

DataDefender



**Rishabh Thukral, Justin Kang,
Adam Siffel, Pete Stenger**



Motivation

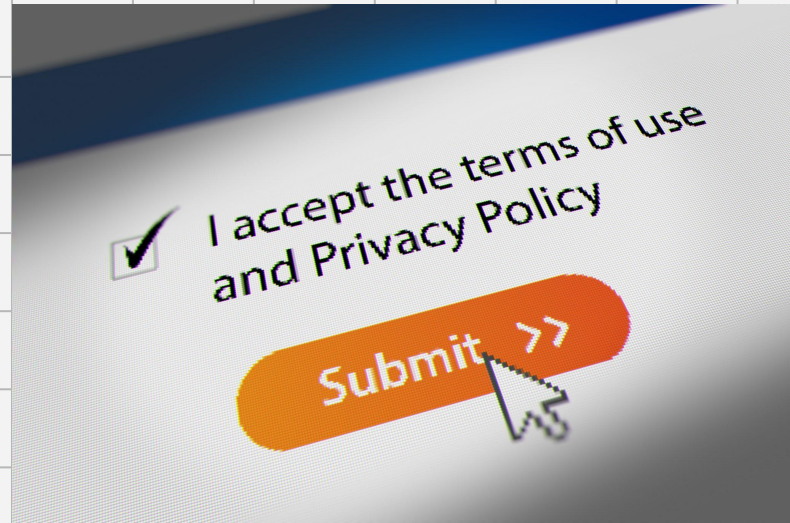
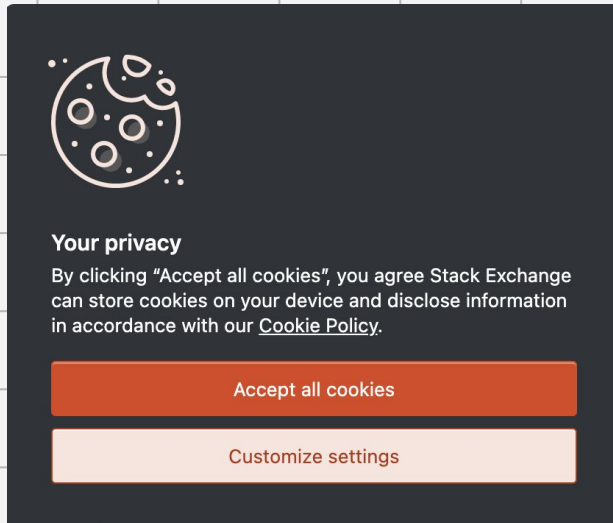
Data Brokers

Data Brokers Market Estimated to Reach US\$ 462.4

Lawsuits Aim Billions in Fines at Equifax and Ad-Targeting Companies

Brokers say a potential privacy bill could hamper their work with law enforcement and overly restrict their industry.

But HOW do they get all this information?



We use cookies to make your experience of our websites better. By using and further navigating this website you accept this. Detailed information about the use of cookies on this website is available by clicking on [more information](#).

ACCEPT AND CLOSE

It is **BETTER** to know
than to not know.

Solution – Find the platform that sold your
info

How do we do that?

