

International Fraud Group Hackathon 2022

# **Analysis Hub: Analysis Management Solution**

Presented by  
Team Inevitables

Date:  
April 20, 2022



# Contents

01

## Understanding

- Introduction
- Motivation
- Objectives
- Creating an Impact

02

## Plan of Action

- Priority Goals
- Methodology
- Targets and Indicators

03

## Futurescope

- Next steps
- The team



Part 1:  
**Understanding**

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# Introduction

We propose a web app that helps any user to create prediction results for the risk profiling based on sector and geographical parameters, profiles for money laundering, and A new narrative for due diligence and KYC given the audit date from the organizations.

The app will have a unique user account so that security is ensured for every user and the data they use. On logging in the user will be taken to the homepage where options to select any of the following outcomes are mentioned, namely:

- Money laundering identifier.
- KYC Identifier.
- Traffic Analysis.
- Palm oil sector.



# Objectives

01

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A web app for processing and analyzing data as per the focus areas.



Traffik Analysis Hub

02

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A user account based webapp



03

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Focus more on data security and high efficient data analysing model



Part 2:  
**Plan of Action**

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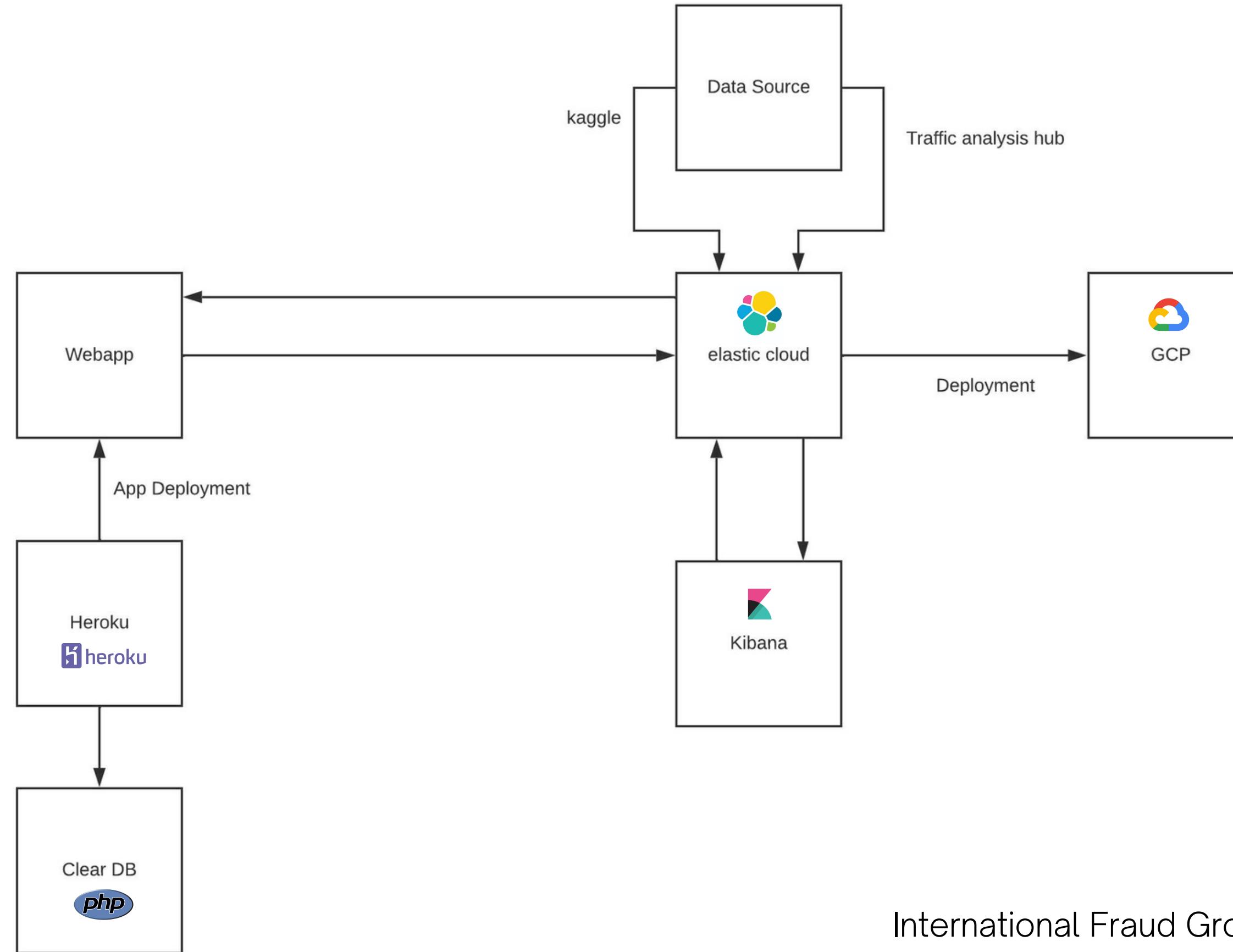


