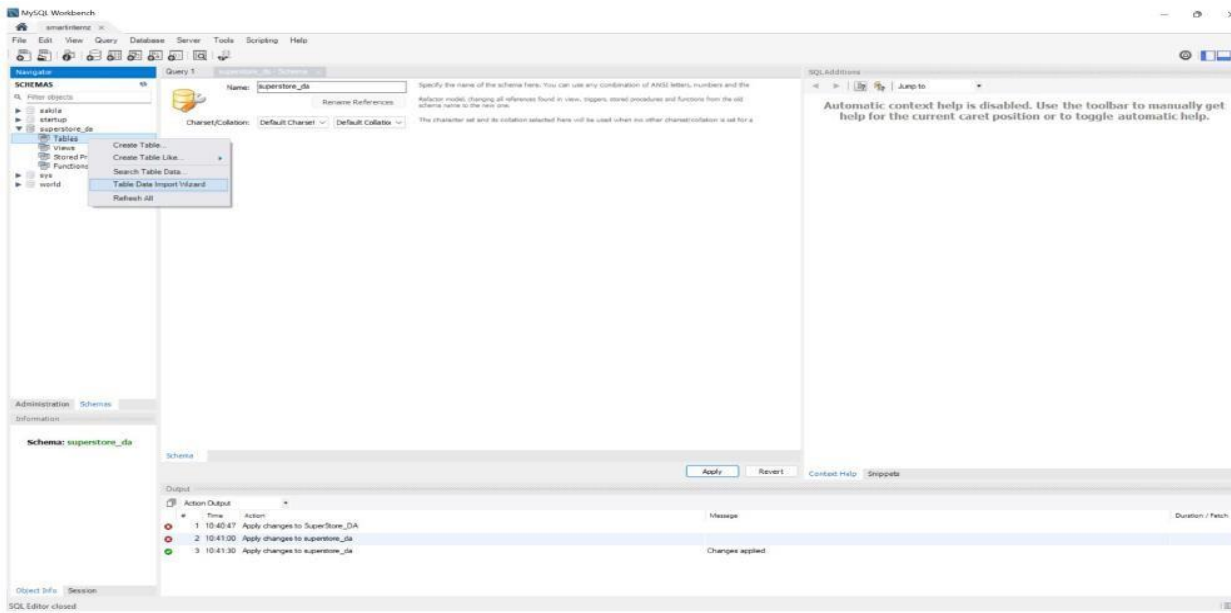
✚ As you can see of the left panel Schema with the given name is created.

✚ Click on schema name and give a Right-Click on tables

✚ Now click on Table Data Import Wizard to load the dataset.

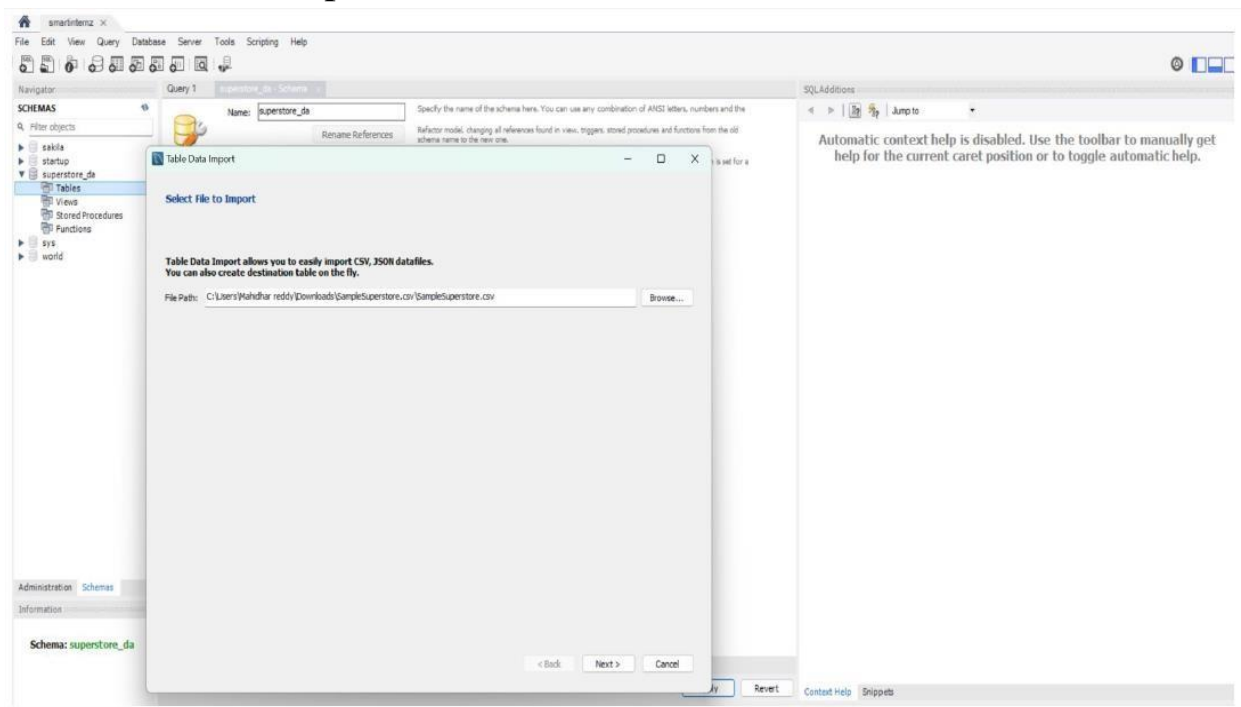


Click on Browse and select the file in your computer to load the dataset file as a Table into that schema you created in MySQL

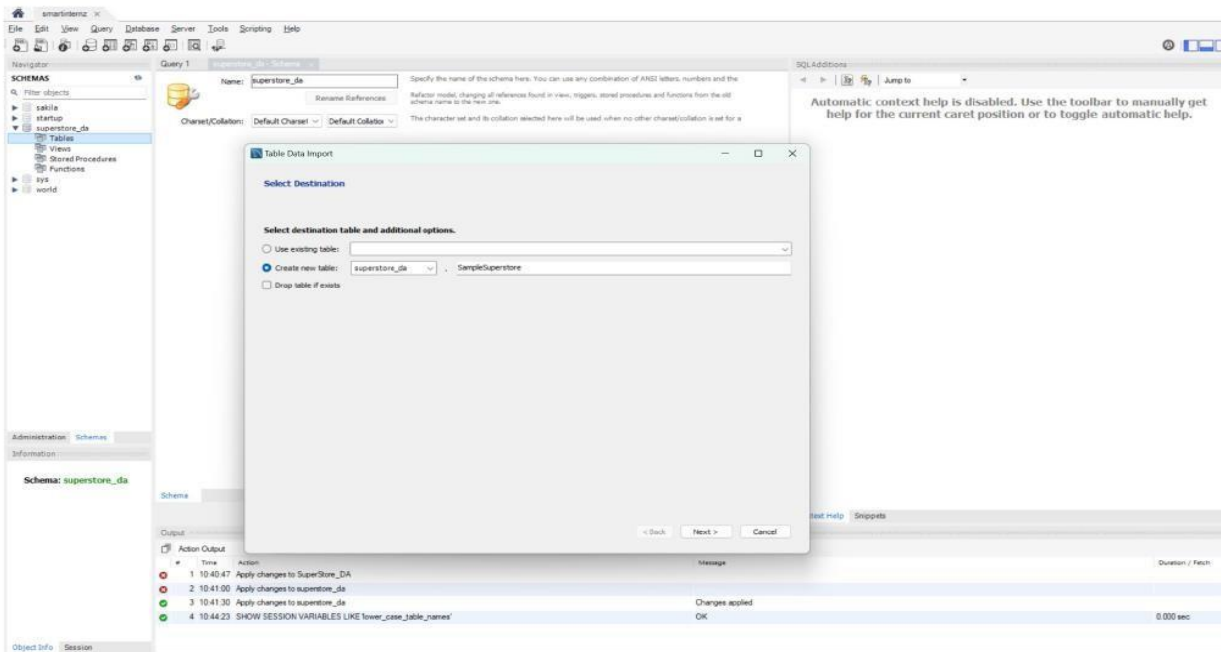


If

you want add the dataset to existing table click on use existing table and select from the dropdown of tables lists.

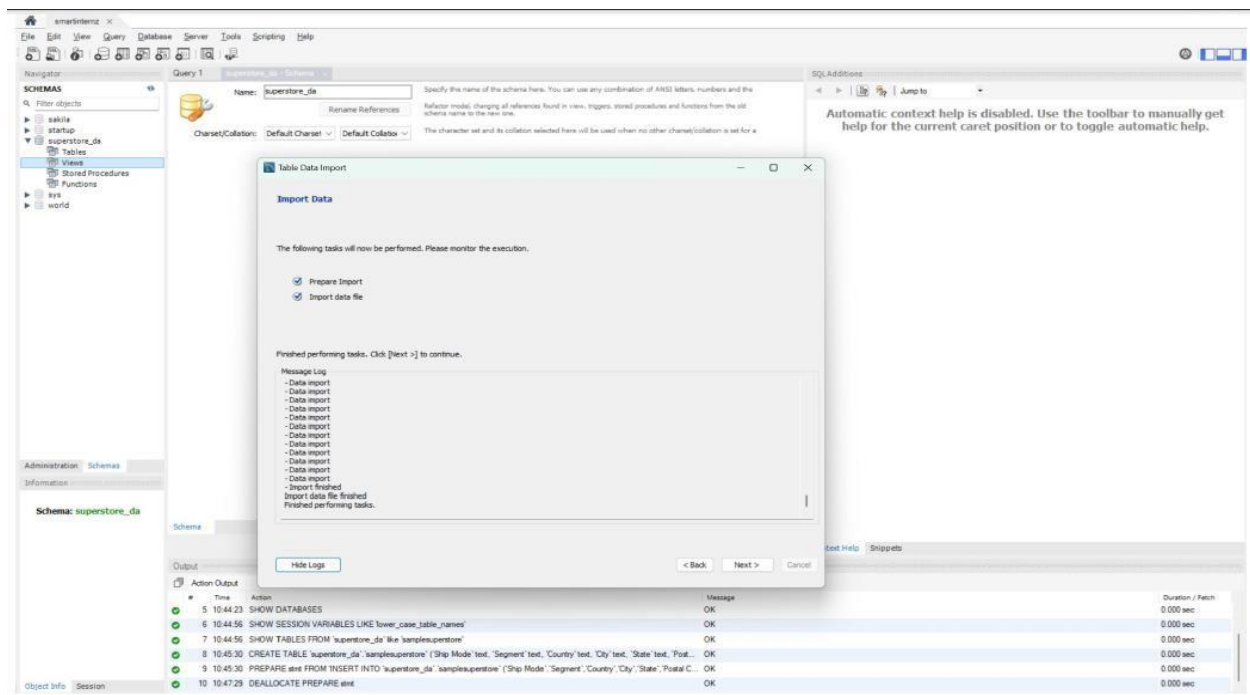


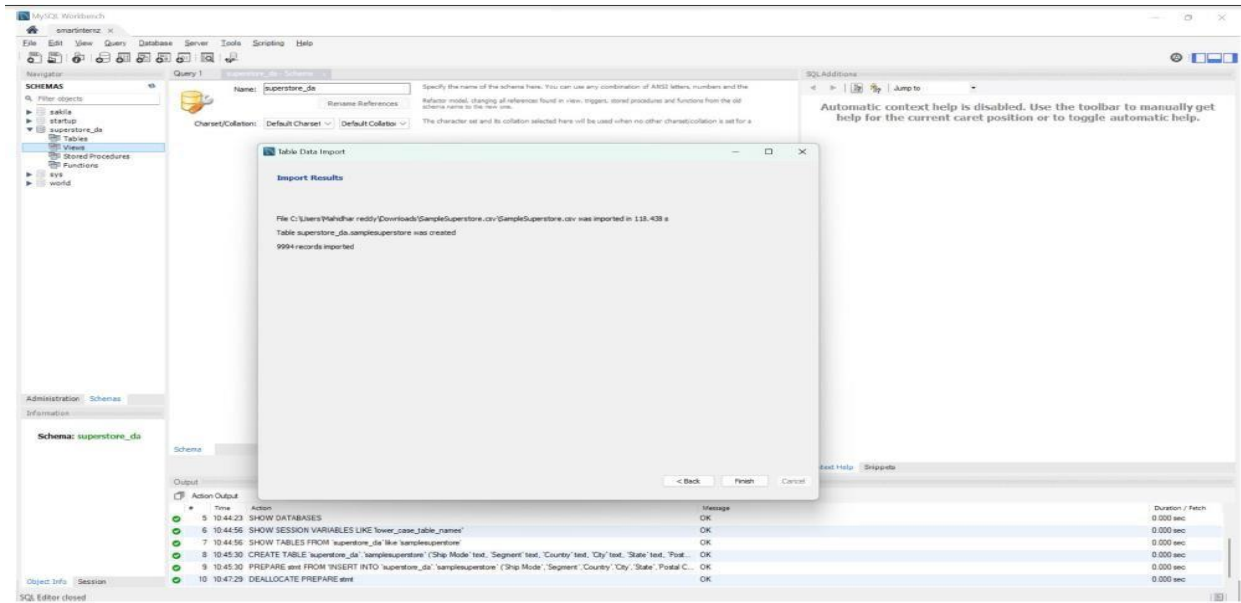
Otherwise go with create new table and Click on **Next**.



