NOVASIGHT

Real Time Online Security & Monitoring Application

Partnered with Novacoast

EQUIFAX
UBER
T-Mobile
THE HOME DEPOT
CHIPOTLE MEXICAN GRILL
YAHOO!
ORBITZ
LinkedIn
UNDER ARMOUR
TARGET
Hilton
MARRIOTT
Arby's
CHASE
Google+

WABC
abc NEWS

- Data leaks are an ever prevalent problem

- What we can change is the response time to address these data leaks

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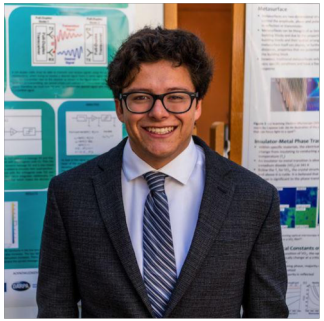
Team: Human Error Is A Myth

Graham Foster
(Lead)

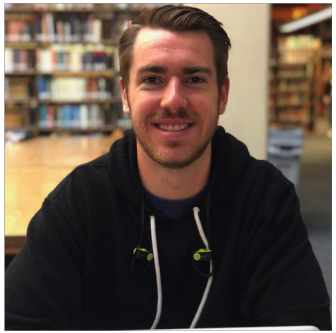


Fernando Mendoza
(scribe)

Omer Cohen

Diego Segundo

Quintin Hill



Blake Johnson

Need for a system to combat these attacks

- Personal Device Leaks
- Company Database Leaks
- There are security analysts who work to prevent and detect these breaches
- This is extremely time consuming due to the scale with which these breaches occur both in size and frequency

Our Solution

- Minimizes Response Time
- Centralized and Automated Web Application
  - Simultaneously scrapes: pastesites, breached databases, darkweb marketplaces
- Analysis Algorithm
- Proactive Alerting System

LEAKED CREDIT CARD DETAIL

https://pastebin.com/MZRVQ379

text 1.11

1. typ
2. num
3. cvv
4. exp
5. nam
6.
7. typ
8. num
9. cvv
10. exp
11. nam
12.
13. type: Visa
14. number: 4532 1517 1844 9010

Get 40% OFF Pastebin PRO accounts!

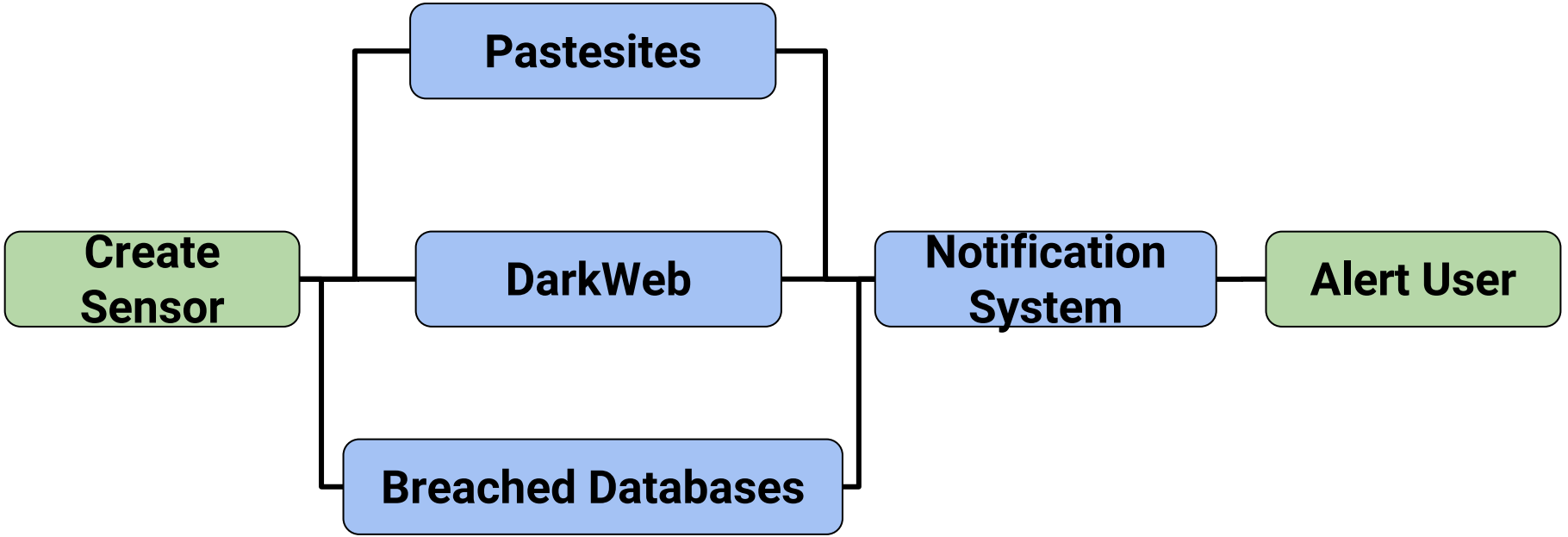
9

The Sensor

- Our tool to put together all the search terms that may be helpful in finding your information
- Terms include name, email, company, etc.

*One sensor will look for each of these search terms.