# **Analysis Hub: Web application**

International Fraud Group Hackathon 2022



# Architecture Diagram



# Features:

## Traffic Analysis.

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Visualizations for max values of victim gender across multiple locations in Malaysia, trafficking modes, and gender to trafficker ratio

## KYC Identifier.

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Represents incomplete profiles that are missing either PAN or Aadhar details

## Money laundering identifier.

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Shows the type of frauds involved in the transaction, the type of action involved, and the dates of actual cases

## Palm Oil sector.

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Industry-specific data visualization ranging from trafficking from a recruitment perspective



**Priority Goal  
and Targets #1:**

# Traffic Analysis

The main features are :

- The user will be able to upload the necessary data as single or multiple files.
- The system will automatically model the user profile from the given set of data.
- A graphical and statistical report will be shown as the end result of the modeling
- AccountUser can download the result and share it across platforms for further requirements.
- The account user will have the provision to manually filter out data from the previous modeling done on the system.
- External encryption can be done on the downloadable format form of the report to increase the security of the data.
- A dashboard dedicated to providing users with the unique and file specific representation of each data field from the CSV file. The dashboard has visualizations for max values of victim gender across multiple locations in Malaysia, trafficking modes, and gender to trafficker ratio.



## Priority Goal and Targets #2:

# Money laundering Identifier

This section generally deals with flagging and finding out money laundering accounts based on the inputs given, normally based on the geographical factors provided. The main features are:

- The **AccountUser** can upload the input files on the web app with the necessary parameters that need to be modeled on the system. This can either be a CSV or other large data files.
- The system will create a model based on the input given and produce an output that will highlight the money laundering accounts and their specific category of money laundering
- The **AccountUser** will get a graphical and statistical representation of the output
- There will be a provision to download the output in a report form.



**Priority Goal  
and Targets #4:**

## Palm Oil Sector Analysis

This section generally deals with selecting the areas in Malaysia which are related to the palm oil industry and the employee details. The main features are:

- The AccountUser can upload the CSV file containing the location, type of trafficking reported if any, the internal/external survey or report scores, etc.
- The system will validate the inputs given to generate a data map of the location based on the coordinates.
- The AccountUser will get a graphical and well as statistical analysis of the output.
- The report can be downloaded as per the demand of the account user.
- The ability for users to modify the visualization using KQL to customize it to the current requirement



**Priority Goal  
and Targets #5:**

## KYC Identifier

This section generally deals with selecting out the various user account which does not fully comply with the KYC and due diligence provided, based on the inputs given, normally user account, pan, and aadhar details. The main features are:

- The AccountUser can upload the list of users and their corresponding KYC details in a bulk format, commonly in CSV.
- The system will validate the inputs given to comply with the KYC and flag the account that does not complete the KYC details
- The AccountUser will get a graphical and well as statistical analysis of the output.
- The report can be downloaded as per the demand of the account user

# Tech Stack

**HTML, CSS , Bootstrap** 

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Front End Development

**Javascript , PHP.js** 

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Back End Development

**Elastic Cloud** 

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Data Management Tool

**Kibana** 

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Data Visualization Tool

**Clear DB -SQL**

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Data Mangament Solution

# Data Sources

## Traffic Analysis - Traffik Analysis Hub

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<http://trafficanalysis.org/>

## Money Laundering Identifier - Kaggle

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<https://www.kaggle.com/>

## KYC Identifier - Kaggle

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<https://www.kaggle.com/>

## Palm Oil Sector - Global Forest Watch

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<https://data.globalforestwatch.org/>