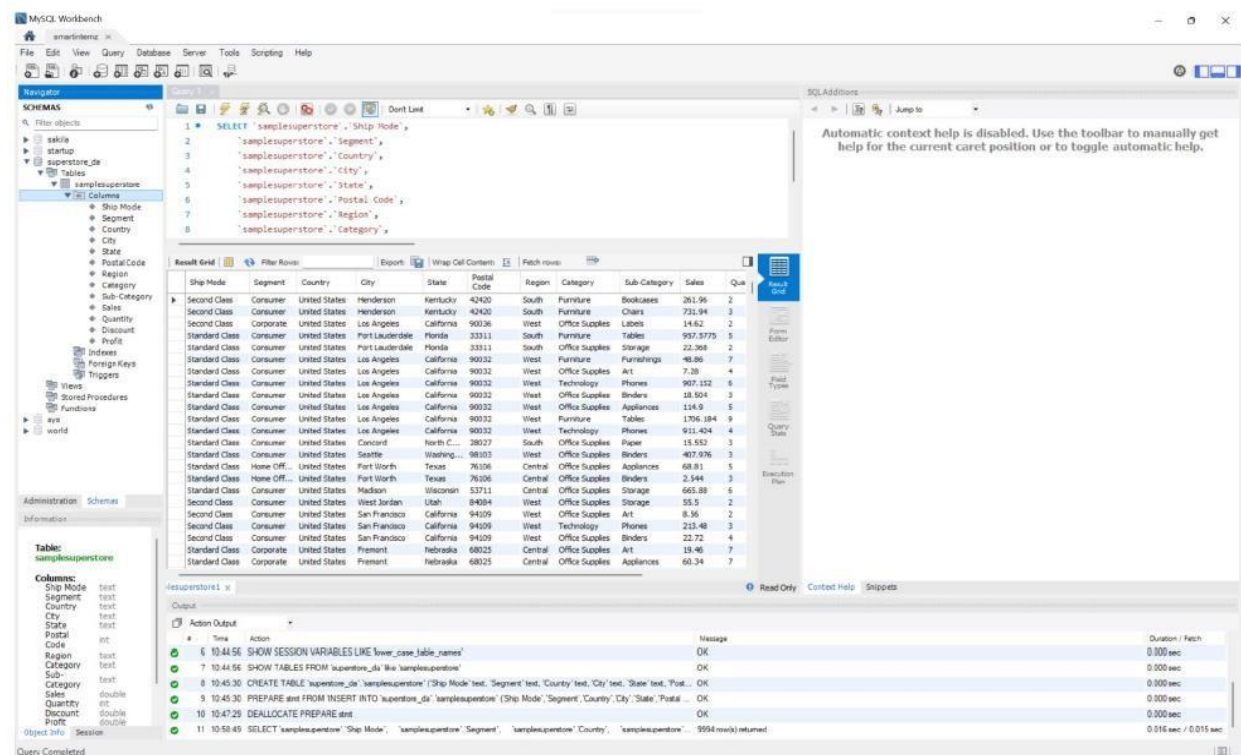
Here you can see the dataset that loaded from the excel csv file we have loaded and you can see the datatype of each column too.

Here you can see the total number of records/rows that are loaded.





Here you can see the loaded dataset that we got by using select statement in query tab.



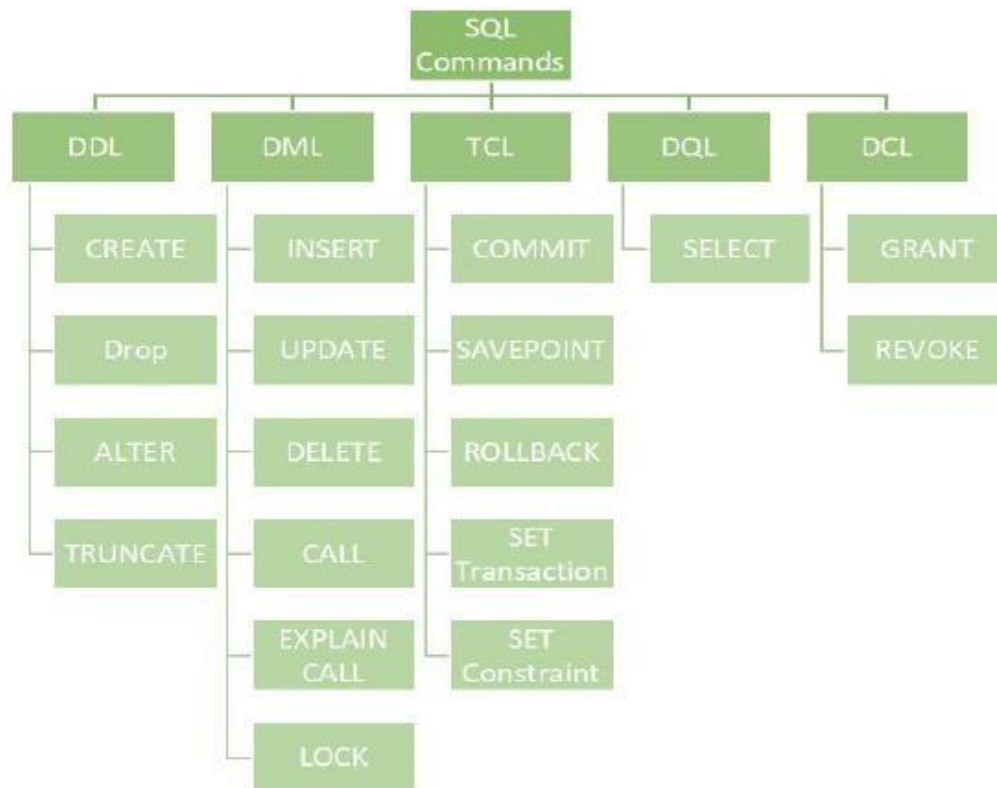
### **3.2.3:CRUD OPERATIONS:**

CRUD is an acronym for CREATE, READ (SELECT), UPDATE, and DELETE statements in SQL Server.

CRUD in database terms  
can be mentioned as Data  
Manipulation Language  
(DML) Statements.

### **3.2.4:Basic SQL Operations :**

- ✚ DDL – Data Definition Language
- ✚ DQL – Data Query Language
- ✚ DML – Data Manipulation Language
- ✚ DCL – Data Control Language
- ✚ TCL – Transaction Control Language



# **CHAPTER-4**

## **INTRODUCTION**

### **TABLEAU**



## **4.1:What is Tableau?**

- Tableau is a ground breaking data visualization software created by Tableau Software.
- Tableau connects easily and nearly any data source.
- Tableau allows for instantaneous insight by transforming data into interactive data visualizations called dashboards



## **4.2:Features of Tableau :**

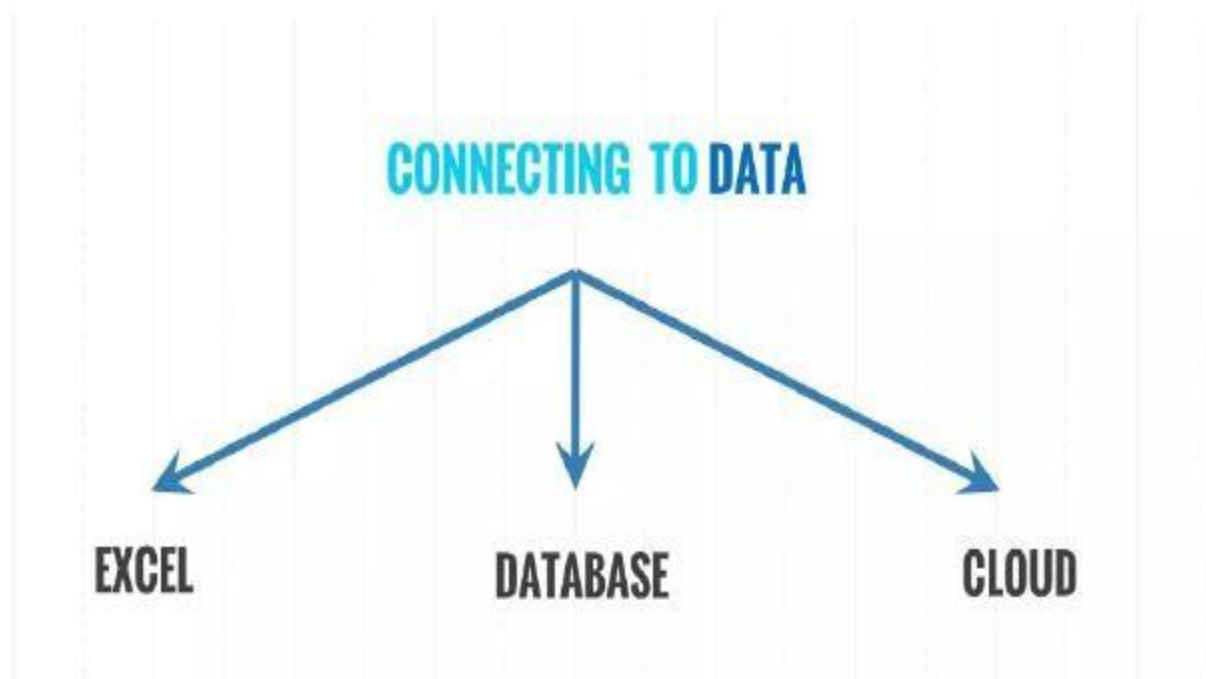
- Informative Dashboards
- Supports numerous Data Sources
- Provides Great Security
- Easy Collaboration & Sharing
- Provides Mobile Version
- Trend lines and Predictive analysis
- Availability of Geo Maps

### 4.3:Products of Tableau :

- Tableau Public
- Tableau Server
- Tableau Desktop



### 4.4:Connecting Tableau with Data Sources :



## **4.5:Working with Flat files :**

- In the To a File section you can see the list of file extensions.
- In the below you can see more option if the list of your file extension is not there.

## **4.6:Working with the Spreadsheets :**

✓Tableau enables us to connect with spreadsheets to import the data.

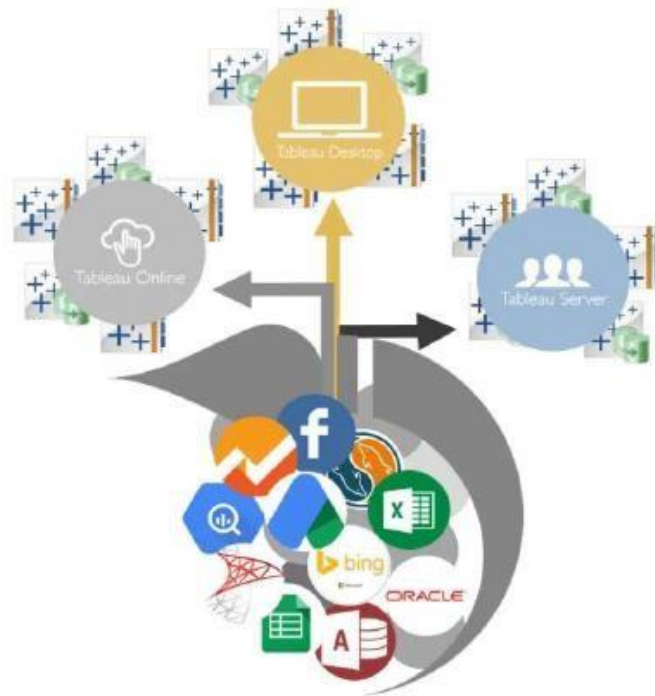
# **CHAPTER - 5**

## **CONNECTING DATABASE**

## **AND TABLEAU**

## **5.1:Connecting Database and Tableau:**

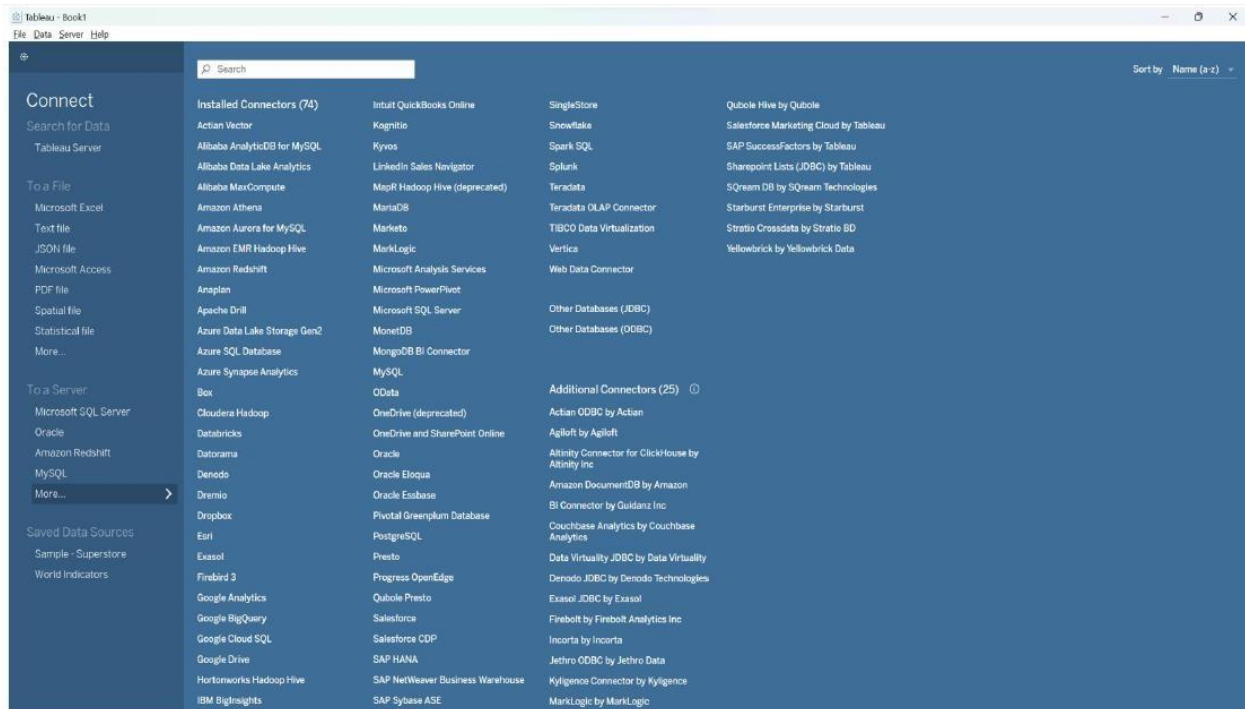
- ✚ Before you begin your analysis, you must connect to your data and then set up the data source.
- ✚ Before you can build a view and analyse your data, you must first connect Tableau to your data.
- ✚ Tableau supports connecting to a wide variety of data, stored in a variety of places.



For example, your data might be stored on your computer in a spreadsheet or a text file, or in a big data, relational, or database on a server in your enterprise.

## **5.2:List of Data Sources Supported by Tableau Desktop :**

- ✚ When you launch Tableau Desktop, the data connectors that are available to you are listed on the Connect pane, which is the left pane on the Start page.



