

Data analyst long term internship project

The tragedy of night → comprehensive crash analysis

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Introduction:

Airline accident analysis is performed to determine the cause of errors once an accident has happened.

In modern aviation industry it is also used to prevent an accident from happening.

Many models have been the not used in accident investigation but also true.

In the aviation industry the human error is the major the cause of accidents. About 38% of 329% major airline crashes.

The general aviation crashes were related to pilot error.

Reason's Model, commonly referred to as the Swiss cheese model, was based on Reason's approach that all organizations such work together to ensure a safe and efficient operation.

All human and mechanical elements of the approach that all the organizations should work of safe flight ensure. The airplane washer, although it can have catastrophic consequences, leading to loss of life, property damage, and significant economic impacts.

Understanding the causes of crashes is crucial for improving aviation safety and preventing future accidents.

This analysis aims to delve into the methodologies used in them.

## Methodologies in airplane crash

### -forensic investigation

Crash investigators typically follow a systematic approach to gather evidence from the crash site, including engines, avionics, flight controls, and structural components.

The analysis often involves collaboration between engineers, manufacturers, and regulatory agencies.

### Environment factors

Weather conditions, air traffic control communications, and terrain features are considered in analyzing environmental factors. Poor visibility may pose significant challenges to pilots.

## 1. Recommendations

- Suggestions for improving safety measures or procedures
- Recommendations of the prevention of similar accidents of in future.

## 10) Conclusion:

- Summary of key findings
- Final thoughts of the crash analysis.

Remember to provide thorough evidence of the analysis for each section, drawing on official reports, data and expert opinions where possible. The ~~additionally~~, maintains a professional and objective tone throughout the analysis.

### weather-related factors +

weather conditions such as icing, thunderstorms, strong winds, or low visibility, can pose significant challenges to the often busy work of low pilots.

### Regulatory oversight +

In some cases, airplane crashes may be attributed to shortcomings in regular oversight of maintenance procedures, lax enforcement of safety regulations, or

### challenges in airplane crash analysis +

#### 1. complexity of evidence +

Crash scenes are often chaotic environments with extensive debris fields, making the challenging task of collecting and preserving evidence. Flight data recorders and cockpit voice recorders may be damaged or required.

## Common-theories of airplane crash analysis

### pilot errors +

One of the most common theories in airplane crash analysis is pilot error, which man can conclude if mistakes in the judgement/decision making.