Part 3:  
**Screenshots**

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# Front Page

**ANALYSIS HUB**

HOME    ABOUT    SERVICE    FEATURES    CONTACT    SIGN-UP

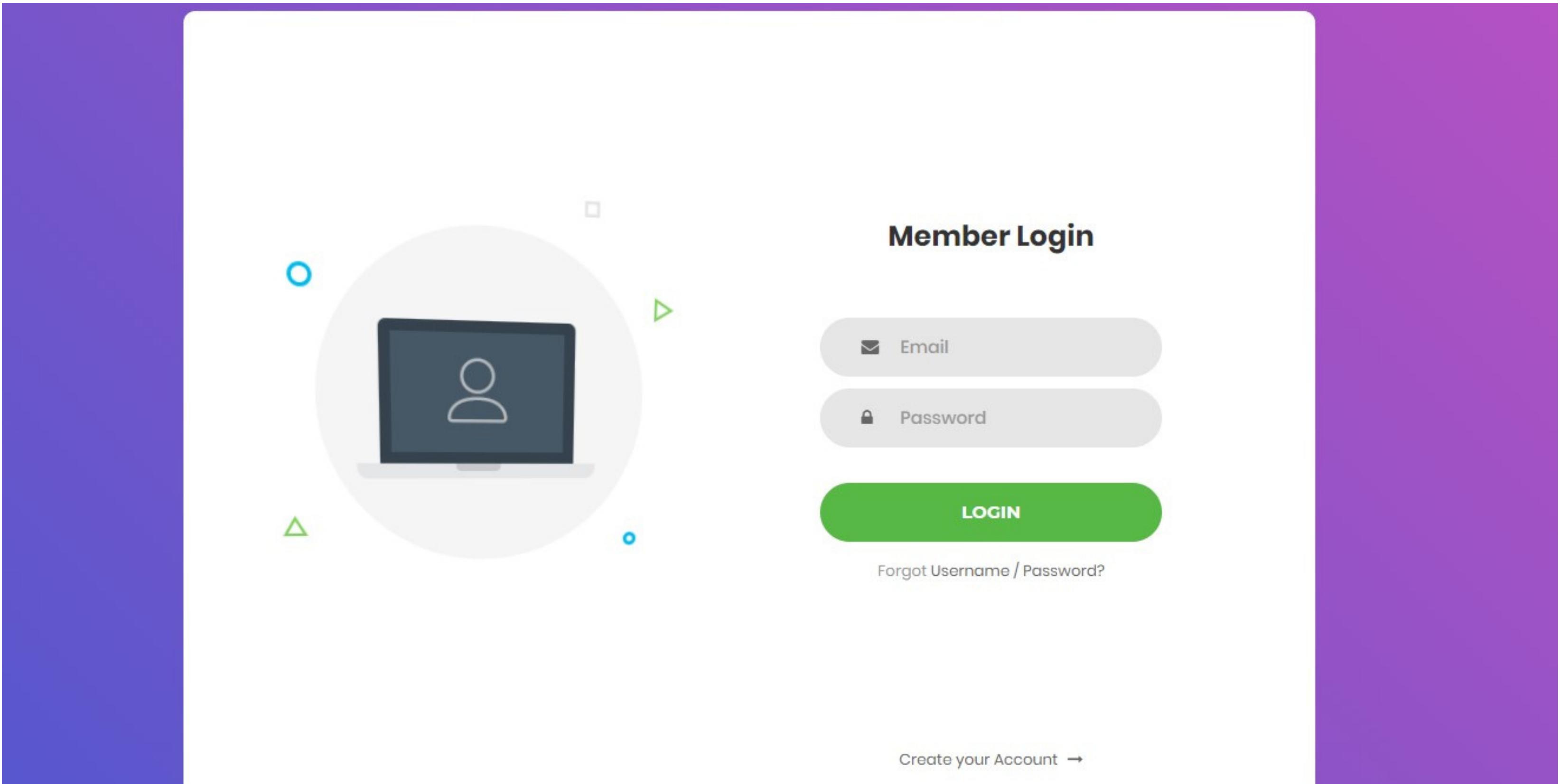
## A RISK ANALYSIS MANAGEMENT SOLUTION

A complete analysis solution for all the risk analysis.

[Login to DashBoard](#)

< >

# Sign in page



# Dashboard

ANALYSIS HUB

≡ Home About Services Project ▾ Support

Arjunraj.net@gmail.com

Home Services Event My Profile

Search...

