

# CYBER SECURITY

- ASHWIN PHADKE



#### STATISTICS

- More than 4,000 ransomware attacks have occurred every day since the beginning of 2016.
- In 2016, the U.S government spent a whopping \$28 billion on cyber security and this is expected
  to increase in 2017 2018.
- The average amount demanded after a ransomware attack is \$1,077.
- 1 in 131 emails contains a malware.
- In 2017, 6.5 percent of people are victims of identity fraud resulting in fraudsters defrauding people of about \$16 billion.
- Unfilled cyber security jobs are expected to reach 3.5 million by 2021 — compared to about 1 million in 2016.
- 230,000 new malware samples are produced every day and this is predicted to only keep growing.
- China is the country with highest number of malware-infected computers in the world.
- 78 percent of people claim to know the risks that come with clicking unknown links in emails and yet still click these links.
- Android is the second most targeted platform by hackers after Windows.



# THIS GUY IS FAMILIARLY UNFAMILIAR



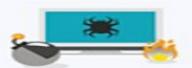
Blockchain will find uses outside of cryptocurrencies but cybercriminals will focus on coins and exchanges #2



Cybercriminals will use AI and machine learning to conduct attacks #3



Supply chain attacks will become mainstream #4



File-less and file-light malware will explode #5



Organisations will still struggle with SaaS security

# CYBERSECURITY PREDICTIONS 2018



#6



More breaches due to error, compromise and design #7



Financial trojans will still account for more losses than ransomware #8



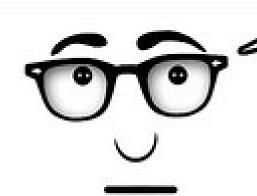
Expensive home devices will be held to ransom #9



IoT devices will be hijacked and used in DDoS attacks against us #10



IoT devices will provide persistent access to home networks If it's on the Internet, it isn't private.



Donkey Hotel



# injection

# WHAT IS SQL INJECTION?



A SQL query is one way an application talks to the database.



SQL injection occurs when an application fails to sanitize untrusted data (such as data in web form fields) in a database query.



An attacker can use specially-crafted SQL commands to trick the application into asking the database to execute unexpected commands.

## BROWSER SNIFFING

## JAVASCRIPT ATTACKS

BROWSER SECURITY

INFECTED TERMINAL

CANVAS FINGERPRINTING



# KNOW MHAI YOU DID ON THE WEB

YOUR FAVORITE PERSONALIZED SITES ARE USING YOUR DATA



The sites you frequent on a daily basis are actively gathering facts about you. That's why that jacket you've been coyly eyeing inconspicuously appeared in an ad on an unrelated website. Social networks are betting on a future built on a personalized web, your own Internet paradise filled with items the virtual you will likely share, pin, tweet, or "like." We take a look at what information your favorite sites gather and what they do with it.

#### COMPANY

#### NUMBER OF ACTIVE USERS

#### ANNUAL AD REVENUE

TYPE OF DATA GATHERED





Time, date







Email



Phone















SMS routing information

How to define Android:
Someone is hearing, seeing and knowing whatever you do with your

"SMART" phone



# SCOPE OF CYBER ATTACKS:



- -- Reconnaissance/Footprinting
- -- SQL Injection
- -- Scanning Networks
- -- Enumeration
- -- Hacking Web Servers
- -- Hacking Web Applications
- -- Cryptography
- -- Sniffing
- -- Session Hijacking
- -- Social Engineering
- -- System Hacking
- -- Denial of Service
- -- Hacking Wireless Networks
- -- Malware Threats
- -- Evading IDS, Firewalls, and
- -- Hacking Mobile Platforms

# HEARD THEM ANYWHERE ?

- SPECTRE AND MELTDOWN
- WANNACRY
- NOTPETYA
- UBER
- YAHOO
- EQUIFAX
- VISA CARD







of all the websites in the world use JavaScript

# JAVASCRIPT VULNERABILITIES

JS

# CAN IT BE YOUR CAREER ?



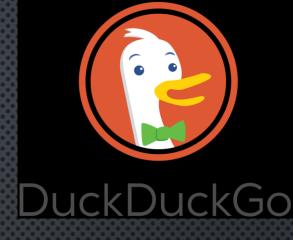
# SO WHO'S GONNA SAVE ME FROM THIS T-REX

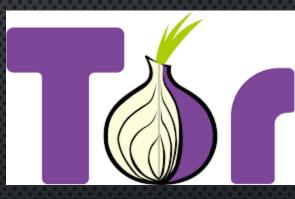




#### TIPS

- DUCK DUCK GO.
- TORR
- VPN
- TWEAK YOUR PRIVACY SETTINGS
- USE A GOOD ANTIVIRUS
- BETTER BE PROTECTED AGAINST MALWARE, ADWARE
- USE OPEN SOURCE SOFTWARE(LINUX)
- SECURE YOUR ROUTER
- GET A DECENT LOOK AT SETTINGS.
- BE AWARE
- AND A FEW VOCAL TIPS: YEAH! THEY ARE WATCHING







### ASHWIN PHADKE

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