

PolGuard

BITS & PIECES

GOA POLICE HACKATHON'22

PROBLEM STATEMENT

Issues with current malware detection softwares

#1 INCREASING **RISK** FROM MALWARE

- Technology advances, so does malware
- Over **560,000 new malware** affect systems **every day**
- 4 companies fall victim to ransomware attacks **every minute**

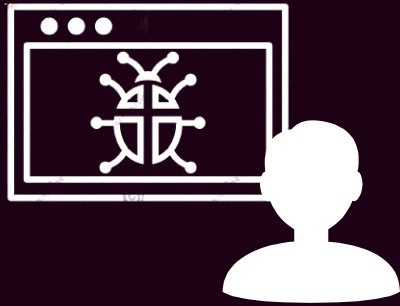
#2 DETECTION METHOD

Static signature
based malware
detection

VS

Machine learning
based malware
detection

#3 BROKEN LINK



OUR SOLUTION

PolGuard's user and police side clients

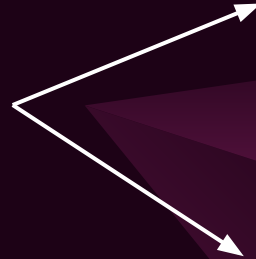
DETECTION METHOD



Training Data



ML Model



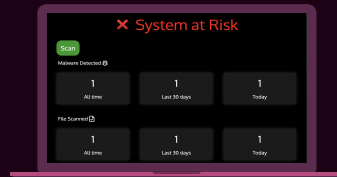
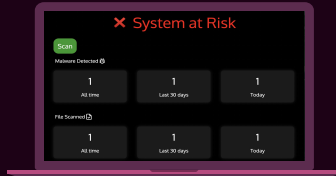
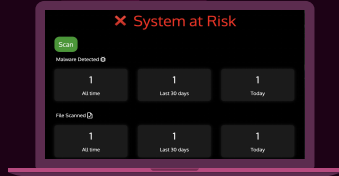
Malicious