Risk Profile Identifier Check Now

Palm Oil Sector Analysis Check Now

Money Laundering Identifier Check Now

Related news search IBM Watson articles

KYC and Due Diligence Identifier Check Now

Related news search Google Scholar articles

Traffic Analysis Check Now

Login to Kibana Kibana Login

World Data Map

Events shown in time zone: India Standard Time - Kolkata

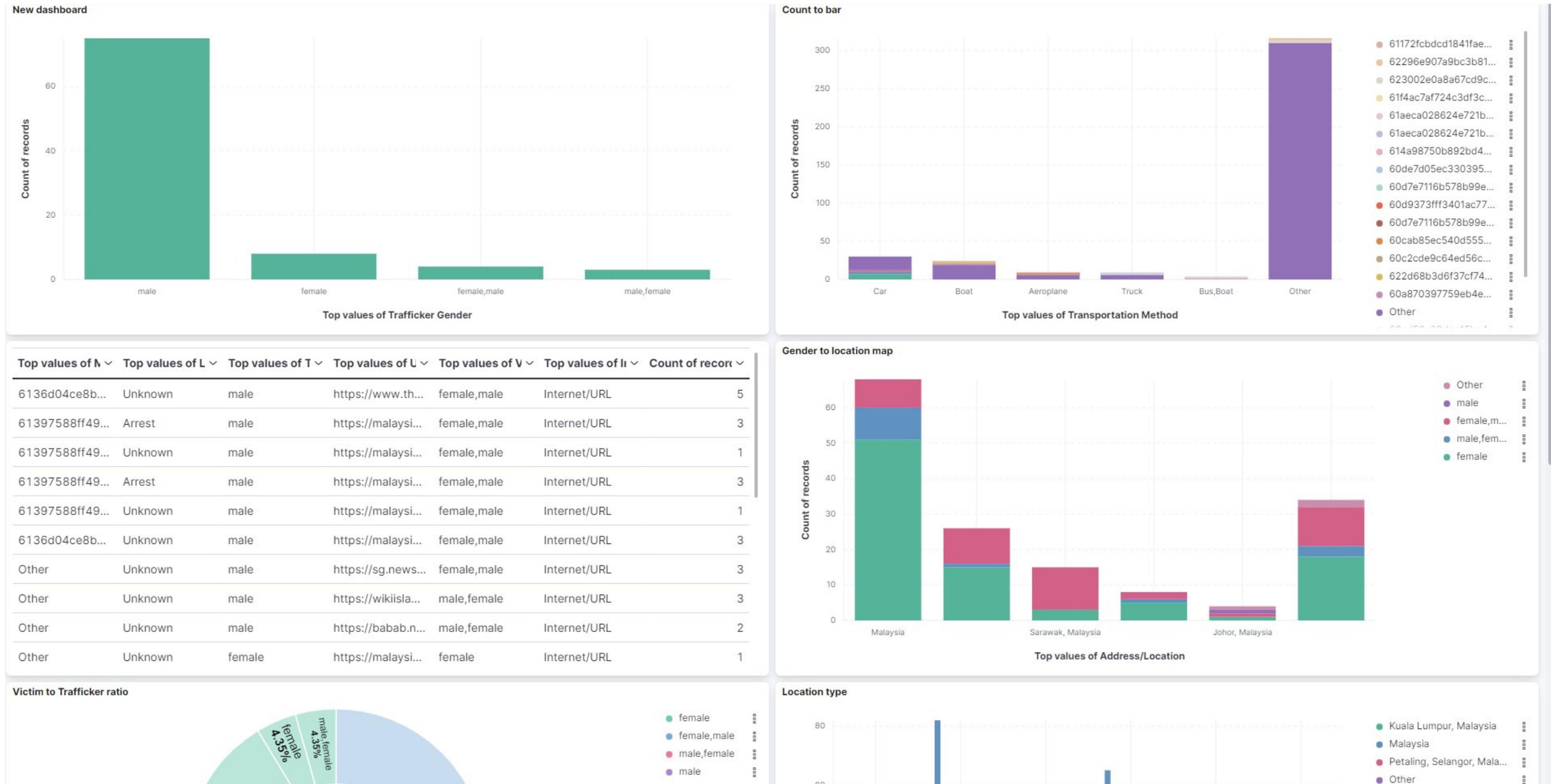
Arjun Raj

Today April 2022 Print Week Month /

Sun	Mon	Tue	Wed	Thu	Fri	Sat
27	28	29	30	31	Apr 1	
3	4	5	6	7	8	
10	11	12	13	14	15	
Rama N				Ambedk	Good Fr	
Mahavir	+2 more					
Easter I			20	21	22	
24	25	26	27	28	29	Jamat U