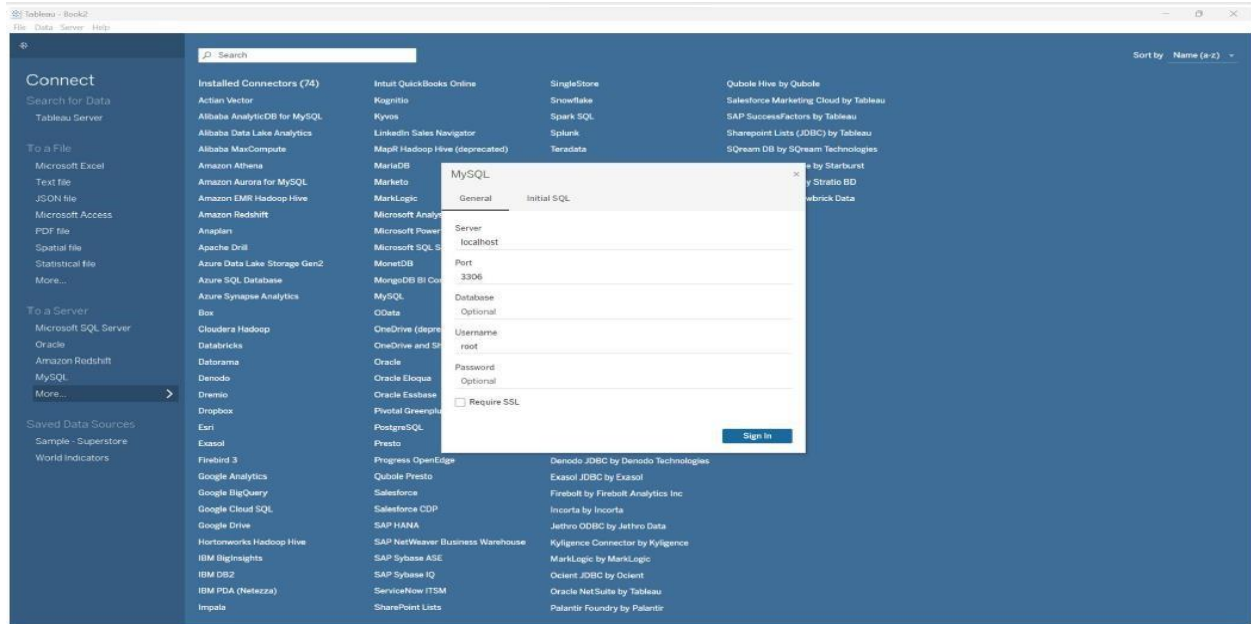
✚ Name of the server that hosts the database you want to connect to.

✚ Username and password

✚ Are you connecting to an SSL server?

✚ (Optional) Initial SQL statement to run every time Tableau connects. If the connection is success you can see this page.

Now you can go to sheets and start working on the dataset to create Visualizations.



# **CHAPTER – 6**

## **DATA VISUALIZATION**



## **6.1.What is Data Visualization...??**

- Data visualization is the graphical representation of information and data. By using visual elements like chart, graph and maps.
- Data visualization tools provide an accessible way to see and understand trends, outliers, and patterns in data.



### **Advantages :**

- Easily sharing information.
- Interactively explore opportunities.
- Visualize patterns and relationships.

## **6.2:Types of Visualization in Tableau :**

Histograms	Box plot
Motion	Pie
Bar	Line
Bubble	Bullet
Scatter	Tree

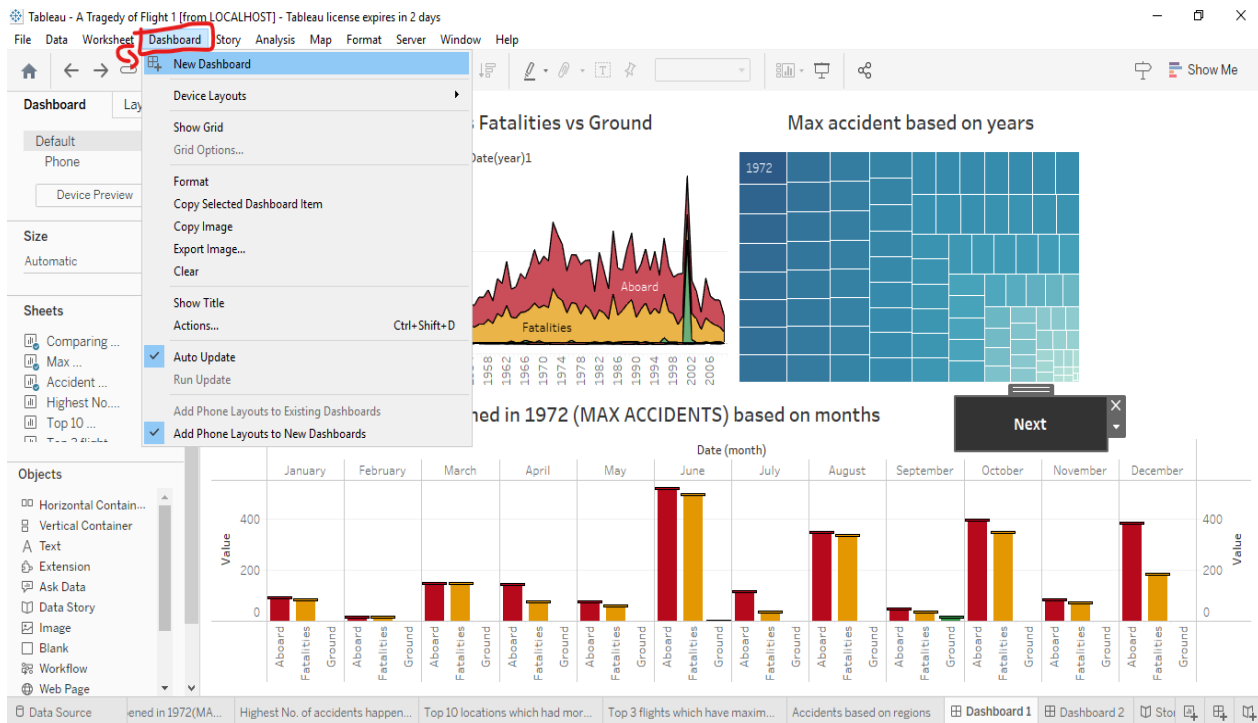
# **CHAPTER - 7**

## **DASHBOARD AND**

## **STORIES**

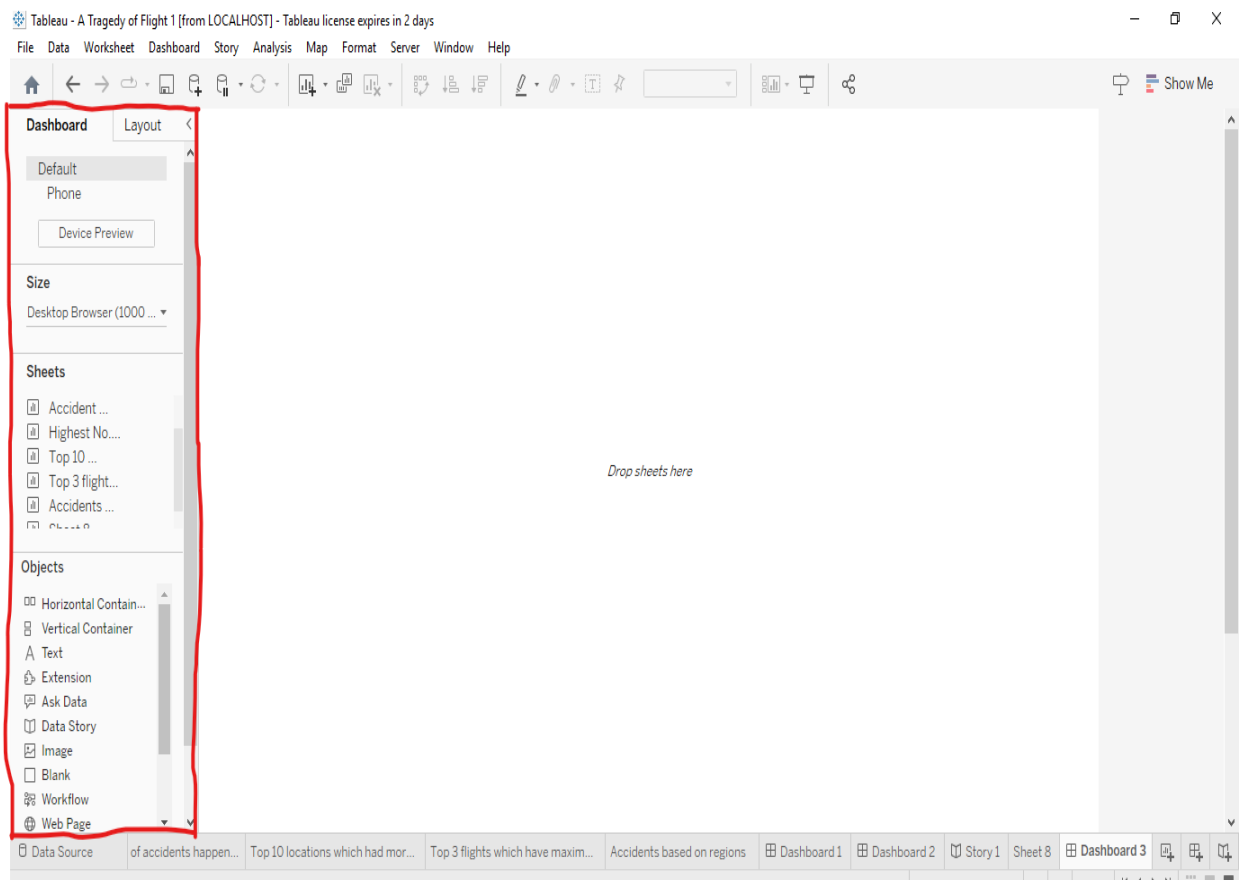
## 7.1:Creating a Dashboard in Tableau :

- A dashboard is a collection of different kinds of visualizations or views that we create on Tableau We can bring together different elements of multiple worksheets and put them on a single dashboard.
- The dashboard option enables us to import and add charts and graphs from worksheets to create a dashboard. On a dashboard, we can place relevant charts and graphs in one view and analyse them for better insights.

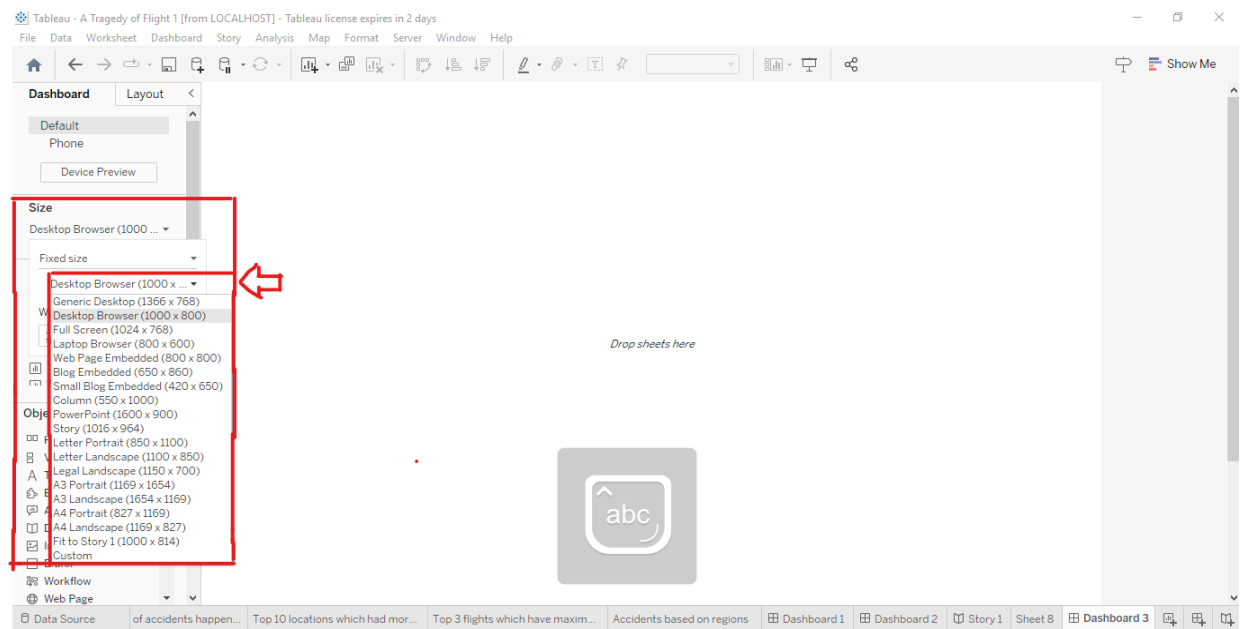
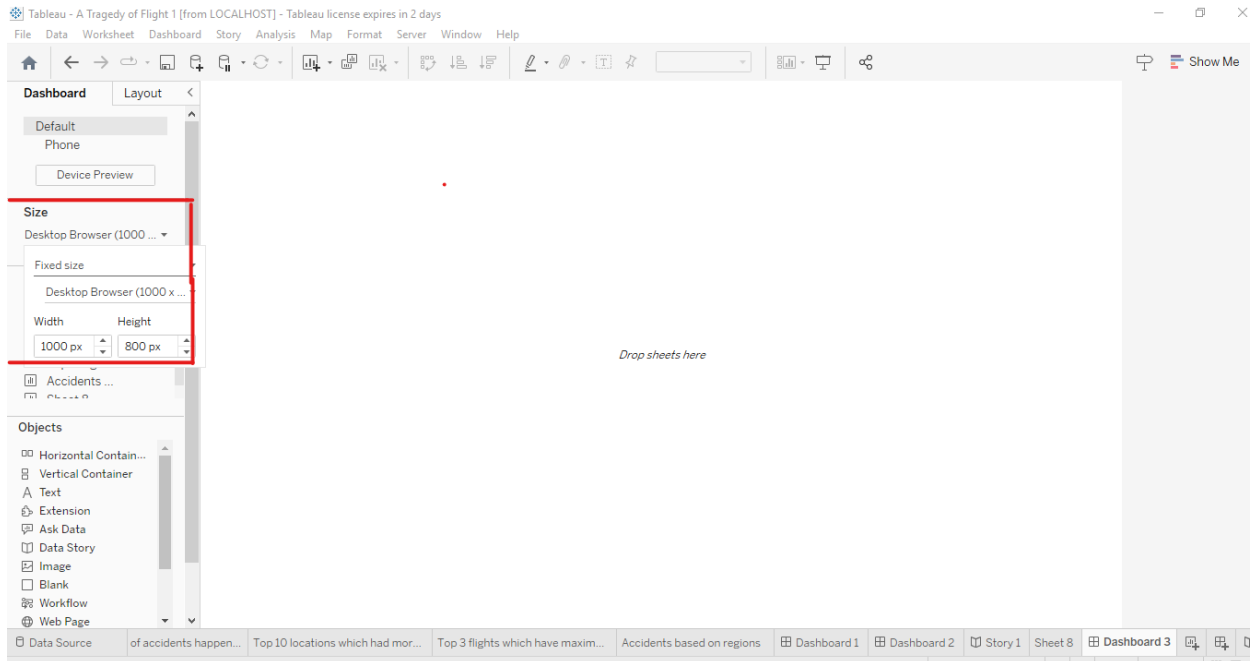


## 7.2:Dashboard Pane :

- In the window where we can create our dashboard, we get a lot of tabs and options related to dashboarding. On the left, we have a Dashboard pane which shows the dashboard size, list of available sheets in a workbook, objects, etc.