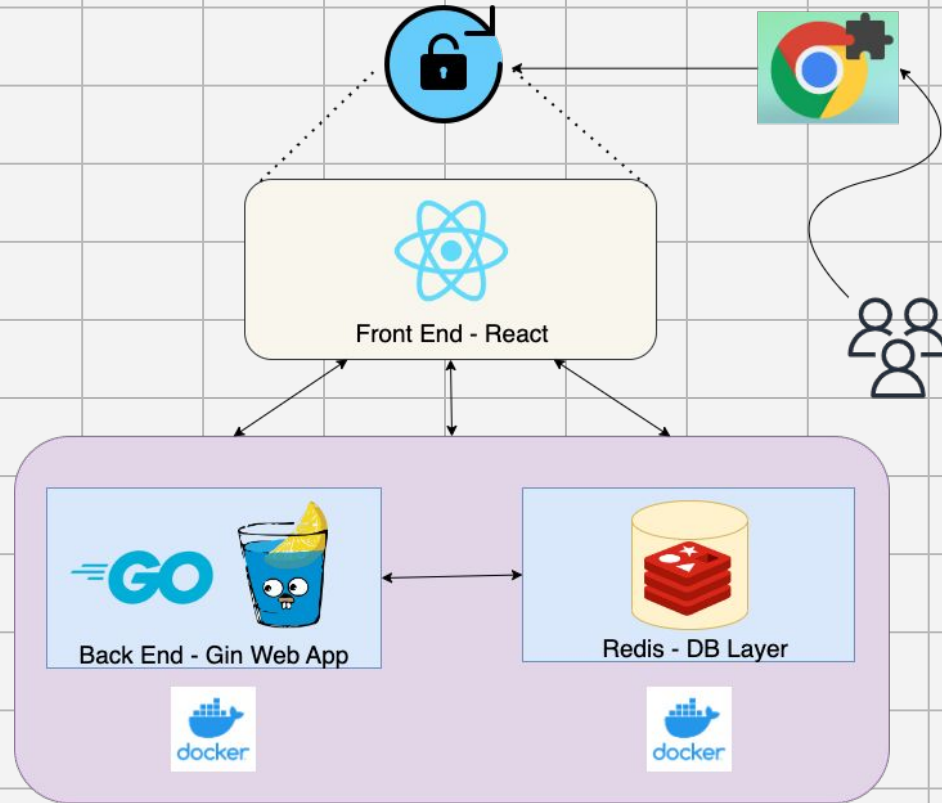
DataDefender



Goal:

- 1. Build an extension that provides a new email address that is unique to a platform but redirects to your primary inbox.**
- 2. Use the unique email to identify which platform sold your email and report it for the community.**

Demo



Data Defender - High Level Architecture



ORDER *Online*

LOGOUT

[MY ACCOUNT](#) • [ORDER HISTORY](#) • [MY FAVORITES](#) • [FAQ](#) • [REWARDS](#) • [START ORDER](#)

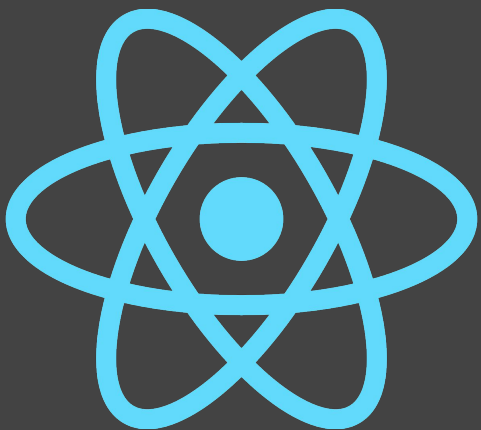
★ THANKS FOR JOINING! ★

Earn a
FREE SANDWICH

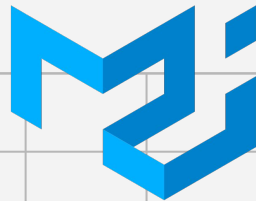


AFTER YOUR FIRST ORDER
FREAKY FAST REWARDS 👍

Frontend (React)



Chrome Extension



DataDefender



- React framework
- Material-UI API for design
- Local storage for persistent info
- React-hooks to manage state

example+Fg@gmail.com



LOOKUP/REPORT SITE



Copied to clipboard.



Backend (Gin Golang)

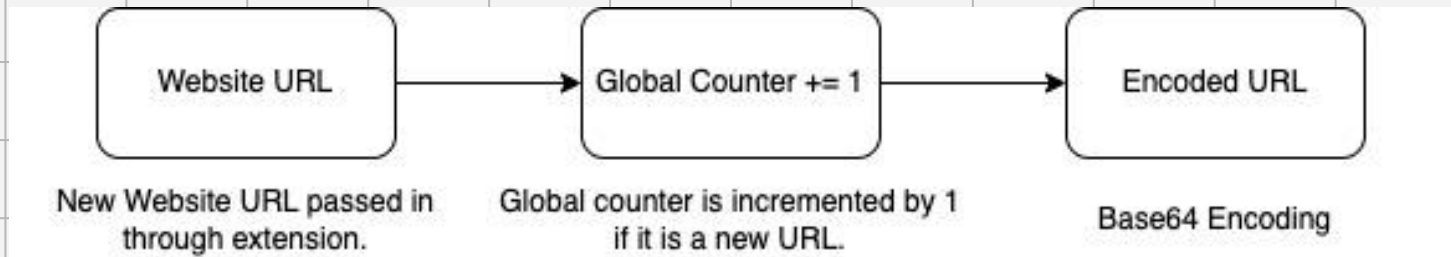


Gin Golang

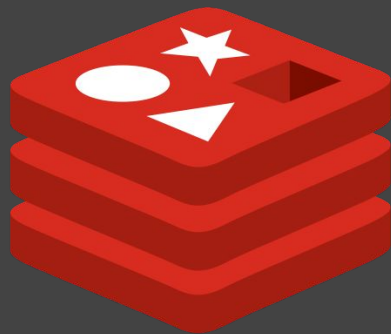
-

- Used to create the backend for the extension.
- Connects to redis to get the necessary values for the functions of the extension.
- Runs the service to Encodes and decodes URL to concatenate to the email address.