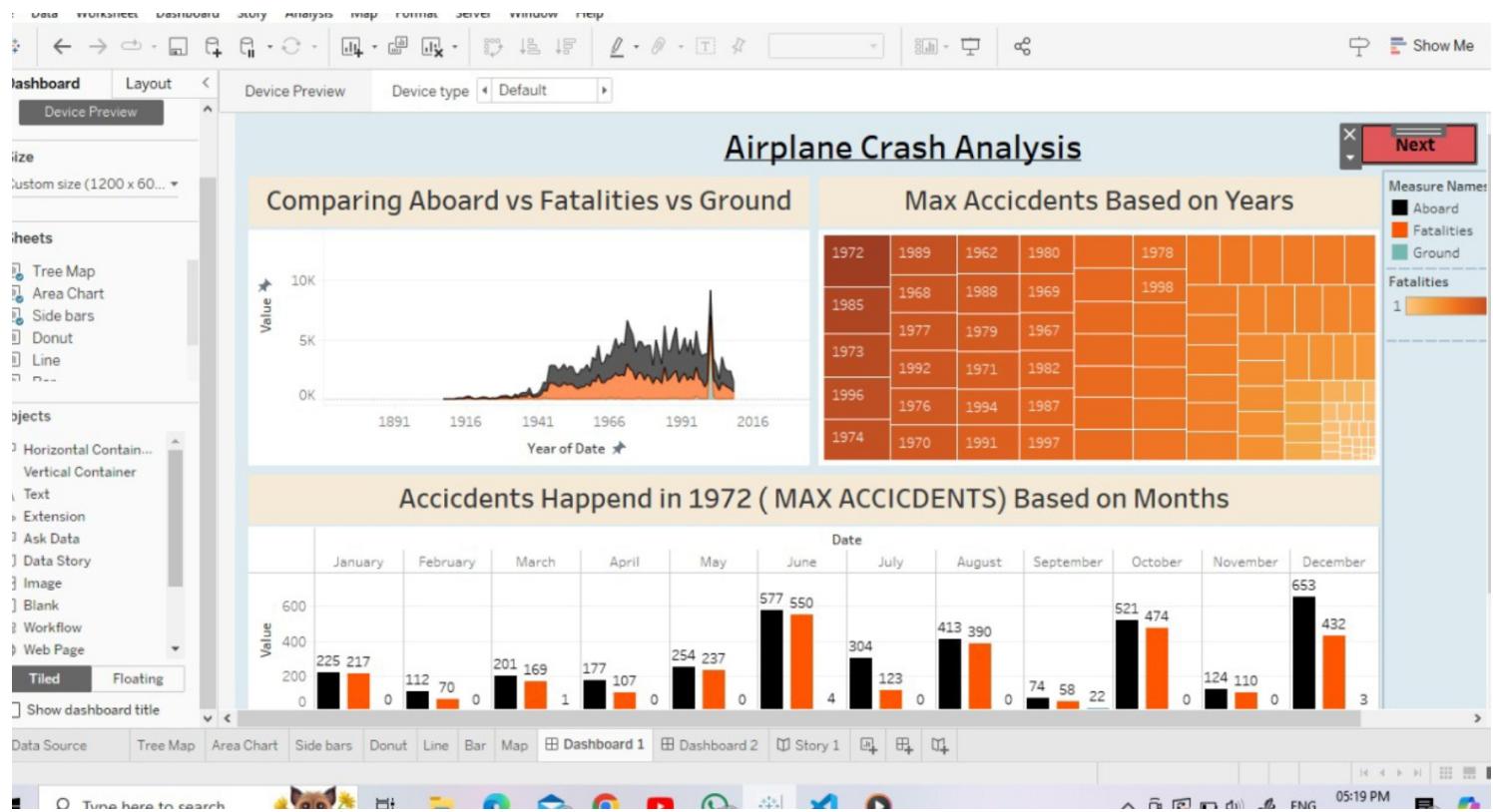
### mechanical failure +

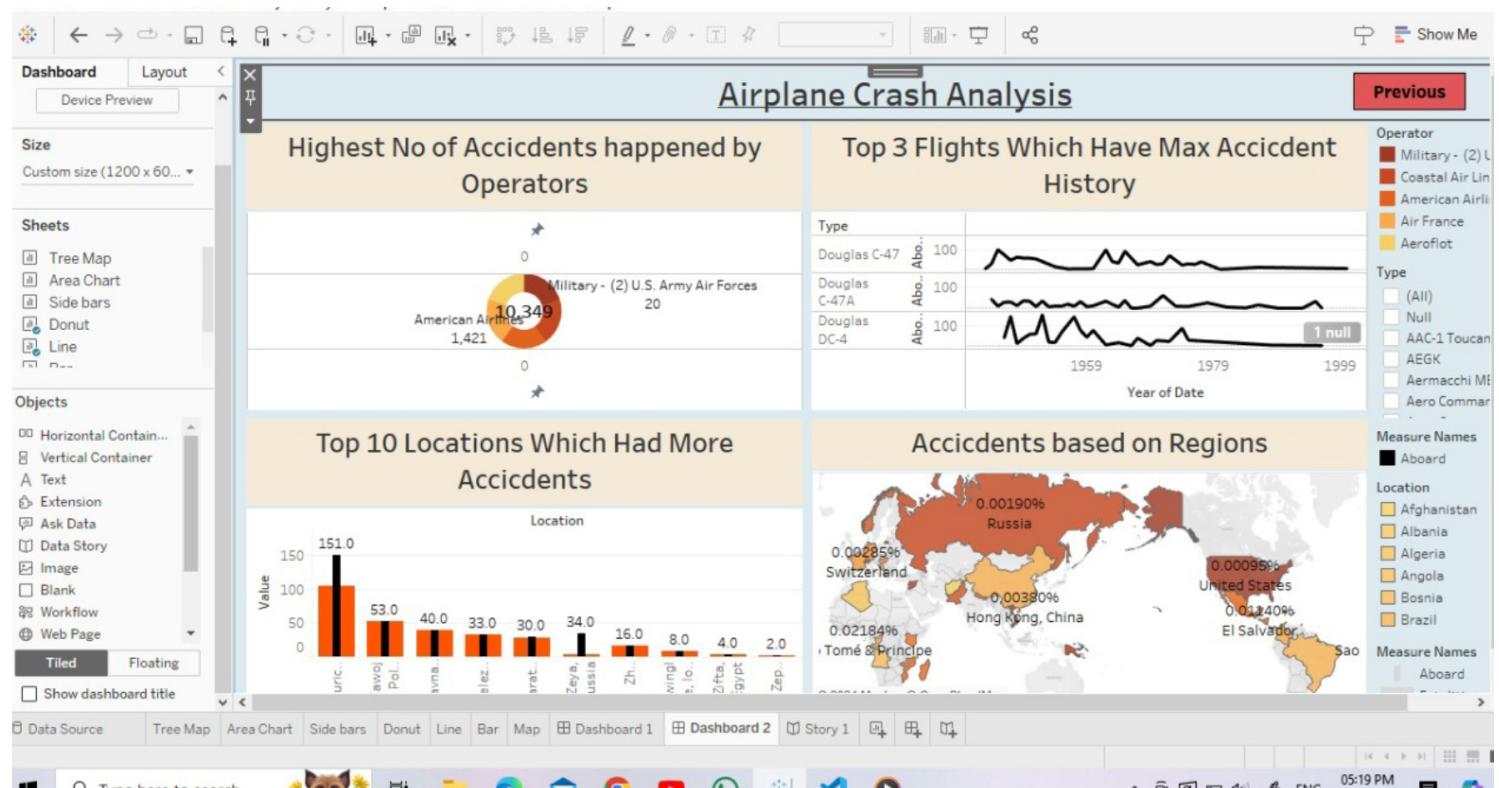
Aircraft systems and components are susceptible to malfunctions or failures.

