**ANONYMOUS TIP-OFFS REPORTING AND VERIFICATION PORTAL**

**Idea in detail :**

1. **Online Web-Enabled Platform Description**
2. Create and deploy a user-friendly, secure, efficient and easy to navigate web-enabled which allows submission of genuine tip offs in a concise and anonymous manner.
3. A declaration should be agreed upon by the reporter stating the information to be precise, accurate, and genuine to the best of their knowledge.
4. A complaint ID will be generated for every tip off and the current status can be viewed through this complaint ID. The tip off can also be cancelled as per the wish of the reporter.
5. Navigation pane will offer multiple categories of various incidents to choose from, allowing easier filing of complaints.
6. A dashboard will be maintained containing all the information regarding the tip offs, which will be envisaged using Tableau Visualisation tool, where the general locations of requests would pop up in real time.
7. The user may choose to remain anonymous or provide some personal information while filing the complaint.
8. **Data collection and Policies**
9. As per the selected category, a form with the specific fields will be provided to the user.
10. Details of the incidents will be asked which includes
11. Location (State, district, city, pin code) and
12. The description of the event
13. Latest date of the incident.

The granularity of the form will be maintained according to the reporter’s preference of anonymity.

1. Keeping the concern of national security in mind, we are obliged to collect some metadata of the user which includes IP addresses MAC addresses and port numbers of the machine. This information will not be shared/disclosed to the third party - person, organization or general authorities, unless the nation’s security has been compromised.
2. The users will be offered multiple options to provide evidence to back up their reports. This evidence can be in the form of urls, text, videos and images.
3. The collected data will be maintained on a server, including the references to the resources, using DynamoDB.
4. **Verification and Analysis of tip offs**
5. The data collected will be evaluated on the two major scales: Confidence and Priority.
6. Priority Assigning: The data will first be normalised into three categories:-
7. Red - Highest Priority; Immediate Verification
8. Yellow - Medium Priority;
9. Blue - Lowest Priority;
10. Grey - Tip-offs that are no longer active.

The reports will be verified and analysed in the order of their priorities, Red being the highest and Blue being the lowest.

1. Calculation of Priority:
2. Any new complaint is first assigned 0 priority and is classified under the Blue category. The complaints of higher priorities will gain immediate attention.
3. The complaints will be ready for verification only if the priority of the complaint equals 1, i.e., it comes under the Red category.
4. The metadata from the tip offs will be used to form hotspots by evaluating the general location from the reporter’s IP address. If multiple tips regarding the same topics originate from a common location, then the area can be considered as a hotspot for that particular incident and every tip will thus be assigned higher priority than normal.

1. Calculation of Confidence
2. If the tip-off reaches the Red value of priority, then it can proceed to verification and authenticity.
3. Various Web Crawling and Scraping techniques will be used for the authentication of the textual complaints on platforms like trusted news websites, Twitter accounts of news sources, genuine partners, agencies and authorities, etc.
4. In case of Audio-Visual complaints, real-time-streaming data analysis with the help of Satellite Imaging and CCTV camera footage will be performed to determine the Confidence Factor of the tipoff.

1. **Reporting to authorities**
   1. Once the verification techniques, like ensemble learning and Real-Time-Data-Streaming Analysis, classify a tip to be of high confidence, it will be sent to the concerned authorities based on the pre-defined incident-authority charts.
   2. The authorities will revert back according to the action they have taken for the reported problem, some of which will be available to the reporter.