How it works


Pastesites
Create Sensor
DarkWeb
Notification System
Alert User
Breached Databases

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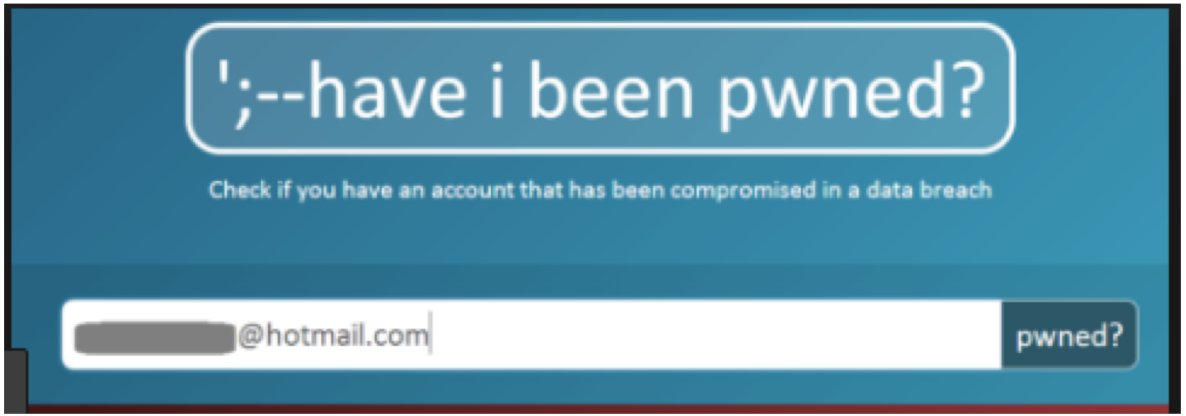
Demo

Pastesites

- Pastesites allow us to find leaked personal information that has been exposed
- We use Selenium to streamline the data gathering process
- Selenium allows us to automate tedious tasks otherwise required of security analysts

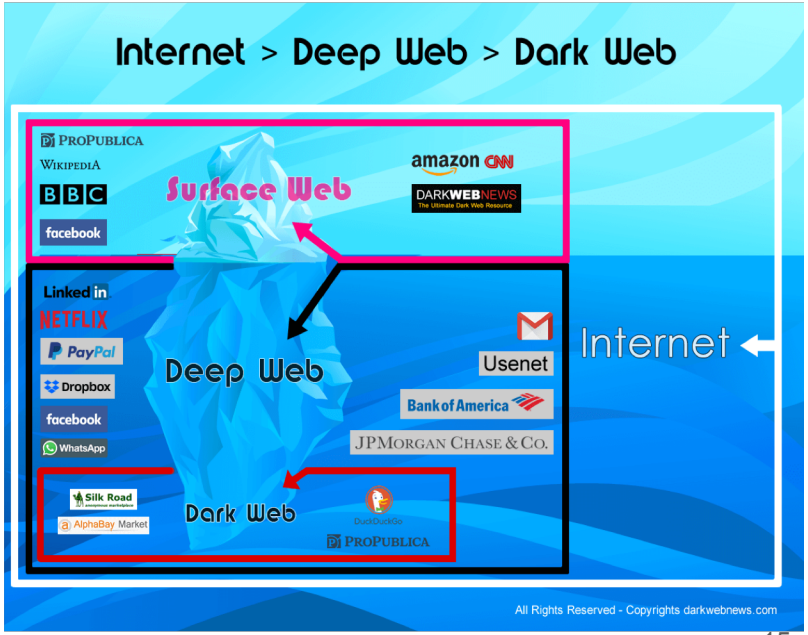
Breached Databases

- System will monitor breached databases and email/password exposure (I.e. HaveIBeenPwned Database)



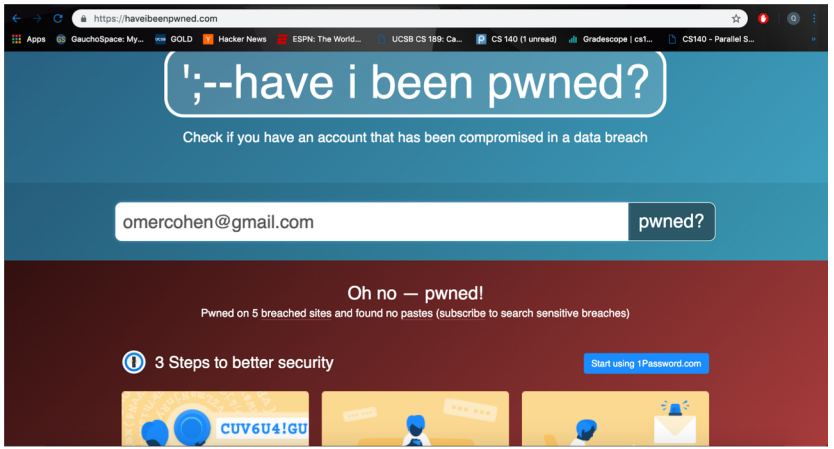
DarkWeb MarketPlaces/Forums

- In addition, we monitor Dark Web sources for data
- Less regulation than pastesites
- Hidden behind layered proxy networks on the DarkWeb.



Notification System

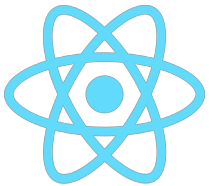
- We notify users in real-time of any detected breaches
- Allowing our users to immediately address any information leak



Technologies Used in Implementation

- Parallel asynchronous architecture allows for independence between modules.
- Extensible backend architecture
- Our REST API allows developers to call an individual module that suits their needs.

REACT



Selenium

Impact

- Viable for both consumers and corporations.
- With our API we can connect our system to all these other identity management systems
  - **This is defensive software**
- This application has implications for EVERYBODY, security affects EVERYBODY

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THANK YOU!
Questions?