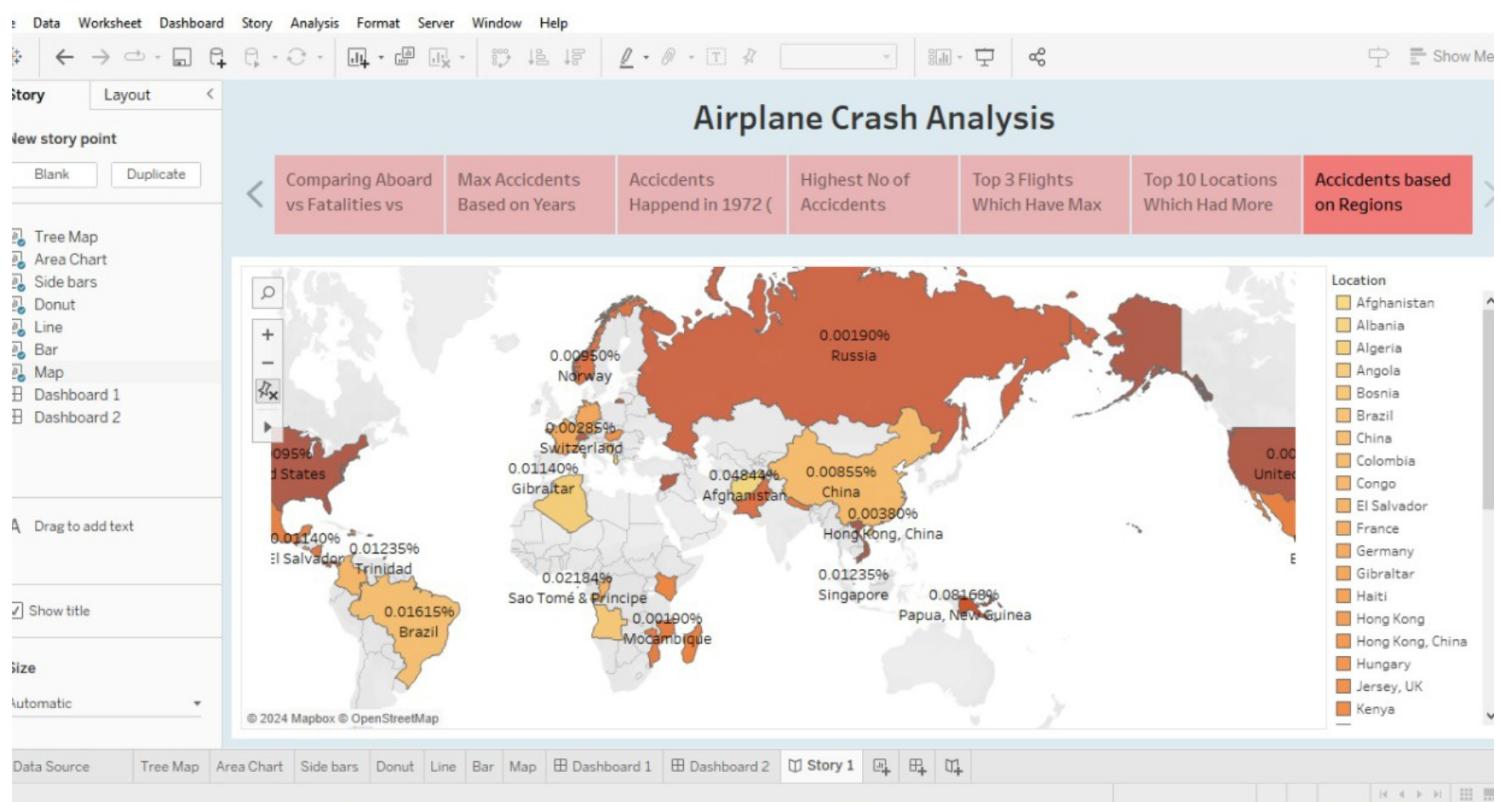
The hydraulic system failure or electrical problems are examples of mechanical failures that investigators consider.