URL Encoding



—



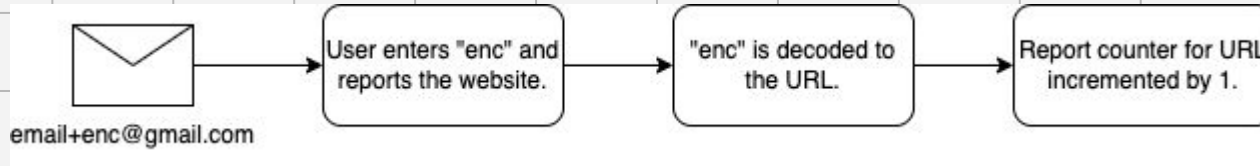
redis

Redis

- Open source memory storage system, similar to a Python dictionary
 - Three major uses:

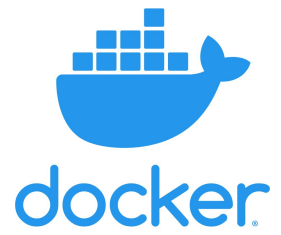
Key: URL String	Value: Encoded URL
Key: Counter Key (ID)	Value: URL String
Key: URL Lookup Key	Value: Number of Reports

Reporting System

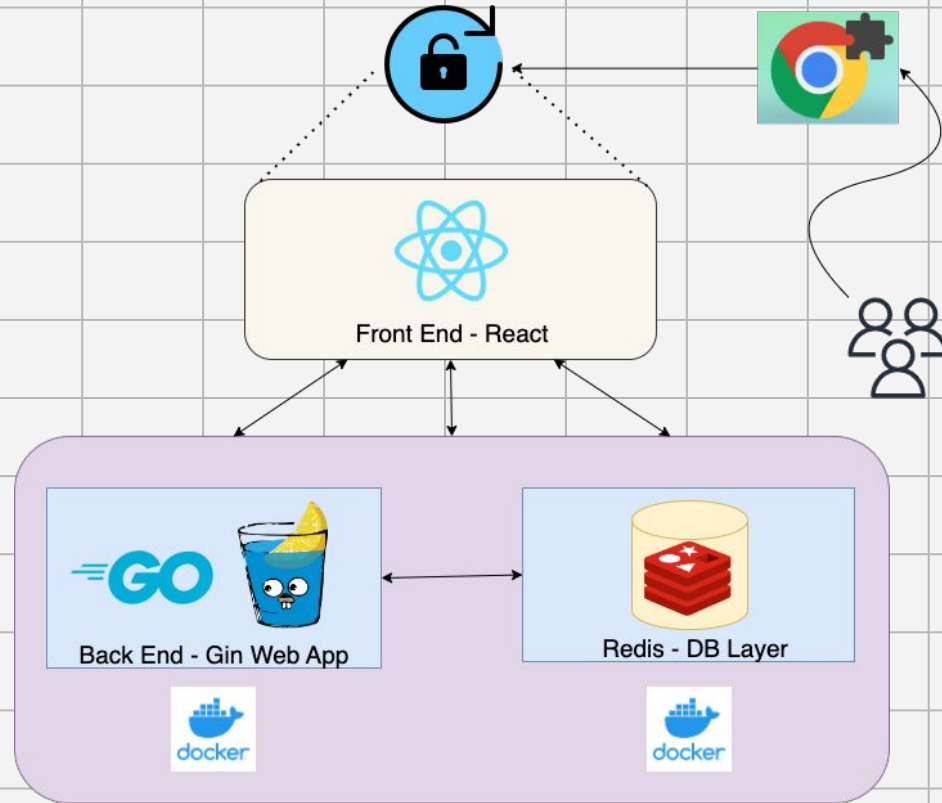


Key: URL Lookup Key

Value: Number of Reports



Overall Architecture



Data Defender - High Level Architecture



Q&A



Thank
you
HackGT!