Google Calendar

# Kibana Visualization



# Palm Oil Sector Analysis

ALYSIS HUB

≡

Home About Services Project Support

Akshay

Palm oil sector factories:

elastic Search Elastic

Dashboard Palm oil manufacturing locations in Malaysia

Palm oil manufacturing areas in Malaysia

LAYERS

- malaysia\_plam\_oil
- Road map - desaturate

Exit full screen

Quick Report Generator

Generate PDF

Quick Report Generator

Generate PNG

Go to Kibana Dashboard

Kibana Dashboard

Read related articles

Read articles

View Original Data

View Dataview

Elastic Maps Service, OpenStreetMap contributors, OpenMasters

Send message

# Money Laundering Analysis

ALYSIS HUB

- Home
- Services
- Event
- My Profile

Type of money Laundering Records:

Type of Fraud	Count of Records
none	850
type3	500
type2	480
type1	420

Quick Report Generator

Generate PDF

Quick Report Generator

Generate PNG

Go to Kibana Dashboard

Kibana Dashboard

Read related articles

Read articles

View Original Data

View Dataview

Send message

# Traffik Analysis

ANALYSIS HUB

≡ Home About Services Project ▾ Support

✉️ 🔔 Arjunraj.net@gmail.com ▾

Home Services Event My Profile

KYC and Due Diligence Identifier Money Laundering Identifier Risk Profile Identifier Palm Oil Analysis

Check Now Check Now Check Now Check Now

Gender to Location Diagram : Location : Malaysia

Gender to location map

Category	Count
Other	2
female,male	11
male,female	3
female	18

Top values of Address/Location

Exit full screen

Quick Report Generator

Generate PDF

Quick Report Generator

Generate PNG

Go to Kibana Dashboard

Kibana Dashboard

Read related articles

Read articles

View Original Data

View Dataview

# Kibana Organisation Level

The screenshot shows the Kibana interface for managing organization members. At the top, there's a header with the elastic logo and a trial status message "Trial - 4 days". Below the header, a breadcrumb navigation shows "Cloud > Organization > Members". The main section is titled "Inevitables" with a edit icon, and it displays an organization ID: 739074839. There are two tabs: "Members" (which is selected) and "Contacts". A prominent button labeled "Invite" is visible on the right side. The main content area lists "4 members" with the following details:

Email address ↑	Status	Added
akhilmani0@gmail.com	● Invite expired Resend invite	10 days ago
akshaymonkv98@gmail.com (you)	● Active	10 days ago
akshayvanil117@gmail.com	● Invite expired Resend invite	10 days ago
arjunraj.pala@gmail.com	● Invite expired Resend invite	10 days ago

Part 4:  
**Future-Scope**

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# Future-Scope

- An ML algorithm can be used to create a more efficient model
- As per the demand of the user, more quality life improvements can be done to the entire web app.
- The data storage can be migrated to a more robust and premium data center for more security.
- Using REST APIs to collect data from end-user to create data pipelines to overwrite existing dashboards, so that a single visualization can be re-used multiple times.

# The Team Inevitables

## Project Team

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**ARJUN RAJ**

Team Lead



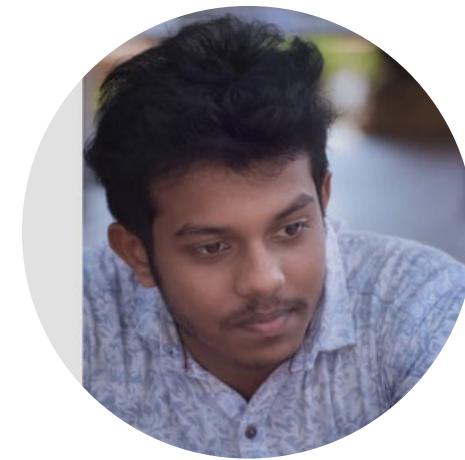
**AKSHAYMON K V**

Full Stack Developer



**AKSHAY V ANIL**

Full Stack Developer



**AKHIL M ANIL**

Full Stack Developer

# Thank You