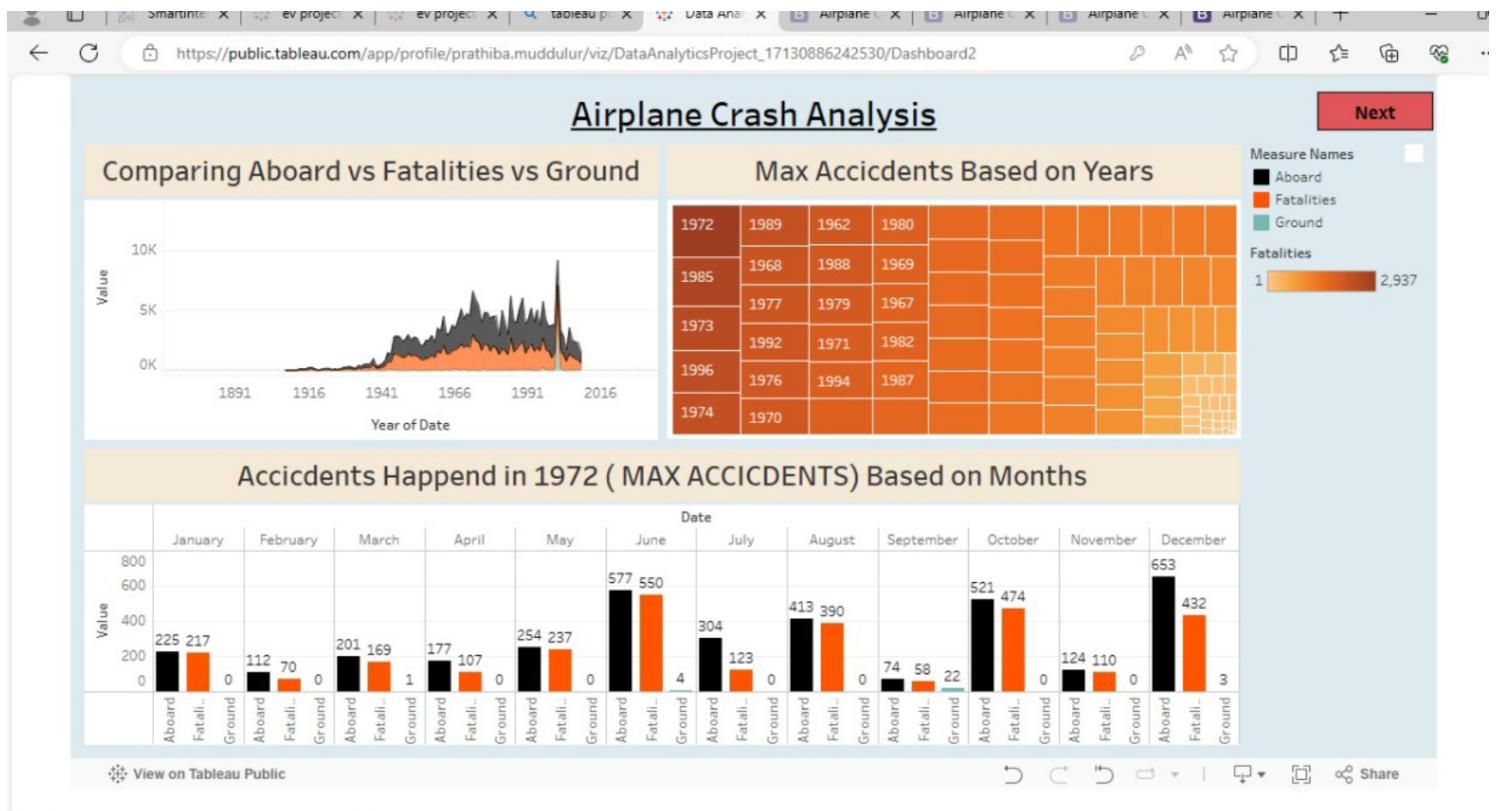
### weather related factors:

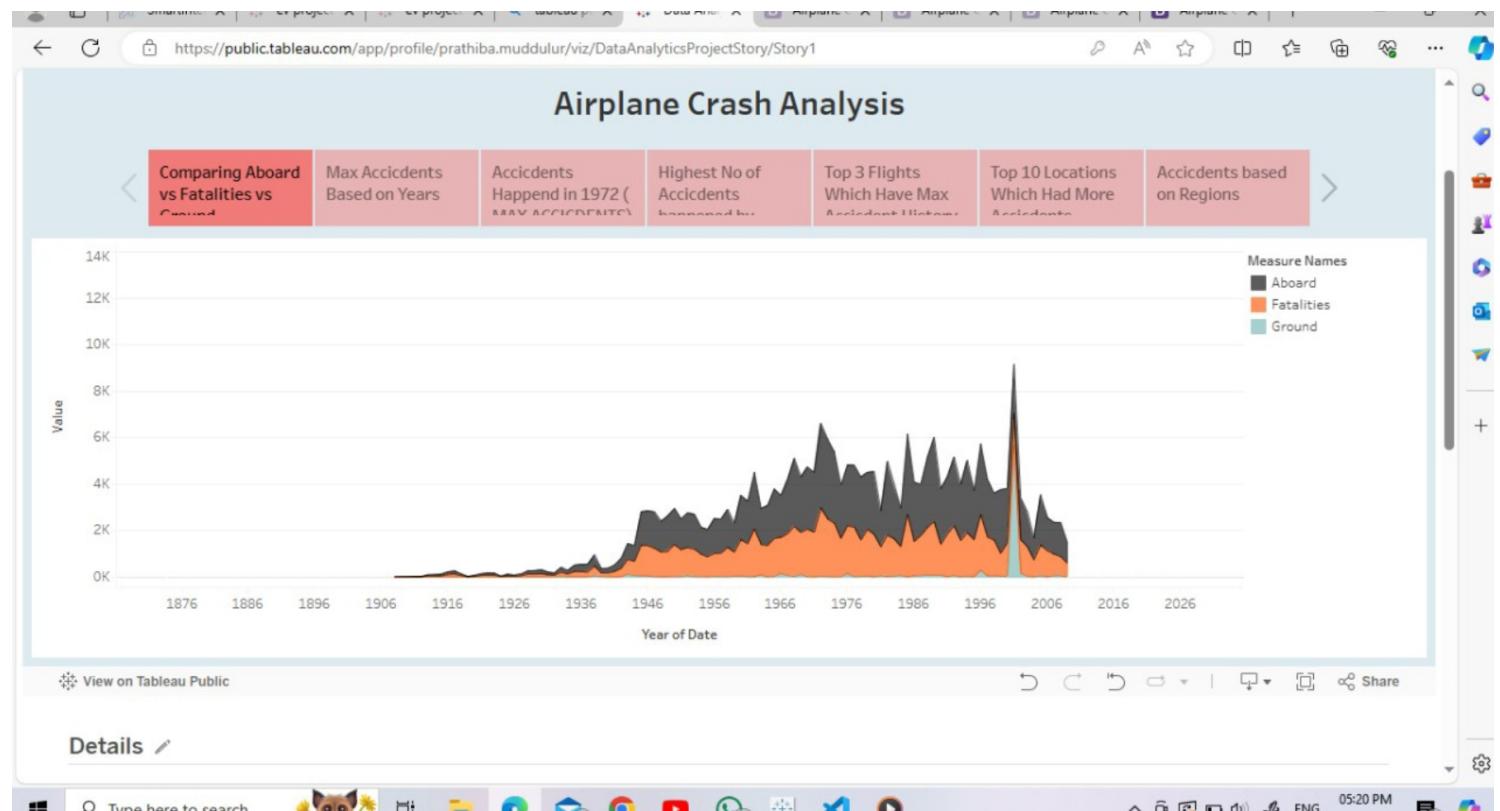
Adverse weather conditions, such as icing, thunderstorms, strong winds or low visibility can pose significant challenges to the flight visibility.