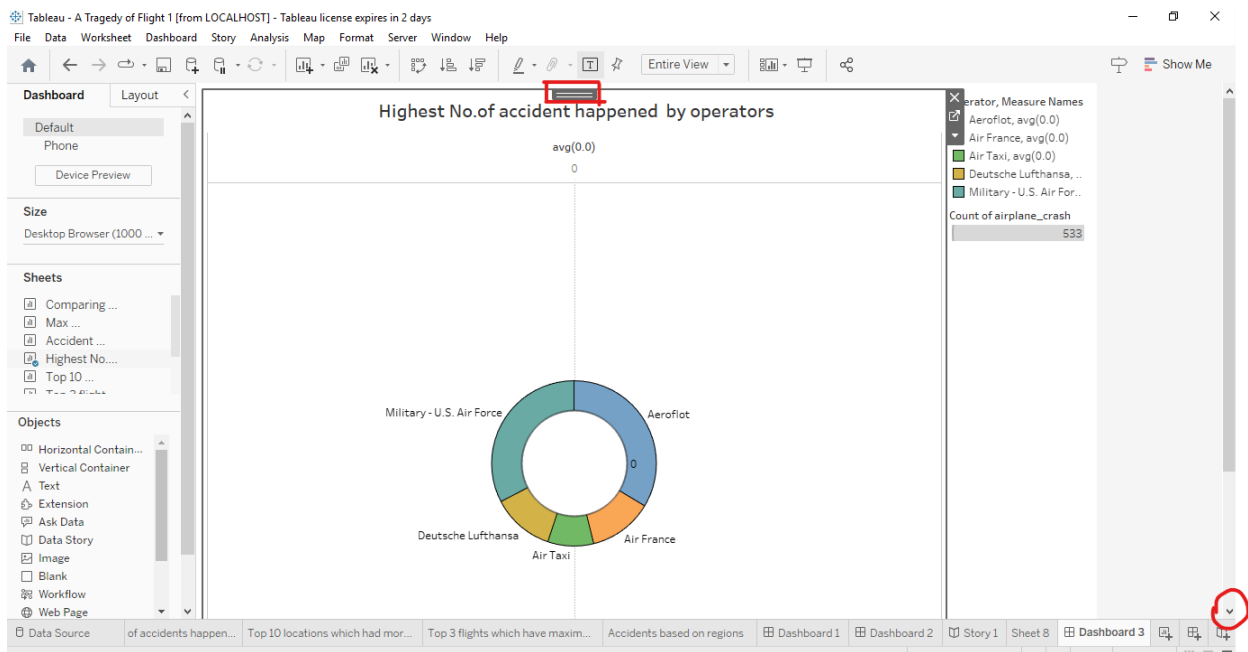


From the Dashboard tab, we can set the size of our dashboard. We can enter custom dimensions like the width and height of the dashboard as per our requirements



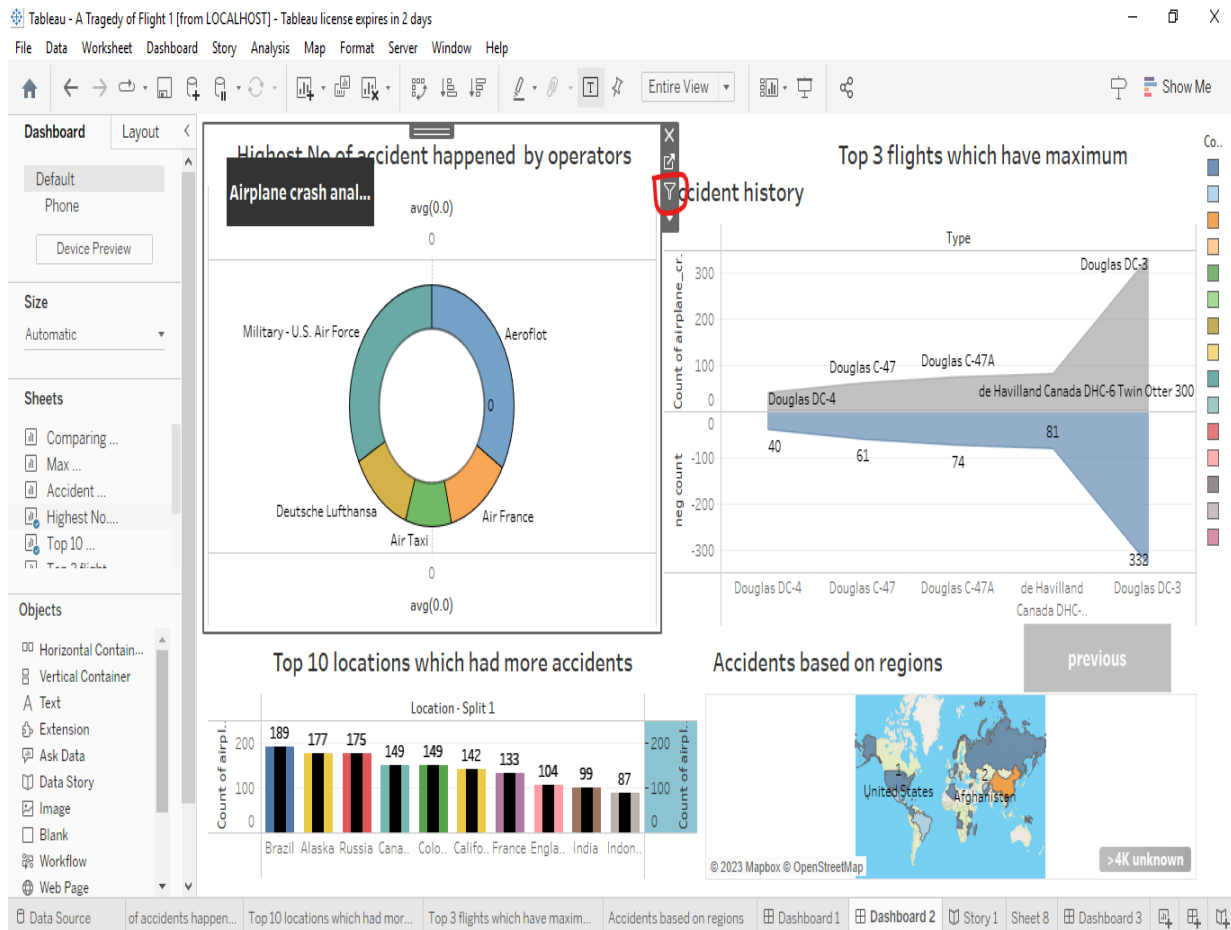
### **7.3: Adding Sheets :**

- Have a look at the picture below to see how you can drag a sheet or visual around on the dashboard and adjust its size.



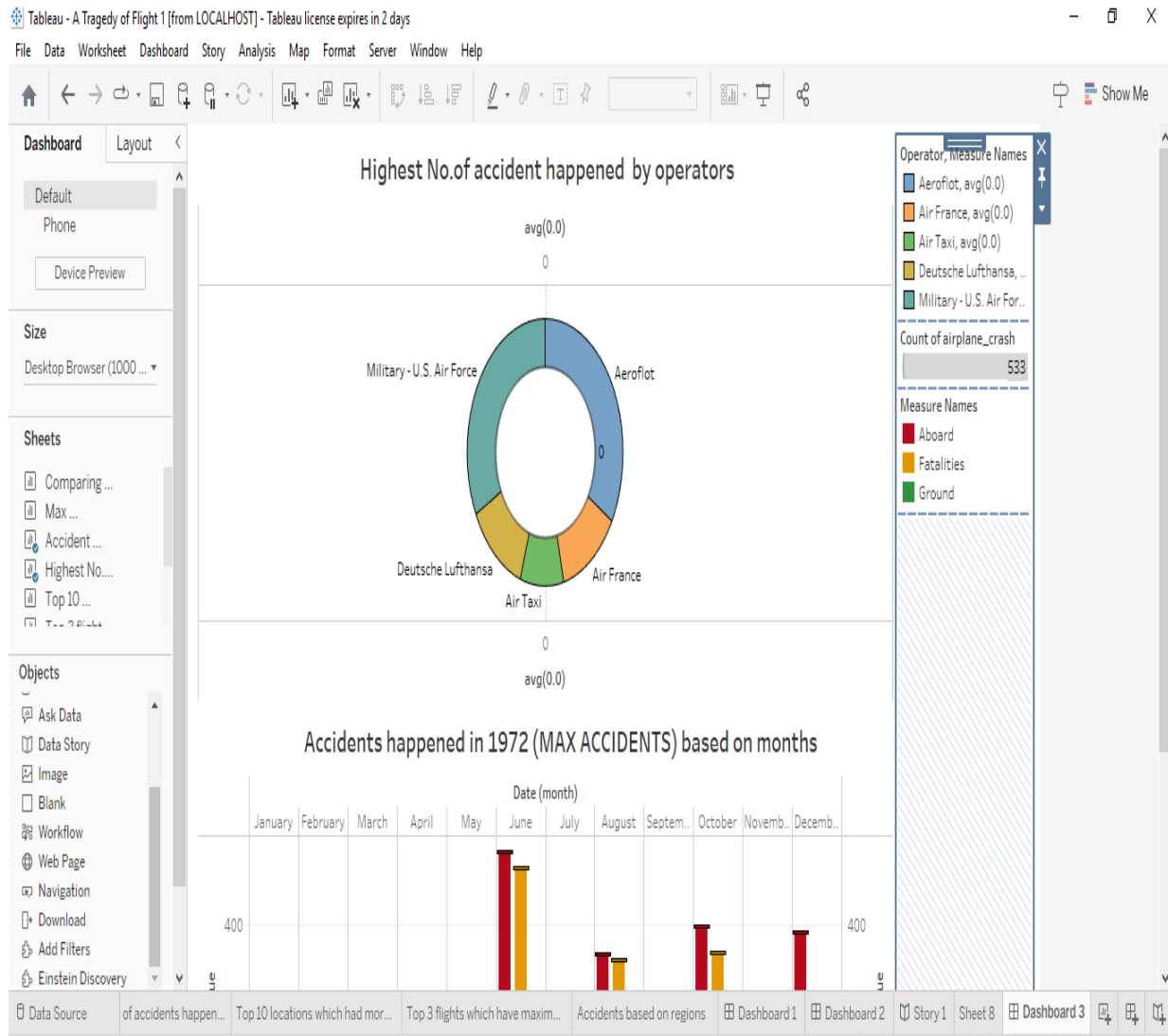
### **7.4: Adding More sheets in dashboard :**

//In a similar way, we can add as many sheets as we require and arrange them on the dashboard properly



## 7.5: Filters in dashboard :

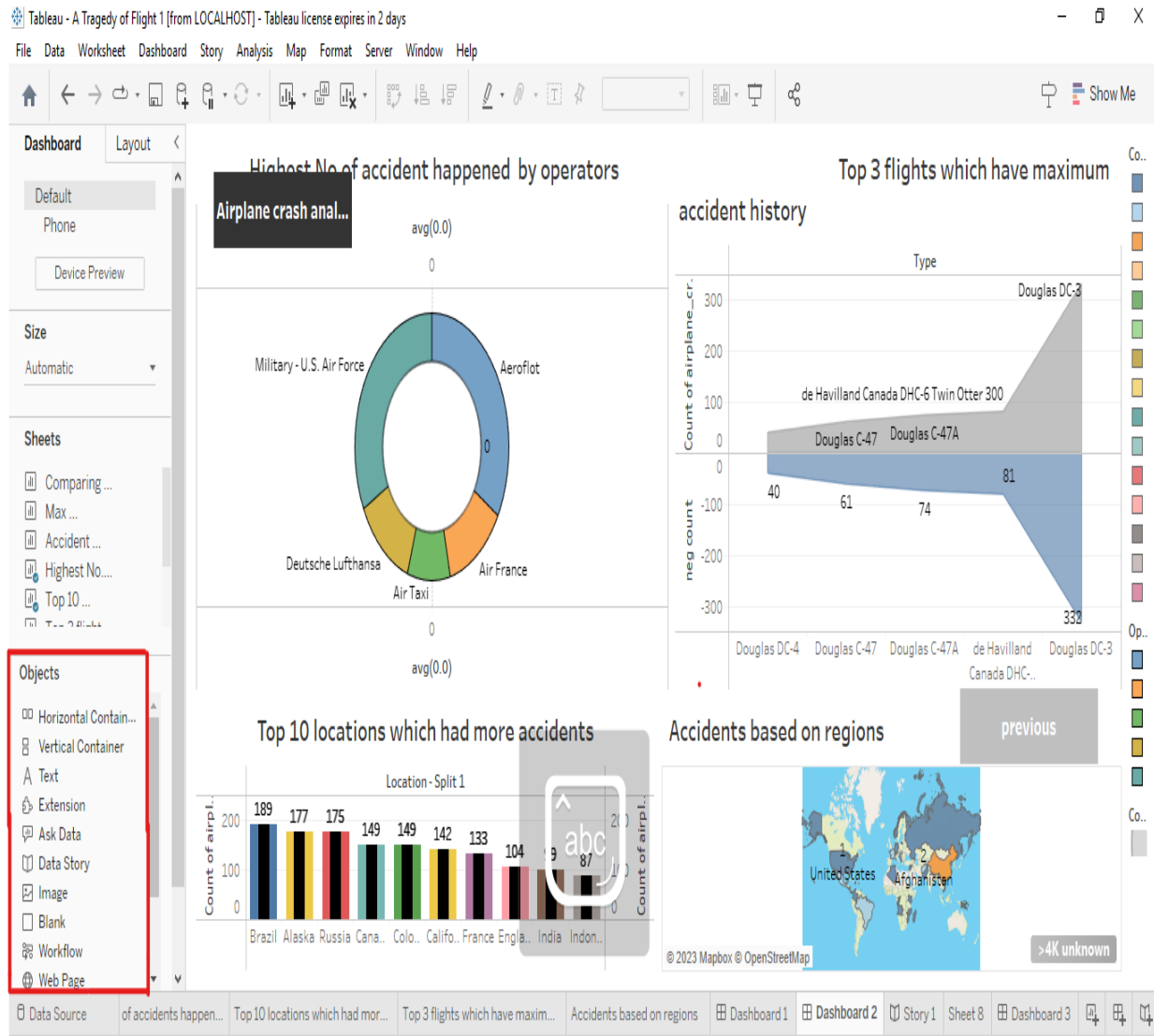
- Also, you can apply the filter or selections on one graph and treat it like a filter for all the other visuals on the dashboard.
- To add a filter to a dashboard in Tableau, select Use as Filter option given on the right of every visual.