Safe

File to Scan



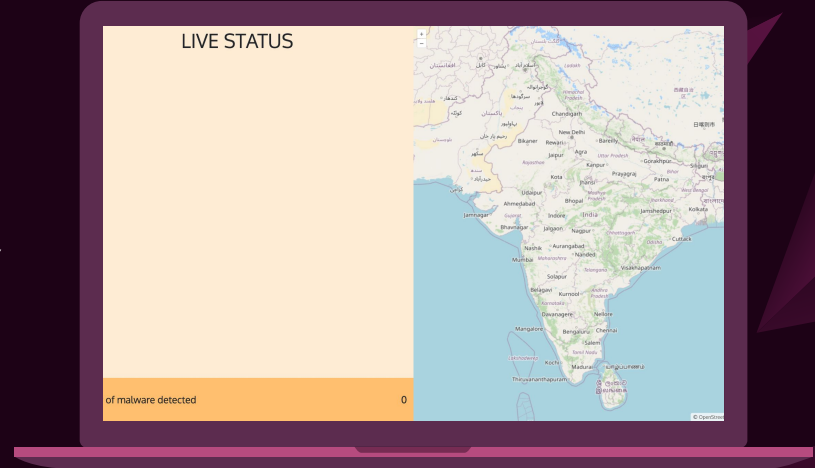
USERS SIDE



reports



POLICE SIDE



POLICE SIDE FEATURES

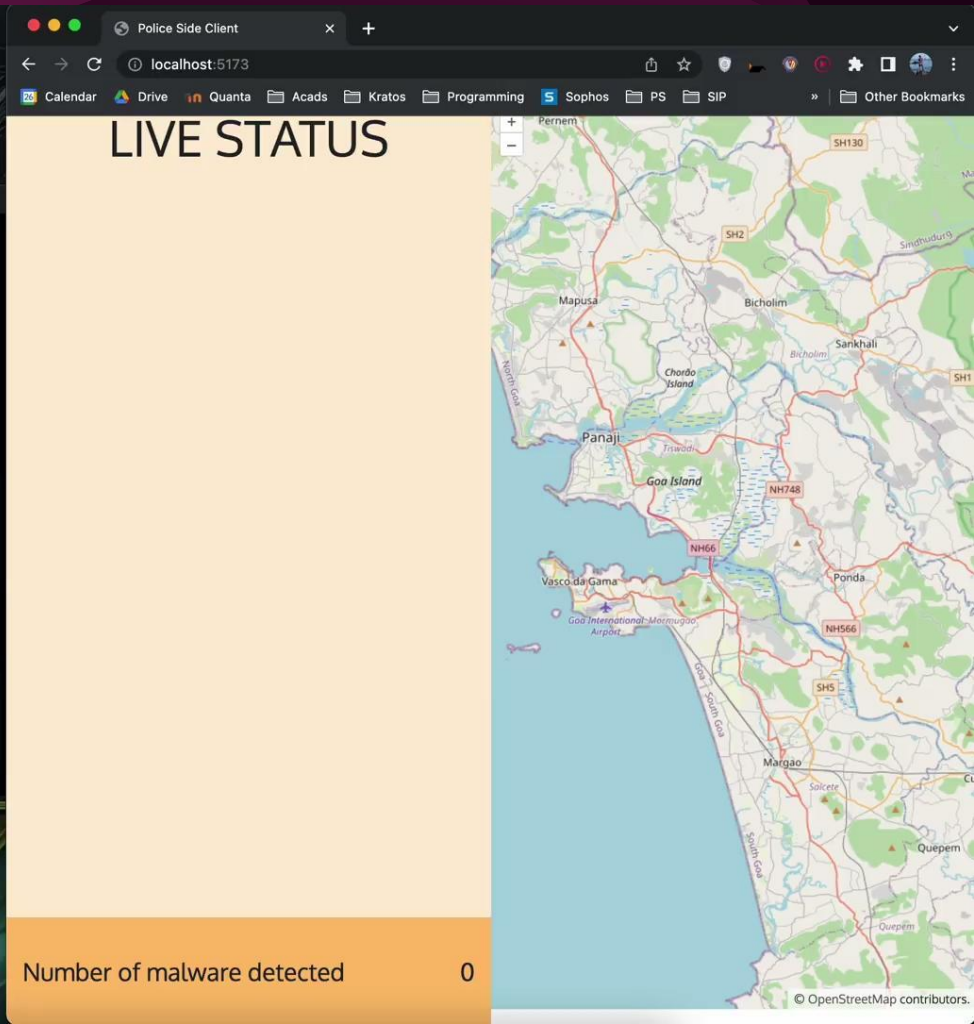
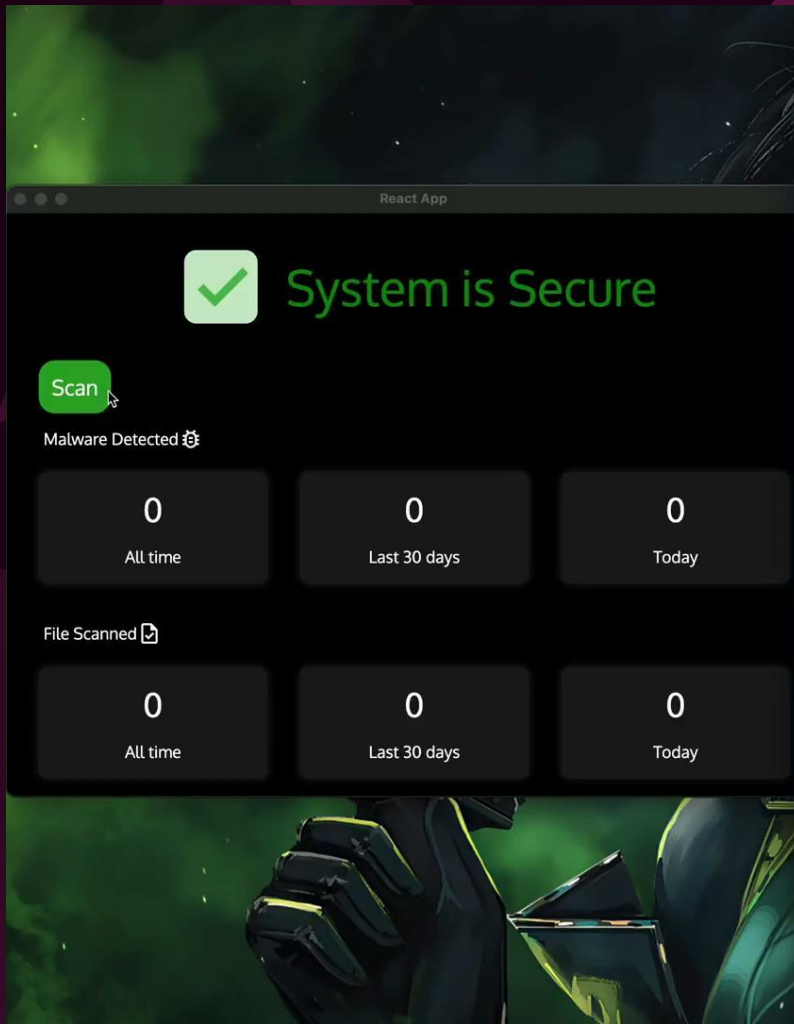
- Live status - ip and coordinates
- Georeports
- Similarity index

MITIGATE LARGE SCALE ATTACKS.
ASSIST VULNERABLE USERS.

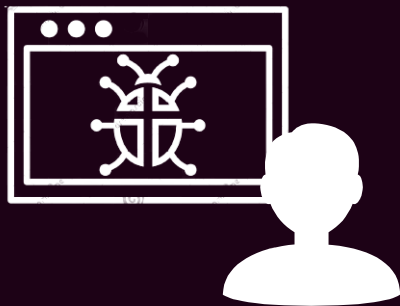
The background is a dark purple field filled with various shades of purple geometric shapes, primarily triangles, creating a low-poly, crystalline effect. Scattered throughout are several light purple five-pointed stars of different sizes. In the upper left, there is a stylized rocket ship with a jagged, flame-like tail. In the center-right, there is a planet with a thin ring system and three small dark spots on its surface.

DEMO

See our app in action!



NOW,



FUTURE WORK

- Get more accurate location data
- Improve accuracy by increasing size of dataset
- Extend compatibility to android/iOS devices
- Implement real-time scanning of files

THANKS!



Praneeth B

f20200096@goa.bits-pilani.ac.in



Akhil Bansal

f202000116@goa.bits-pilani.ac.in



Bharath Hegde

f202000143@goa.bits-pilani.ac.in