The screenshot shows a code editor interface with the following details:

- File Bar:** File, Edit, Selection, View, Go, Run, ...
- Editor Area:** The main area displays the content of `project 1.html`. The code includes meta tags for charset, width, and viewport, a title, favicons, Google Fonts, and vendor CSS files.
- Explorer Bar (Left):**
  - OPEN EDITORS:** project 1.html, inner-page.html, portfolio-details.html, flaskcodep.py
  - BOOTSTRAP:** \_pycache\_, Vesperm, assets, forms, static, css, img (containing Cheapestelectriccc..., dddimage.jpg, electric\_vehicle\_c..., ElectricCarData\_C..., EVIndia.csv, imagekjpg, pizza\_sales\_excel..., ssssimage.jpg, vvimage.jpg), js, vendor
  - templates:** index.html, inner-page.html, portfolio-details.html, project 1.html, flaskcodep.py
- Terminal Tab:** Shows the command line output of running the Flask application. It includes a warning about using it in production, information about the server (port 5000), and a debugger entry point (PTN: 344-696-033).
- Status Bar:** Includes file path (C:/Users/PRATHIBHA/Desktop/bootstrap0), file name (bootstrap0), line count (Ln 276), column count (Col 27), spaces (Spaces: 2), encoding (UTF-8), and file type (CRLF, HTML).

The screenshot shows a code editor interface with the following details:

- File Menu:** File, Edit, Selection, View, Go, Run, ...
- Search Bar:** bootstrap0
- Explorer View:** Shows a file tree under the 'BOOTSTRAP0' folder:
  - \_pycache\_
  - Vesperm
  - assets
  - forms
  - static
    - css
    - img
      - Cheapestelectric...
      - dddimage.jpg
      - electric\_vehicle\_c...
      - ElectricCarData\_C...
      - EVIndia.csv
      - imagek.jpg
      - pizza\_sales\_excel...
      - ssssimage.jpg
      - vvvimage.jpg
    - js
    - vendor
  - templates
    - index.html
    - inner-page.html
    - portfolio-details.ht...
    - project 1.html
  - flaskcodep.py
- Editor Area:** Displays the content of the flaskcodep.py file:

```
from flask import Flask, render_template
app = Flask(__name__)
@app.route('/')
def hello_world():
    return render_template('index.html')
if __name__ == '__main__':
    app.run(debug=True)
```
- Terminal Tab:** Shows the command line output of the Python application:

```
PS C:\Users\PRATHIBHA\Desktop\bootstrap0> & C:/Users/PRATHIBHA/AppData/Local/Programs/Python/Python311/python.exe c:/Users/PRATHIBHA/Desktop/bootstrap0/Vesperm/flaskcodep.py
* Serving Flask app 'flaskcodep'
* Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on http://127.0.0.1:5000
Press CTRL+C to quit
* Restarting with stat
* Debugger is active!
* Debugger PIN: 344-696-033
127.0.0.1 - - [17/Apr/2024 16:48:38] "GET / HTTP/1.1" 200 -
```
- Status Bar:** L15, Col 1 | Spaces: 4 | UTF-8 | CRLF | Python 3.11.0 64-bit | 05:21 PM

127.0.0.1:5000

Data Analyst

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# Airplane Crash Analysis

Airplane Crashes and fatalities since 1908

Get Started



Type here to search

The screenshot shows a web browser window with multiple tabs open, all related to 'Airplane' projects. The main content area displays a 'Data Analyst' interface with a navigation bar and a central 'ABOUT PROJECT' section. The 'About' tab is selected. Below it, there is a detailed description of an aviation accident, a list of contributing factors, and a 'Learn More' button. The browser's address bar shows the URL as 127.0.0.1:5000.