## 7.6: Adding objects :

- Another set of tools that we get to make our dashboard more interactive and dynamic is in the Objects section. We can add a wide variety of objects such as a web page, button, text box, extension, etc.

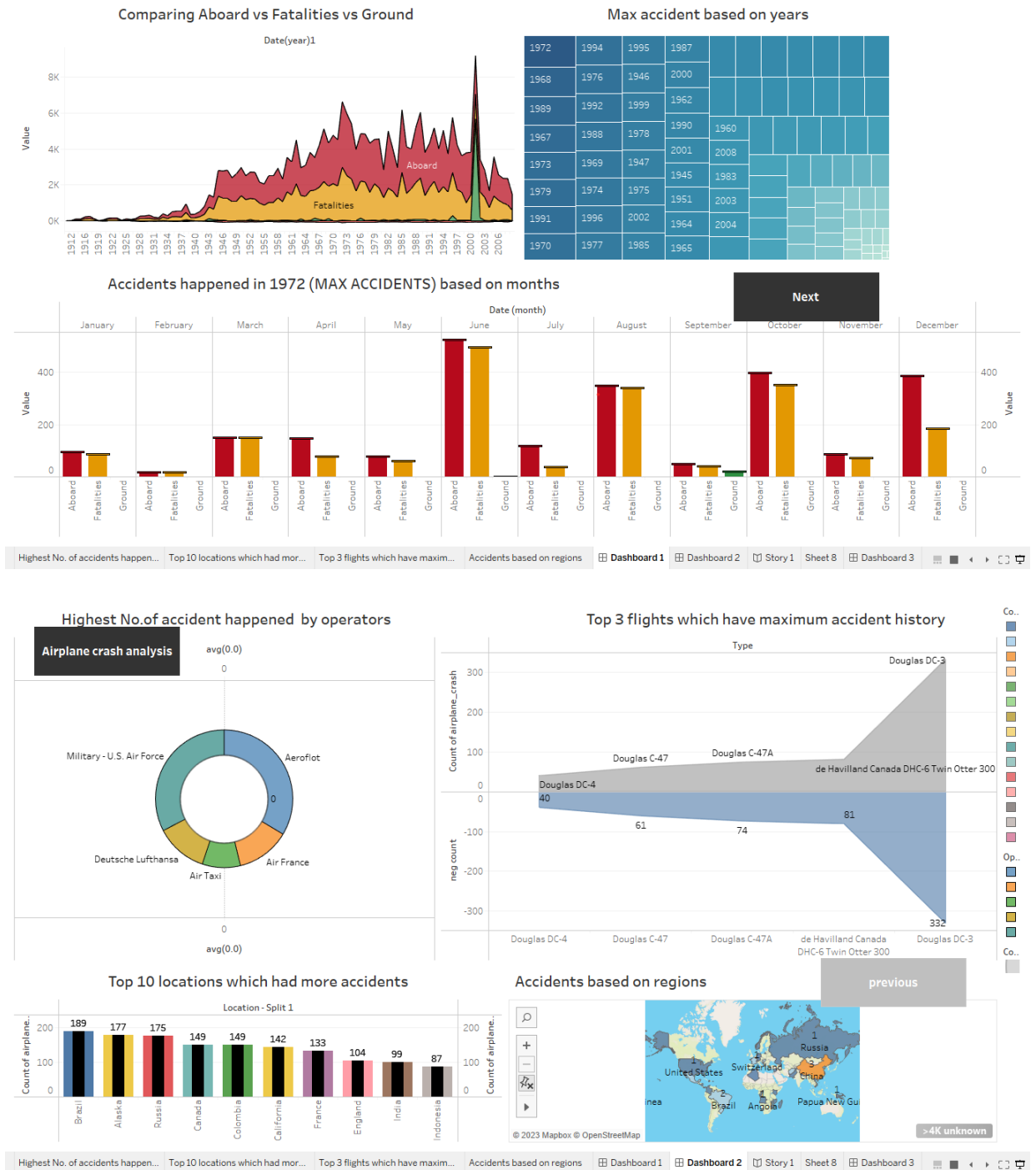




From the objects pane, we can add a button and also select the action of that button, that is, what that button should do when you click on it. Select the Edit Button option to explore the options you can select from for a button object

## 7.7: Final Dashboard :

- Now, we move towards making a final dashboard in Tableau with all its elements in place



## 7.2:What are Tableau Stories?

- Well, it is a sequence of different charts that combine to provide a cohesive plot to its viewers. In essence, all these charts tell a story about the data which allows the viewers to form their conclusion. The story in Tableau contains story points, where each story point is either a worksheet or a dashboard.
- When you share a story—for example, by publishing a workbook to Tableau Public, Tableau Server, or Tableau Cloud—users can interact with the story to reveal new findings or ask new questions of the data.

**Options for adding a new story point:** Choose **Blank** to add a new point or **Duplicate** to use the current story point as the starting place for your next point.

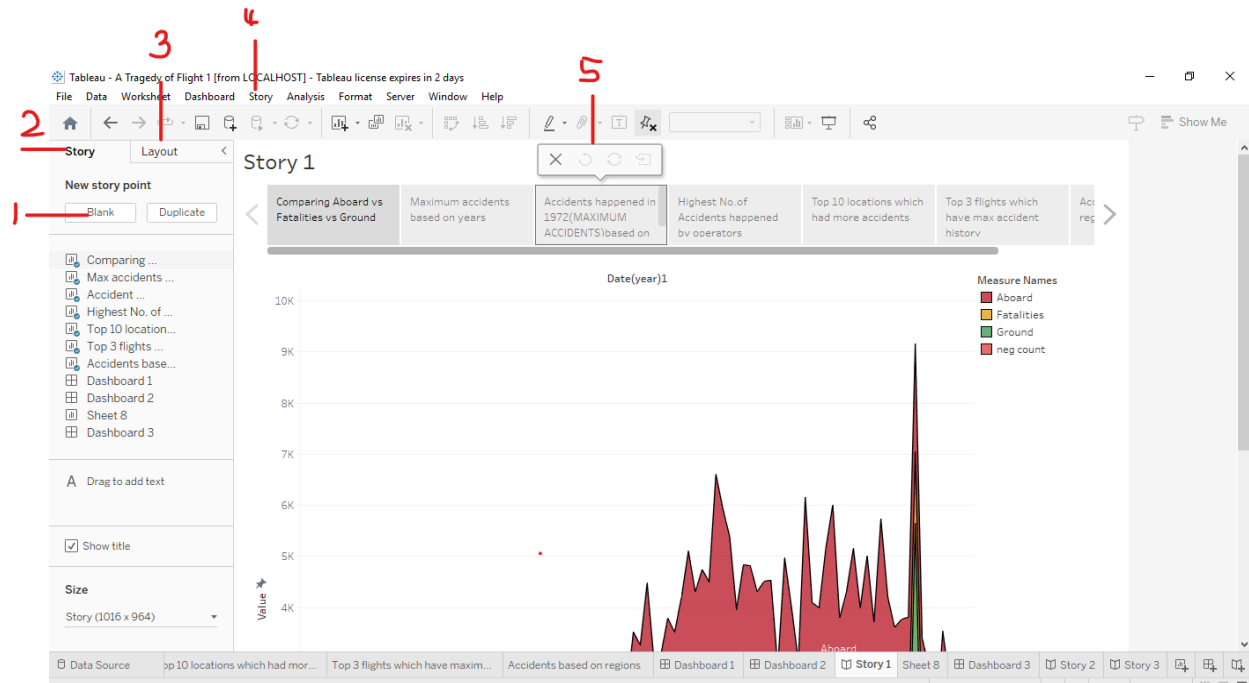
**The Story pane:** Use this pane to drag dashboards, sheets, and text descriptions to your story sheet. This is also where you set the size of your story and display or hide the title.

**The Layout pane:** This is where you choose your navigator style and display or hide the forward and back arrows.

**The Story menu:** Use this menu in Tableau Desktop to format the story or copy or export the current story point as an image. You can also clear the entire story here or show or hide the navigator and story title.

**The Story toolbar:** This toolbar appears when you mouse-over the navigator area. Use it to revert changes, apply updates to a story point, delete a story point, or create a new story point out of the current, customized one.

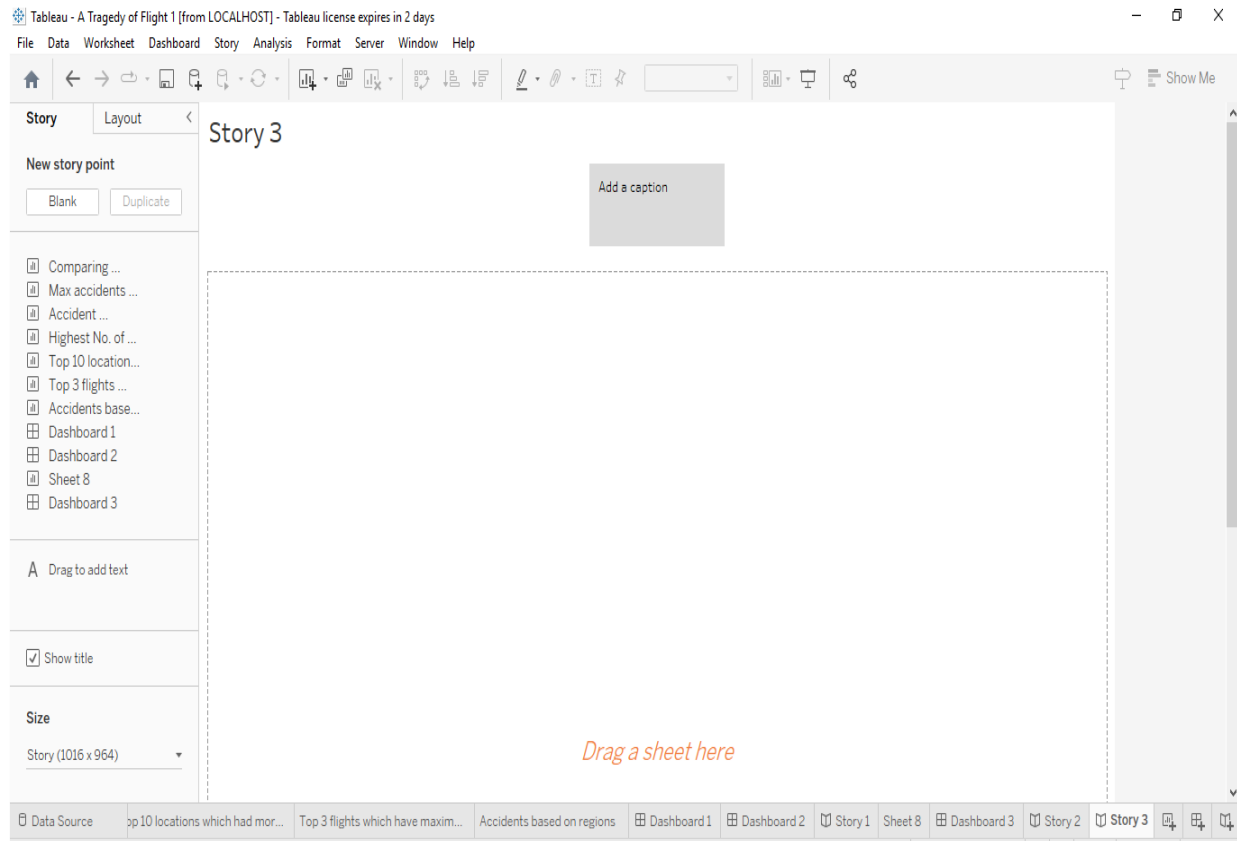
**The navigator:** The navigator allows you to edit and organize your story points. It's also how your audience will step through your story. To change the style of the navigator, use the Layout pane\