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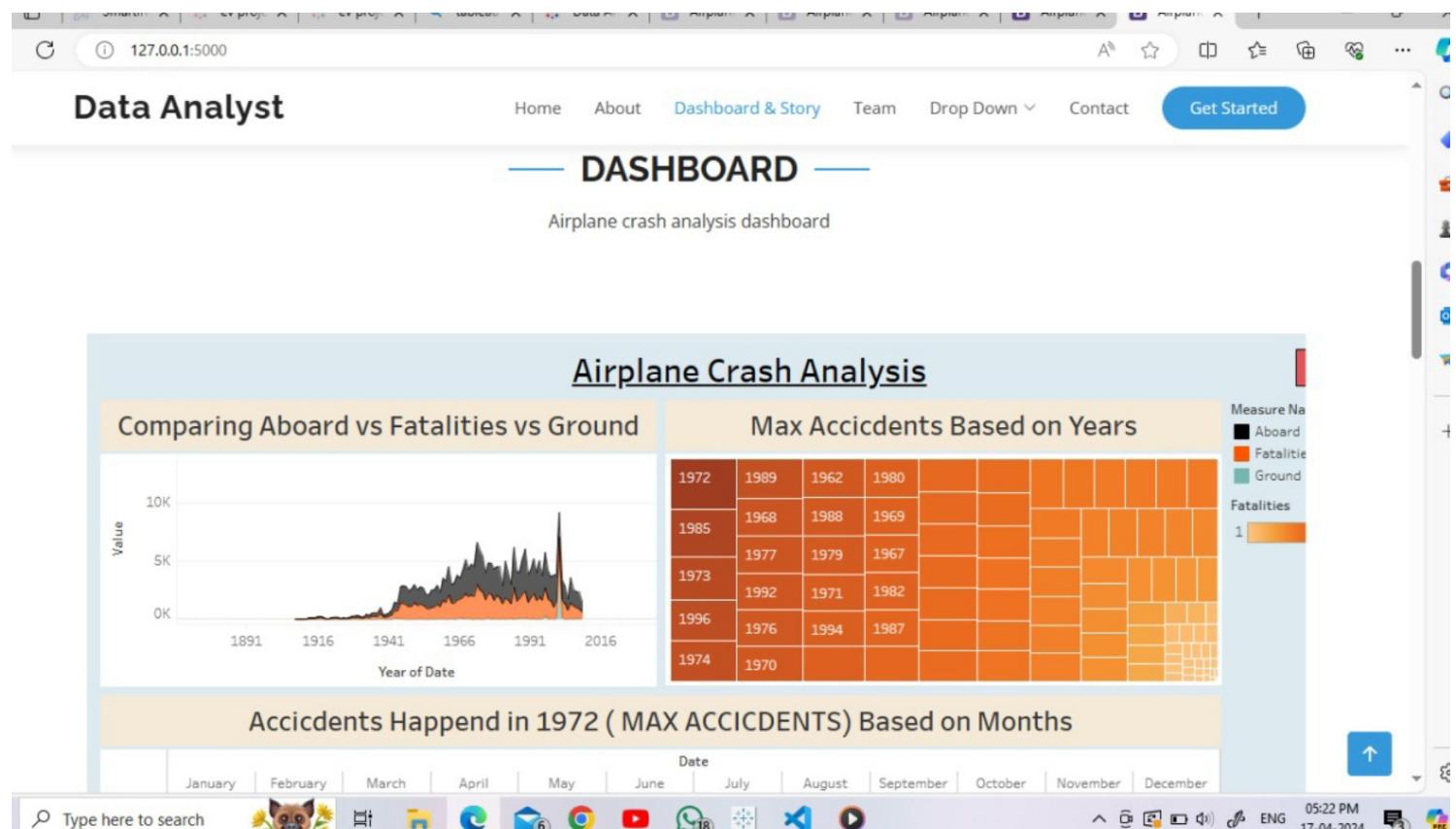
### ABOUT PROJECT