## 7.2.1 How to create a Story?

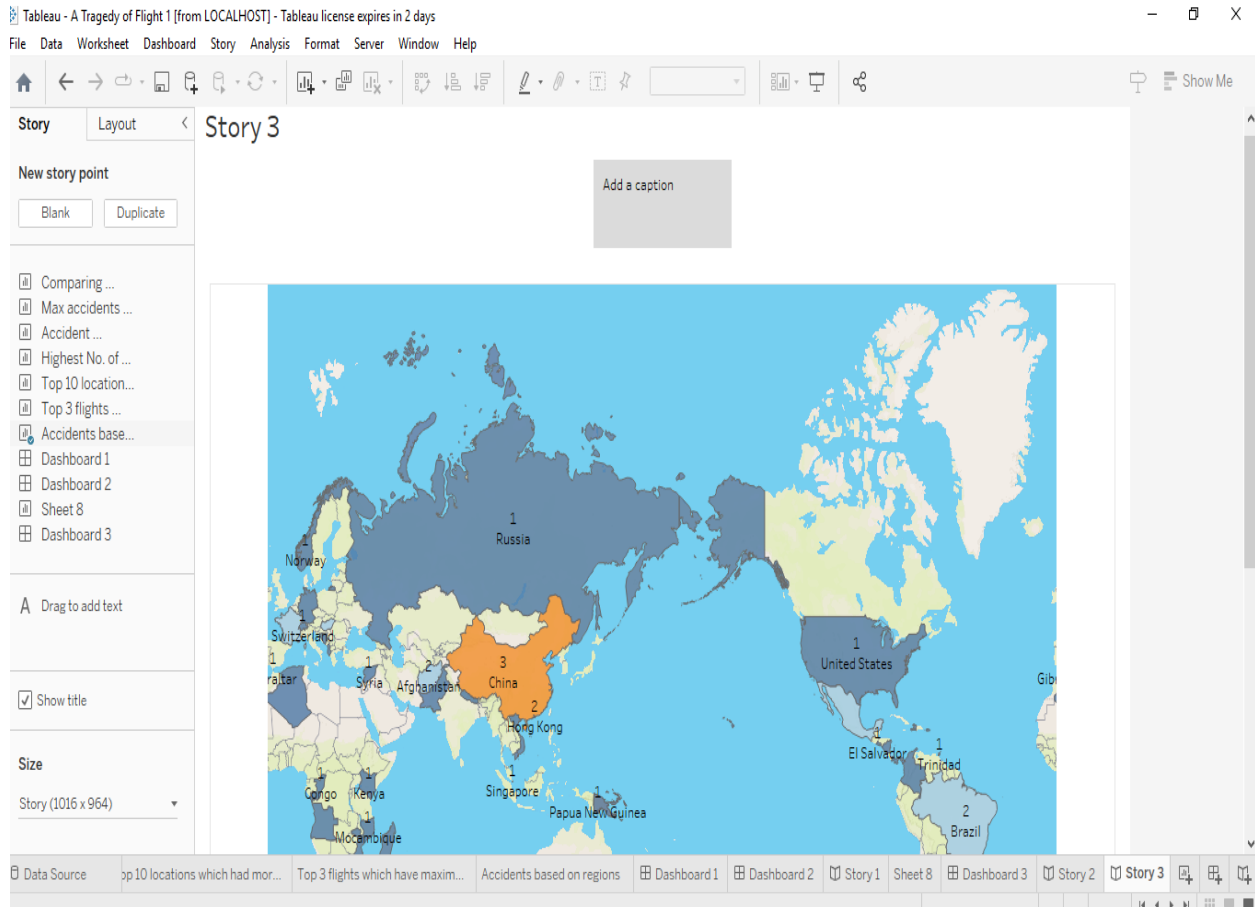
### Step 1:

Click on the new Story tab to create a new story. You can then add various sheets and dashboards to create a story point



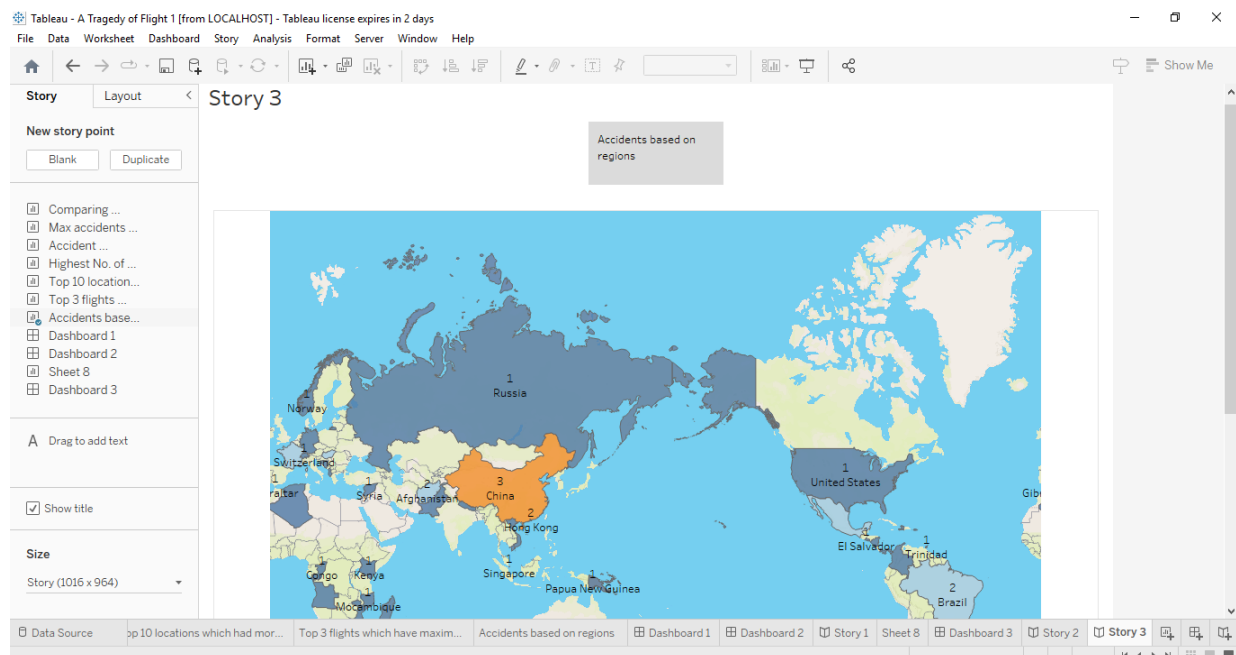
## Step 2:

To start building your story, double-click a sheet on the left to feature it to your story purpose



### Step 3:

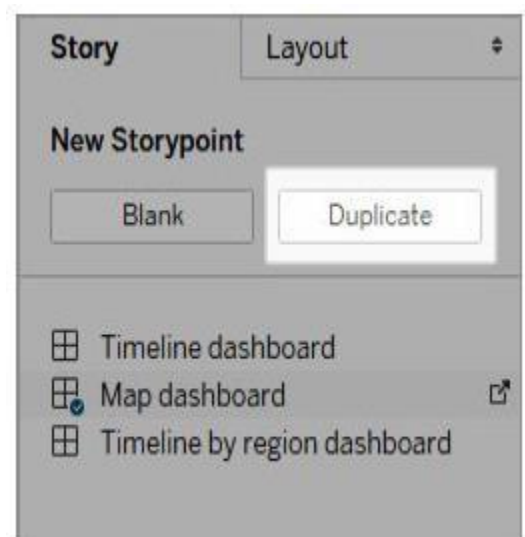
We can also add a caption to summarize the story point by clicking on “Add a caption” and then writing it. Let’s add the caption “The Tragedy of flight by Category and Subcategory” to our example.



Starting with your next story point, you'll use the drill-down technique in order to narrow down the scope of the story and keep the narrative moving.

1. To use your first story point as a baseline for your next, click Duplicate under New Story point on the left.

You can change the size of your story by clicking on the Size option in the lower-left corner. You can choose from one of

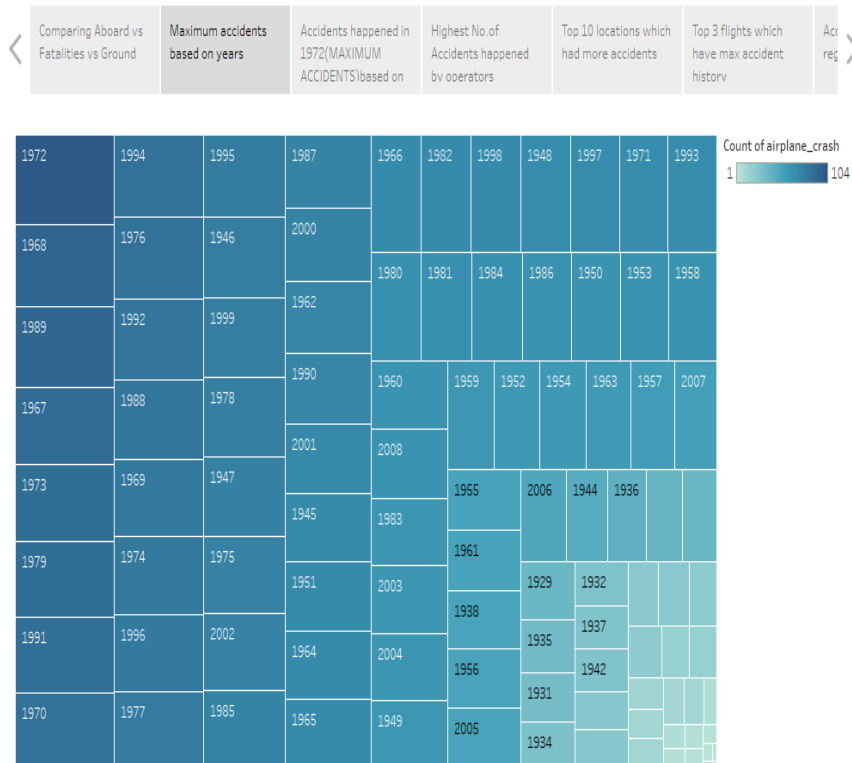


the predefined sizes or set your custom size in pixels. You can also change the name of your story by right-clicking on your Story tab and choosing rename.

### **7.2.2: Final Story :**

Examine your work! Take a look at “Finishing touches” in action

Story 1





# **CHAPTER – 8**

## **WEB INTEGRATION**

## **8. WEB INTEGRATION :**

Publishing helps us to track and monitor key performance metrics and to communicate results and progress, help a publisher stay informed, make better decisions, and communicate their performance to others.

### **8.1: Publishing dashboard and reports to tableau public:**

#### **Step 1:**

Go to Dashboard/story, click on the share button on the top ribbon Give the server address of your tableau public account and click on connect.



## Step 2:

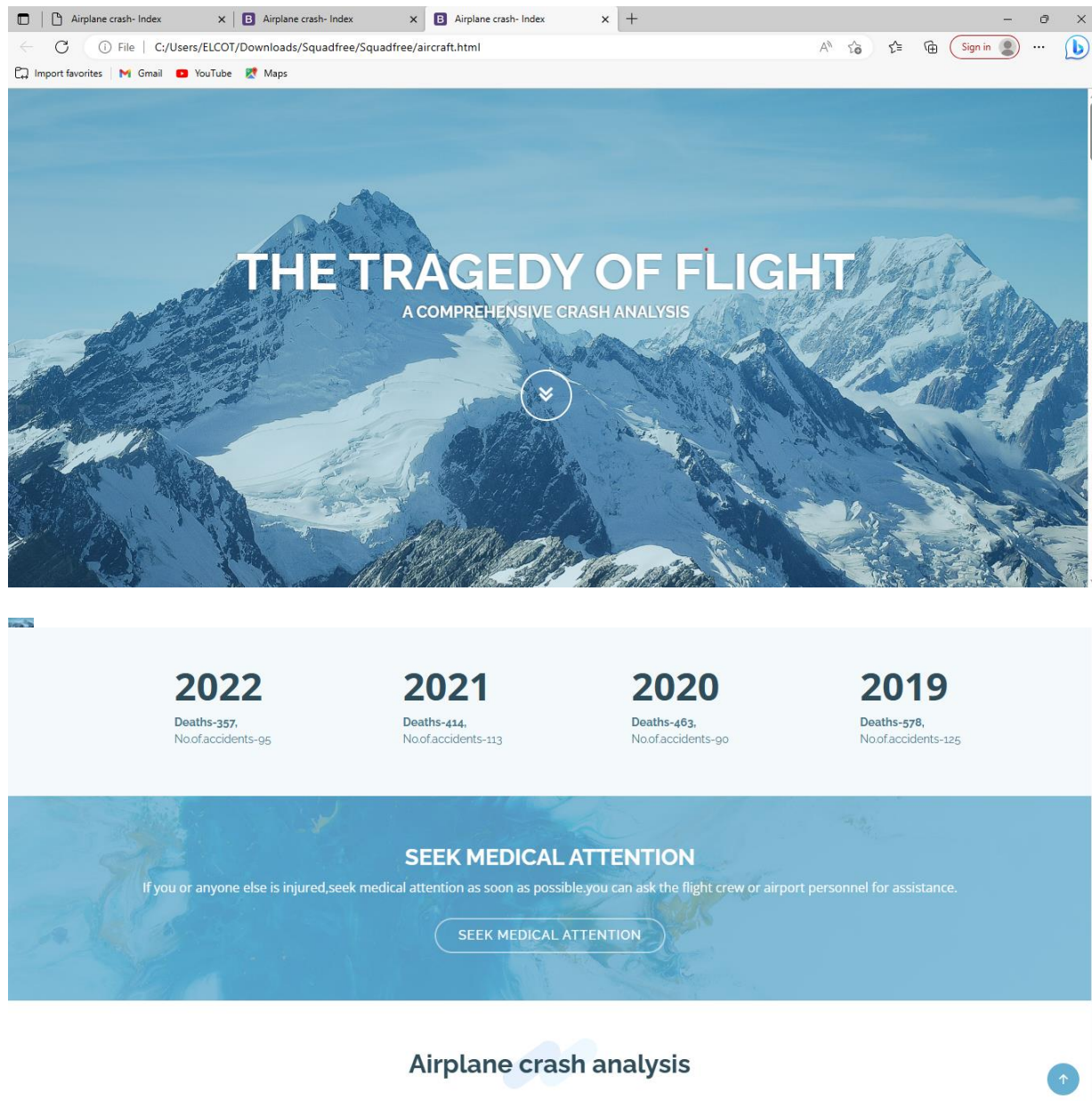
Once you click on connect it will ask you for the tableau public username and password. Once you login into your tableau public using the credentials, the particular visualization will be published into the tableau public

**Note:** While publishing the visualization to the public, the respective sheet will get published when you click on the share option.



## 8.2: Embed Dashboard & Story with Web Bootstrap:

Created the Web Integration: [Airplane crash- Index](#) Website  
Template by S.Nandhini and My Team



# **CHAPTER – 9**

## **ADVANTAGES ,**

## **DISADVANTAGES**

## **&APPLICATIONS**

Referring to the tragic accidents or crashes of airplanes, here are some advantages and disadvantages associated with such tragedies:

## **9.1 ADVANTAGES:**

**1.Improved Safety Measures:** After a tragic accident, the aviation industry usually works to identify the cause of the accident and implement measures to prevent similar incidents in the future. This can lead to improved safety regulations and procedures for airplanes and airports, making air travel safer for passengers and crew.

**2.Public Awareness:** Airplane accidents often receive significant media attention, which can help to raise public awareness about potential risks associated with air travel. This can lead to increased pressure on airlines and aviation authorities to prioritize safety measures.

**3.Investigative Learning:** Investigating a tragedy requires a thorough examination of what happened, why it happened, and what can be done to prevent similar incidents in the future. These investigations can help improve the overall understanding of airplane mechanics, pilot behaviour, and other factors that contribute to airplane accidents.

## **9.2.DISADVANTAGES:**

1. **Loss of Life:** The most significant disadvantage of airplane tragedies is, of course, the loss of life. Airplane accidents can be devastating for families and communities, causing emotional and psychological trauma that can last for years.
2. **Negative Publicity:** Tragic accidents can also harm the reputation of airlines, airports, and the aviation industry as a whole. This can lead to a decline in public trust, decreased demand for air travel, and financial losses for the companies involved.
3. **Legal Consequences:** In some cases, airplane accidents can lead to costly lawsuits, which can further damage the reputation and financial stability of the airlines and airports involved. These lawsuits can also prolong the healing process for families and communities affected by the tragedy.

## **9.3.APPLICATIONS:**

Flight accidents can have a range of applications, including:

- **Improving aviation safety:** Flight accidents are often thoroughly investigated to determine their causes and contributing factors. The lessons learned from these investigations can be used to improve aviation safety, such as by implementing new safety regulations, improving training programs for pilots and other aviation personnel, and developing better aircraft and equipment.

- Improving emergency response: Flight accidents can also help improve emergency response procedures and equipment. Emergency responders can learn from the challenges and successes of previous accidents to better prepare for future emergencies.
- Improving aircraft design: The investigation of flight accidents can also lead to improvements in aircraft design. Engineers and designers can analyse the causes of accidents and make changes to aircraft systems and components to prevent similar incidents from occurring in the future.
- Legal and insurance purposes: Flight accidents can also have legal and insurance implications. The investigation of an accident can help determine liability and compensation for those affected by the incident.
- Academic research: Flight accidents can be studied by academics in fields such as engineering, psychology, and sociology to better understand the causes and consequences of accidents, and to identify strategies for preventing similar incidents in the future.



# **CHAPTER - 10**

**CONCLUSION**

**FUTURE SCOPE**

## **10.1.CONCLUSION:**

The tragedy of a flight refers to a catastrophic event that results in the loss of life, injuries, and destruction of property. These tragedies can be caused by a variety of factors such as mechanical failure, human error, weather conditions, and external factors. It is crucial to conduct a thorough investigation to determine the root cause of the tragedy and take appropriate measures to prevent similar incidents from happening in the future.

The aviation industry and regulatory bodies are continually working towards improving safety protocols, enhancing training programs for pilots and crew members, and implementing new technologies to make air travel safer. In the aftermath of a tragedy, it is important to provide support and assistance to the victims' families and loved ones and to ensure that proper compensation and restitution are provided.

Ultimately, the tragedy of a flight serves as a reminder of the importance of safety in aviation and the need for continuous improvement and innovation prevent such events from occurring

## **10.2.FUTURE SCOPE:**

The future scope of the tragedy of flight largely depends on the continued development of aviation technology and safety measures. While aviation technology has advanced significantly in recent years, making air travel safer than ever before, accidents and tragedies still occur.

In the future, we can expect further advancements in aviation technology, such as improvements in aircraft design, engine efficiency, and navigation systems, which will further enhance safety and prevent accidents. Additionally, the development of autonomous aircraft and drones could significantly reduce the risk of human error in flying.

Furthermore, ongoing research into human factors, such as pilot training and decision-making processes, will also play a critical role in enhancing aviation safety. This could include the use of simulation and virtual reality technology to improve pilot training and decision-making in high-stress situations.

However, it is also important to recognize that accidents can never be completely eliminated, and tragedies will unfortunately still occur in the future. It is crucial that the aviation industry continues to prioritize safety and invest in ongoing research and development to prevent and mitigate the impact of future tragedies.

# APPENDIX

```
<html lang="en">
```

```
<head>
```

```
<meta charset="utf-8">
```

```
<meta content="width=device-width, initial-scale=1.0" name="viewport">
```

```
<title>Airplane crash- Index</title>
```

```
<me
```

```
<!-- Favicons -->
```

```
<link href="assets/img/favicon.png" rel="icon">
```

```
<link href="assets/img/apple-touch-icon.png" rel="apple-touch-icon">
```

```
<!-- Google Fonts -->
```

```
<link  
href="https://fonts.googleapis.com/css?family=Open+Sans:300,300i,400,400i,600,600i,700,700i|Raleway:300,300i,400,400i,500,500i,600,600i,700,700i|Poppins:300,300i,400,400i,500,500i,600,600i,700,700i" rel="stylesheet">
```

```
<!-- Vendor CSS Files -->
```

```
<link href="assets/vendor/aos/aos.css" rel="stylesheet">
```

```
<link href="assets/vendor/bootstrap/css/bootstrap.min.css" rel="stylesheet">
```

```
<link href="assets/vendor/bootstrap-icons/bootstrap-icons.css" rel="stylesheet">
```

```
<link href="assets/vendor/boxicons/css/boxicons.min.css" rel="stylesheet">
```

```
<link href="assets/vendor/glightbox/css/glightbox.min.css" rel="stylesheet">
```

```
<link href="assets/vendor/swiper/swiper-bundle.min.css" rel="stylesheet">
```

```
<!-- Template Main CSS File -->
```

```
<link href="assets/css/style.css" rel="stylesheet">
```

```
<!-- =====
```

```
* Template Name:The Tragedy of fight
```

```
* Updated: Mar 10 2023 with Bootstrap v5.2.3
```

```
* Template URL: https://bootstrapmade.com/squadfree-free-bootstrap-template-creative/
```

```
* Author: BootstrapMade.com
```

```
* License: https://bootstrapmade.com/license/
```

```
===== -->
```

```
</head>
```

```
<body>
```

```
<!-- ===== Header ===== -->
```

```
<header id="header" class="fixed-top header-transparent">
```

```
<div class="container d-flex align-items-center justify-content-between position-  
relative">
```

```
<div class="logo">
```

</div>

</header><!-- End Header -->

<!-- ===== Hero Section ===== -->

<section id="hero">

<div class="hero-container" data-aos="fade-up">

<h1>Welcome to The Tragedy Of Flight </h1>

<h2>A Comprehensive Crash Analysis</h2>

<a href="#about" class="btn-get-started scrollto"><i class="bx bx-chevron-down"></i></a>

</div>

</section><!-- End Hero -->

<main id="main">

<!-- ===== About Section ===== -->

<section id="about" class="about">

<div class="container">

<div class="row no-gutters">

<div class="content col-xl-5 d-flex align-items-stretch" data-aos="fade-up">

<div class="content">

<h3>AVIATION ACCIDENT ANALYSIS

what is aviation accident Analysis?</h3>



<p>

An airplane crash analysis is a detailed investigation into the cause of an aviation accident. Aviation accident analysis is performed to determine the cause of errors once an accident has happened. In the modern aviation industry, 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.

</p>

<a href="#" class="about-btn">About us <i class="bx bx-chevron-right"></i></a>

</div>

</div>

<div class="col-xl-7 d-flex align-items-stretch">

<div class="icon-boxes d-flex flex-column justify-content-center">

<div class="row">

<div class="col-md-6 icon-box" data-aos="fade-up" data-aos-delay="100">

<i class="bx bx-receipt"></i>

<h4>History Of the flight accident</h4>

<p>Notable aviation accident in history: Tenerife airport disaster(1977), a collision between two boeing 747s at Tenerife airport in the canary Islands resulted in 583 fatalities, making it the deadliest aviation accident in history.

</p>

</div>

<div class="col-md-6 icon-box" data-aos="fade-up" data-aos-delay="200">

<i class="bx bx-cube-alt"></i>

<h4>what causes planes to crash?</h4>

<p>Human errors in aviation, Mistakes by crew members, Air traffic controller negligence, weather condition, improper aircraft maintenance, aircraft design defect, GPS for aircraft</p>

</div>

<div class="col-md-6 icon-box" data-aos="fade-up" data-aos-delay="300">

<i class="bx bx-images"></i>

<h4>3 Main flight controls</h4>

<p>The Ailerons,Elevator(or stabilator),and rudder constitute the primary control system and are required to control an aircraft safety during flight</p>

</div>

<div class="col-md-6 icon-box" data-aos="fade-up" data-aos-delay="400">

<i class="bx bx-shield"></i>

<h4>Aircrash investigation</h4>

<p>The result of aircraft investigation can have far-reaching effects on the aviation industry,including changes to regulations,modifications to aircraft design or maintenance procedures,and improvements in pilot training and procedures.The ultimate goal of aircraft investigation is to improve aviation safety and prevent future accidents</p>

</div>

</div>

</div><!-- End .content-->

</div>

</div>

</div>

</section><!-- End About Section -->

<!-- ===== Services Section ===== -->

<section id="services" class="services">

<div class="container">

<div class="section-title" data-aos="fade-in" data-aos-delay="100">

<h2>Types of aviation accidents</h2>

<p>The accident categories described are based on standard ICAO definitions. The four categories listed below are the accident types that are the cause of most accidents.</p>

</div>

<div class="row">

<div class="col-md-6 col-lg-3 d-flex align-items-stretch mb-5 mb-lg-0">

<div class="icon-box" data-aos="fade-up">

<div class="icon"><i class="bx bxl-dribbble"></i></div>

<h4 class="title"><a href="">CONTROLLED FLIGHT INTO TERRAIN(CFIT)</a></h4>

<p class="description">In-flight collision with terrain, water, or obstacle without indication of loss of control</p>

</div>

</div>

<div class="col-md-6 col-lg-3 d-flex align-items-stretch mb-5 mb-lg-0">

<div class="icon-box" data-aos="fade-up" data-aos-delay="100">

<div class="icon"><i class="bx bx-file"></i></div>

<h4 class="title"><a href="">LOSS OF CONTROL IN-FLIGHT(LOC-I)</a></h4>

<p class="description">Loss of aircraft control while in flight, and not primarily due to SCF</p>

</div>

</div>

<div class="col-md-6 col-lg-3 d-flex align-items-stretch mb-5 mb-lg-0">

<div class="icon-box" data-aos="fade-up" data-aos-delay="200">

<div class="icon"><i class="bx bx-tachometer"></i></div>

<h4 class="title"><a href="">SYSTEM\COMPONENT FAILURE or  
MALFUNCTION(SCF) </a></h4>

<p class="description">Failure or malfunction of an aircraft system or component related to its design,the manufacturing process,or a maintenance issue,which leads to an accident .SCF includes those related to powerplant(SCF-PP)and those which are not powerplant-related(SCF-NP)</p>

</div>

</div>

<div class="col-md-6 col-lg-3 d-flex align-items-stretch mb-5 mb-lg-0">

<div class="icon-box" data-aos="fade-up" data-aos-delay="300">

<div class="icon"><i class="bx bx-world"></i></div>

<h4 class="title"><a href="">FIRE(F-NI and F-POST)</a></h4>

<p class="description">Fire or smoke inside or outside of the aircraft,in flight or on the ground, and regardless of whether the fire results from an impact(F-POST)or not(F-NI)</p>

</div>

</div>

</div>

</div>

</section><!-- End Services Section -->

```

<!-- ===== Counts Section ===== -->

<section id="counts" class="counts section-bg">

<div class="container">

<div class="row no-gutters">

<div class="col-lg-3 col-md-6 d-md-flex align-items-md-stretch">

<div class="count-box">

<span data-purecounter-start="0" data-purecounter-end="2022" data-purecounter-
duration="1" class="purecounter"></span>

<p><strong>Deaths-357,</strong> No.of.accidents-95</p>

</div>

</div>

<div class="col-lg-3 col-md-6 d-md-flex align-items-md-stretch">

<div class="count-box">

<span data-purecounter-start="0" data-purecounter-end="2021" data-purecounter-
duration="1" class="purecounter"></span>

<p><strong>Deaths-414,</strong> No.of.accidents-113</p>

</div>

</div>

<div class="col-lg-3 col-md-6 d-md-flex align-items-md-stretch">

<div class="count-box">