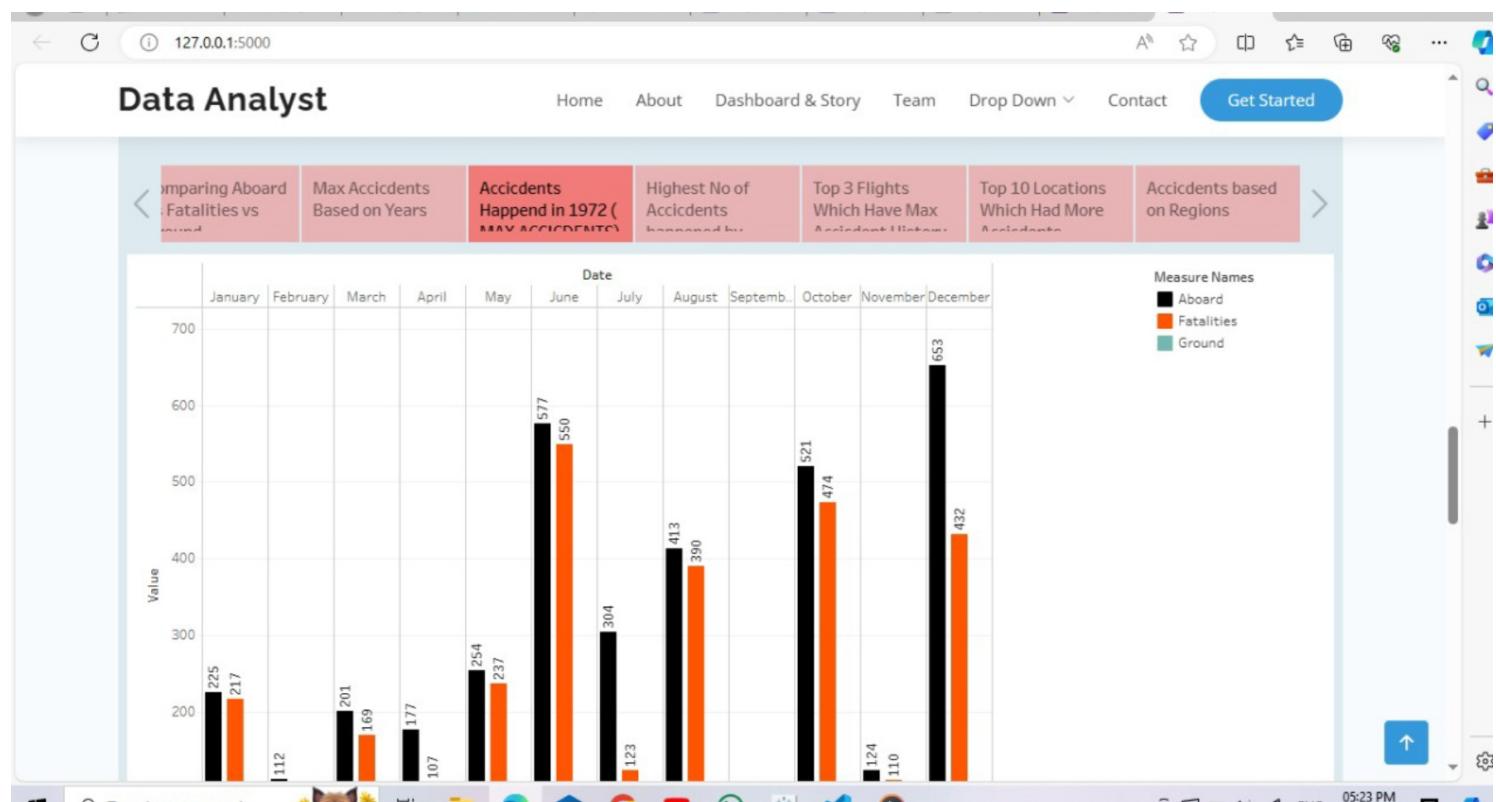
An aviation accident is defined by the Convention on International Civil Aviation Annex 13 as an occurrence associated with the operation of an aircraft, which takes place from the time any person boards the aircraft with the intention of flight until all such persons have disembarked, and in which (a) a person is fatally or seriously injured, (b) the aircraft sustains significant damage or structural failure, or (c) the aircraft goes missing or becomes completely inaccessible.[1] Annex 13 defines an aviation incident as an occurrence, other than an accident, associated with the operation of an aircraft that affects or could affect the safety of operation

Physical defects that may be experienced after air crash differ according to the impact and the nature of the crash. While to some it may be worse, there are those who manage to escape with slight injuries. The survivors of air crash first develop stress and depression, coupled with fear.

[Learn More](#)

Tune here to search    05:21 PM





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127.0.0.1:5000

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## — TEAM —

**Karthik Mothukuri**  
Team Member

**N. Venkatesh**  
Team Leader

**S.Dhanunjaya**  
Team Member

**Mysore Sonia**  
Team Member

Type here to search 05:23 PM 17-04-2024

The screenshot shows a web page titled "Data Analyst" at the URL 127.0.0.1:5000. The page features a navigation bar with links for Home, About, Dashboard & Story, Team, Drop Down, Contact, and a prominent blue "Get Started" button. On the left, there is a section titled "Data Analyst" with a paragraph of text about aviation accident analysis. Below this are four social media sharing icons: Twitter, Facebook, Instagram, and LinkedIn. The main content area is titled "CONTACT US" and contains a form with fields for "Your Name", "Your Email", "Subject", and a large "Message" area. To the left of the message area, there are three contact details: "Tirupati Andhra Pradesh, India" with a location pin icon, "Students@vidyanikethan.edu" with an envelope icon, and "7670813211" with a phone icon. A blue "Send Message" button is located at the bottom right of the form. The browser interface includes a vertical sidebar with various icons and a taskbar at the bottom.

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## CONTACT US

**Data Analyst**

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.

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Your Name

Your Email

Subject

Message

Send Message