```

```
<span data-purecounter-start="0" data-purecounter-end="2020" data-purecounter-
duration="1" class="purecounter"></span>
```

```
<p><strong>Deaths-463,</strong> No.of.accidents-90</p>
```

```
</div>
```

```
</div>
```

```
<div class="col-lg-3 col-md-6 d-md-flex align-items-md-stretch">
```

```
<div class="count-box">
```

```
<span data-purecounter-start="0" data-purecounter-end="2019" data-purecounter-
duration="1" class="purecounter"></span>
```

```
<p><strong>Deaths-578,</strong> No.of.accidents-125</p>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
</section><!-- End Counts Section -->
```

```
<!-- ===== Cta Section ===== -->
```

```
<section id="cta" class="cta">
```

```
<div class="container" data-aos="zoom-in">
```

```
<div class="text-center">
```

```
<h3>SEEK MEDICAL ATTENTION</h3>
```

```
<p> If you or anyone else is injured,seek medical attention as soon as possible.you can ask  
the flight crew or airport personnel for assistance.</p>
```

```
<a class="cta-btn" href="#">Seek Medical Attention</a>
```

```
</div>
```

```
</div>
```

```
</section><!-- End Cta Section -->
```

```
<!-- ===== Portfolio Section ===== -->
```

```
<section id="portfolio" class="portfolio">
```

```
<div class="container">
```

```
<div class="section-title" data-aos="fade-in" data-aos-delay="100">
```

```
<h2>Airplane crash analysis</h2>
```

```
<p>.</p>
```

```
</div>
```

```
<div class="row" data-aos="fade-in">
```

```
<div class="col-lg-12 d-flex justify-content-center">
```

```
<ul id="portfolio-filters">
```

```
<div class="col-lg-4 col-md-6 portfolio-item filter-card">
```

```
<div class="portfolio-wrap">
```

```
<img      src=https://www.skyfilabs.com/project-ideas/improvement-of-aircraft-accident-investigation-through-expert-systems class="img-fluid" alt="">
```

```
<div class="portfolio-links">
```

```
<a      href="assets/img/portfolio/portfolio-4.jpg"      data-gallery="portfolioGallery" class="portfolio-lightbox" title="Card 2"><i class="bx bx-plus"></i></a>
```

```
<a href="portfolio-details.html" title="More Details"><i class="bx bx-link"></i></a>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
<div class="col-lg-4 col-md-6 portfolio-item filter-web">
```

```
<div class="portfolio-wrap">
```

```
<img  
src=https://th.bing.com/th/id/R.5f5745fea312ab6f44480b9b10412737?rik=vWmqCNTYXBfpkA&riu=http%3a%2f%2fwww.pbs.org%2fwgbh%2fnova%2fplanecrash%2fimages%2fhuma-accidentschart-.gif&ehk=mDB9xcRSI0Qg34SJ6Yji%2ba6T9mATv7HRtvlfXovsKJg%3d&risl=&pid=ImgRaw&r=0 class="img-fluid" alt="">
```

```
<div class="portfolio-links">
```

```
<a      href="assets/img/portfolio/portfolio-5.jpg"      data-gallery="portfolioGallery" class="portfolio-lightbox" title="Web 2"><i class="bx bx-plus"></i></a>
```

```
<a href="portfolio-details.html" title="More Details"><i class="bx bx-link"></i></a>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
<div class="col-lg-4 col-md-6 portfolio-item filter-app">
```

```
<div class="portfolio-wrap">
```



```

```

```
<div class="portfolio-links">
```

```
<a href="assets/img/portfolio/portfolio-6.jpg" data-gallery="portfolioGallery" class="portfolio-lightbox" title="App 3"><i class="bx bx-plus"></i></a>
```

```
<a href="portfolio-details.html" title="More Details"><i class="bx bx-link"></i></a>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
<div class="col-lg-4 col-md-6 portfolio-item filter-web">
```

```
<div class="portfolio-wrap">
```

```

```

```
<div class="portfolio-links">
```

```
<a href="assets/img/portfolio/portfolio-9.jpg" data-gallery="portfolioGallery" class="portfolio-lightbox" title="Web 3"><i class="bx bx-plus"></i></a>
```

```
<a href="portfolio-details.html" title="More Details"><i class="bx bx-link"></i></a>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
</div>
```

</div>

</section><!-- End Portfolio Section -->

<!-- ===== Testimonials Section ===== -->

<section id="testimonials" class="testimonials section-bg">

<div class="container">

<div class="section-title" data-aos="fade-in" data-aos-delay="100">

<h2>Accident\Incident Description</h2>

<p>An accident is an event that has unintentionally happened,that results in damage,injury or harm.An accident is an event that has unintentionally happened,but this may not result in damage,harm or injury.therefore,every accident can be an accident.However not all incidents can be termed as an accident.</p>

</div>

<div class="testimonials-slider swiper" data-aos="fade-up" data-aos-delay="100">

<div class="swiper-wrapper">

<div class="swiper-slide">

<div class="testimonial-item">

<p>

<i class="bx bxs-quote-alt-left quote-icon-left"></i>

Air India Erpress Flight 1344,a Boeing 737-800 flying the Dubai-kozhikode route overshot the runway on landing at Calicut International Airport breaking into four pieces.Casualties: 18 Survivors: 172

<i class="bx bxs-quote-alt-right quote-icon-right"></i>

</p>

<h3>August 7,2020</h3>

</div>

</div><!-- End testimonial item -->

<div class="swiper-slide">

<div class="testimonial-item">

<p>

<i class="bx bxs-quote-alt-left quote-icon-left"></i>

**Air India Express Flight 812,A Boeing 737-800 flying the Dubai-Mangalore routeovershot runway 24 on landing at Mangalore International Airport killing 158 passengers on board.Casualties: 158 Survivors: 8**

<i class="bx bxs-quote-alt-right quote-icon-right"></i>

</p>

<h3>May 22,2010</h3>

</div>

</div><!-- End testimonial item -->

<div class="swiper-slide">

<div class="testimonial-item">

<p>

<i class="bx bxs-quote-alt-left quote-icon-left"></i>

**Alliance Air Flight 7412 crashed in a residential estate of patna after the pilot lost control of the aircraft and stalle.Deaths included 55 people aboardalong with 5 on the ground. Casualties: 55+5 Survivors: -**

<i class="bx bxs-quote-alt-right quote-icon-right"></i>

</p>

**<h3>July 17,2000</h3>**

**</div>**

**</div><!-- End testimonial item -->**

**<div class="swiper-slide">**

**<div class="testimonial-item">**

**<p>**

**<i class="bx bxs-quote-alt-left quote-icon-left"></i>**

**Indian Airlines Flight 814 was hijacked by terrorists and flown to Kandahar,Afghanistan.One passenger was killed by the hijackers,the other 192 aboard survived.Casualties: 1 Survivors: 192**

**<i class="bx bxs-quote-alt-right quote-icon-right"></i>**

**</p>**

**<h3>December 24,1999</h3>**

**</div>**

**</div><!-- End testimonial item -->**

**<div class="swiper-slide">**

**<div class="testimonial-item">**

**<p>**

**<i class="bx bxs-quote-alt-left quote-icon-left"></i>**

**1996 Charkhi Dadri mid-air collisions,Saudi,Arablan Airlines Flight 1907.The cause was determinded to be pilot eror by the Kazakhstan airlines pilot.All 349 people on board both planes were killed,making it the deadliest mid-air collison in history.**

**<i class="bx bxs-quote-alt-right quote-icon-right"></i>**

**</p>**

**<h3>November 12,1996</h3>**

**</div>**

**</div><!-- End testimonial item -->**

**</div>**

**<div class="swiper-pagination"></div>**

**</div>**

**</div>**

**</section><!-- End Testimonials Section -->**

**<!-- ===== Team Section ===== -->**

**<section id="team" class="team">**

**<div class="container">**

**<div class="section-title" data-aos="fade-in" data-aos-delay="100">**

**<h2>Effects</h2>**

**<p>Effect of airplane crash :The effects that are brought about by an air crash may be classified as either physical or psychological.in the physical effects, air crash brings about death,disability and injuries.The effects from air crash are determined by other things such as the cause of the crash,the altitude and its speed at the time of crash.</p>**

**</div>**

**<div class="row">**

</div>

</div>

</section><!-- End Team Section -->

<!-- ===== Contact Section ===== -->

<section id="contact" class="contact section-bg">

<div class="container" data-aos="fade-up">

<div class="section-title">

<h2>Conclusion</h2>

<p>Human error is the main cause of aircraft accidents, and it's a chain of errors that sets the accident into motion. Poor flight and cabin crew communication does exist. A program called crew resources management has been developed to improve team work, proper task delegation, communication and trust among the crew. Interpretation of the findings the need for crew communication is evident. When crews don't work together their performance level is low and this is when they are vulnerable to accident.</p>

</div>

</div>

</section><!-- End Contact Section -->

</main><!-- End #main -->

```
<!-- ===== Footer ===== -->
```

```
<footer id="footer">
```

```
<div class="footer-top">
```

```
<div class="container">
```

```
<div class="row">
```

```
<div class="col-lg-4 col-md-6">
```

```
<div class="footer-info">
```

```
</div>
```

```
</div>
```

```
</footer><!-- End Footer -->
```

```
<a href="#" class="back-to-top d-flex align-items-center justify-content-center"><i  
class="bi bi-arrow-up-short"></i></a>
```

```
<!-- Vendor JS Files -->
```

```
<script src="assets/vendor/purecounter/purecounter\_vanilla.js"></script>
```

```
<script src="assets/vendor/aos/aos.js"></script>
```

```
<script src="assets/vendor/bootstrap/js/bootstrap.bundle.min.js"></script>
```

```
<script src="assets/vendor/glightbox/js/glightbox.min.js"></script>
```

```
<script src="assets/vendor/isotope-layout/isotope.pkgd.min.js"></script>
```

```
<script src="assets/vendor/swiper/swiper-bundle.min.js"></script>
```

```
<script src="assets/vendor/php-email-form/validate.js"></script>
```

<!-- Template Main JS File -->

<script src="[assets/js/main.js](#)"></script>

</body>

</html>

```
<div      class='tableauPlaceholder'      id='viz1681200821101'      style='position:
relative'><noscript><a      href='#'><img      alt='Dashboard      1      '
src='https://public.tableau.com/static/images/AT/ATragedyofFlight1/Dashboard1/1_rss.png'
style='border:      none'
/></a></noscript><object      class='tableauViz'      style='display:none;'><param
name='host_url'      value='https%3A%2F%2Fpublic.tableau.com%2F'      />      <param
name='embed_code_version' value='3' />      <param name='site_root' value='' /><param
name='name'      value='ATragedyofFlight1/Dashboard1' /><param name='tabs'
value='no' /><param name='toolbar' value='yes' /><param name='static_image'
value='https://public.tableau.com/static/images/AT/ATragedyofFlight1/Dashboard1/1.png' />      <param name='animate_transition'
value='yes' /><param name='display_static_image' value='yes' /><param
name='display_spinner' value='yes' /><param name='display_overlay' value='yes'
/><param name='display_count' value='yes' /><param name='language' value='en-US'
/><param name='filter' value='publish=yes' /></object></div>      <script
type='text/javascript'> var divElement = document.getElementById('viz1681200821101');
var vizElement = divElement.getElementsByTagName('object')[0]; if (
divElement.offsetWidth > 800 ) {
vizElement.style.width='100%';vizElement.style.height=(divElement.offsetWidth*0.75)+'
px';} else if ( divElement.offsetWidth > 500 ) {
vizElement.style.width='100%';vizElement.style.height=(divElement.offsetWidth*0.75)+'
px';} else { vizElement.style.width='100%';vizElement.style.height='977px';} var
scriptElement = document.createElement('script'); scriptElement.src =
'https://public.tableau.com/javascripts/api/viz_v1.js';
vizElement.parentNode.insertBefore(scriptElement, vizElement); </script>
```

```
<div      class='tableauPlaceholder'      id='viz1681201089757'      style='position:
relative'><noscript><a      href='#'><img      alt='Dashboard      2      '
src='https://public.tableau.com/static/images/AT/ATragedyofFlight1/Dashboard2/1_rss.png'
style='border:      none'
/></a></noscript><object      class='tableauViz'      style='display:none;'><param
name='host_url'      value='https%3A%2F%2Fpublic.tableau.com%2F'      />      <param
```



```

name='embed_code_version' value='3' /> <param name='site_root' value='' /><param
name='name' value='ATragedyofFlight1&#47;Dashboard2' /><param name='tabs'
value='no' /><param name='toolbar' value='yes' /><param name='static_image'
value='https:&#47;&#47;public.tableau.com&#47;static&#47;images&#47;AT&#47;ATr
agedyofFlight1&#47;Dashboard2&#47;1.png' /> <param name='animate_transition'
value='yes' /><param name='display_static_image' value='yes' /><param
name='display_spinner' value='yes' /><param name='display_overlay' value='yes'
/><param name='display_count' value='yes' /><param name='language' value='en-US'
/><param name='filter' value='publish=yes' /></object></div> <script
type='text/javascript'> var divElement = document.getElementById('viz1681201089757');
var vizElement = divElement.getElementsByTagName('object')[0]; if (
divElement.offsetWidth > 800 ) {
vizElement.style.width='100%';vizElement.style.height=(divElement.offsetWidth*0.75)+'
px';} else if ( divElement.offsetWidth > 500 ) {
vizElement.style.width='100%';vizElement.style.height=(divElement.offsetWidth*0.75)+'
px';} else { vizElement.style.width='100%';vizElement.style.height='1327px';} var
scriptElement = document.createElement('script'); scriptElement.src =
'https://public.tableau.com/javascripts/api/viz_v1.js';
vizElement.parentNode.insertBefore(scriptElement, vizElement); </script>

```

```

<div class='tableauPlaceholder' id='viz1681199759507' style='position:
relative'><noscript><a href='#'><img alt='Story 1'
src='https:&#47;&#47;public.tableau.com&#47;static&#47;images&#47;AT&#47;ATrag
edyofFlight1&#47;Story1&#47;1_rss.png' style='border: none' /></a></noscript><object
class='tableauViz' style='display:none;'><param name='host_url'
value='https%3A%2F%2Fpublic.tableau.com%2F' /> <param
name='embed_code_version' value='3' /> <param name='site_root' value='' /><param
name='name' value='ATragedyofFlight1&#47;Story1' /><param name='tabs' value='no'
/><param name='toolbar' value='yes' /><param name='static_image'
value='https:&#47;&#47;public.tableau.com&#47;static&#47;images&#47;AT&#47;ATr
agedyofFlight1&#47;Story1&#47;1.png' /> <param name='animate_transition'
value='yes' /><param name='display_static_image' value='yes' /><param
name='display_spinner' value='yes' /><param name='display_overlay' value='yes'
/><param name='display_count' value='yes' /><param name='language' value='en-US'
/><param name='filter' value='publish=yes' /></object></div> <script
type='text/javascript'> var divElement = document.getElementById('viz1681199759507');
var vizElement = divElement.getElementsByTagName('object')[0];
vizElement.style.width='1016px';vizElement.style.height='991px'; var scriptElement =
document.createElement('script'); scriptElement.src =
'https://public.tableau.com/javascripts/api/viz_v1.js';
vizElement.parentNode.insertBefore(scriptElement, vizElement); </script>

```

