# CYBER SECURITY

**Presented By**

Debraj Karmakar

I am pursuing my B. Tech degree in Computer Science & Engineering from JIS College of Engineering, Kalyani, Nadia, West Bengal.

# What's in it for you?

1. What is Cyber Security?
2. Why Cyber Security?
3. Big Concept – CIA
4. Cybercrimes | Hackers
5. How Cyber Security Work?
6. Who is a Cyber Security expert?
7. Statistics & Facts about Cyber Security

Tony Stark

Cyber Attack

STARK INDUSTRIES

# What can happen due to this?

Industrial Espionage

Asking Company for Ransom

Selling the Information to Criminals

# What is Cyber Security

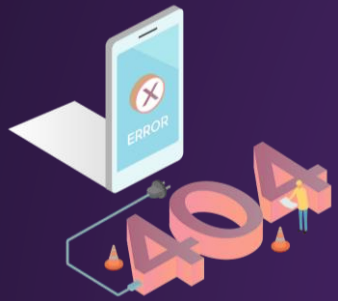
# What is Cyber Security

Cyber Security is the technology and process that is designed to protect networks and devices from attack, damage, or unauthorized access.

Protection of your business

Increase productivity

Inspires customer confidence




Stops your website from crashing

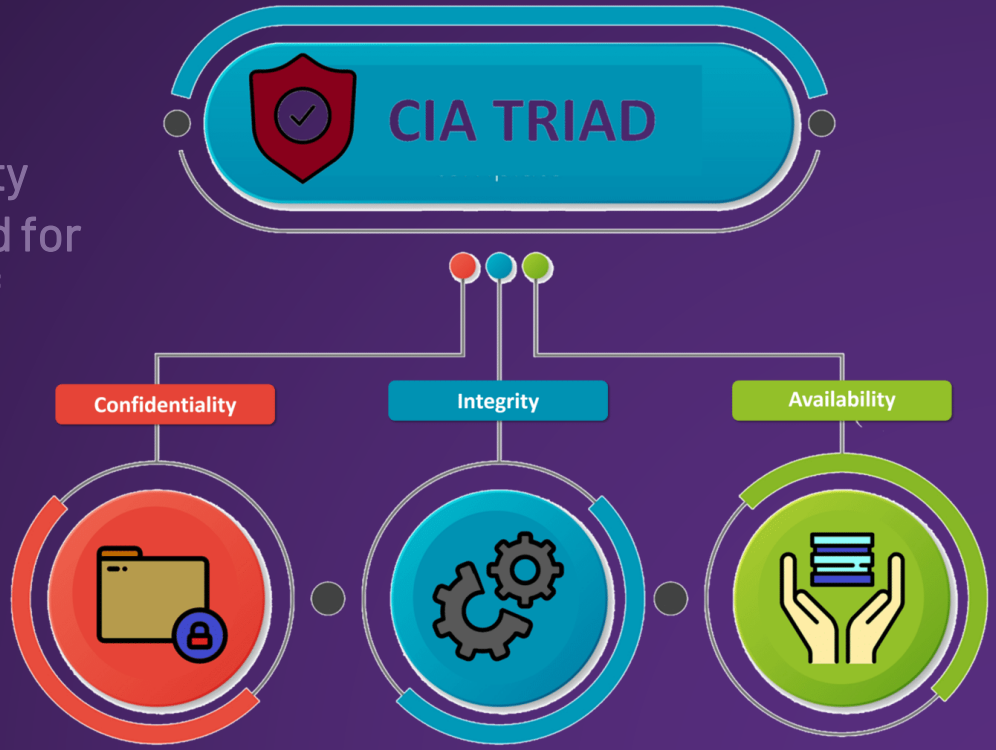
Protection for your customers or clients

# Why Cyber Security

# Why Cyber Security

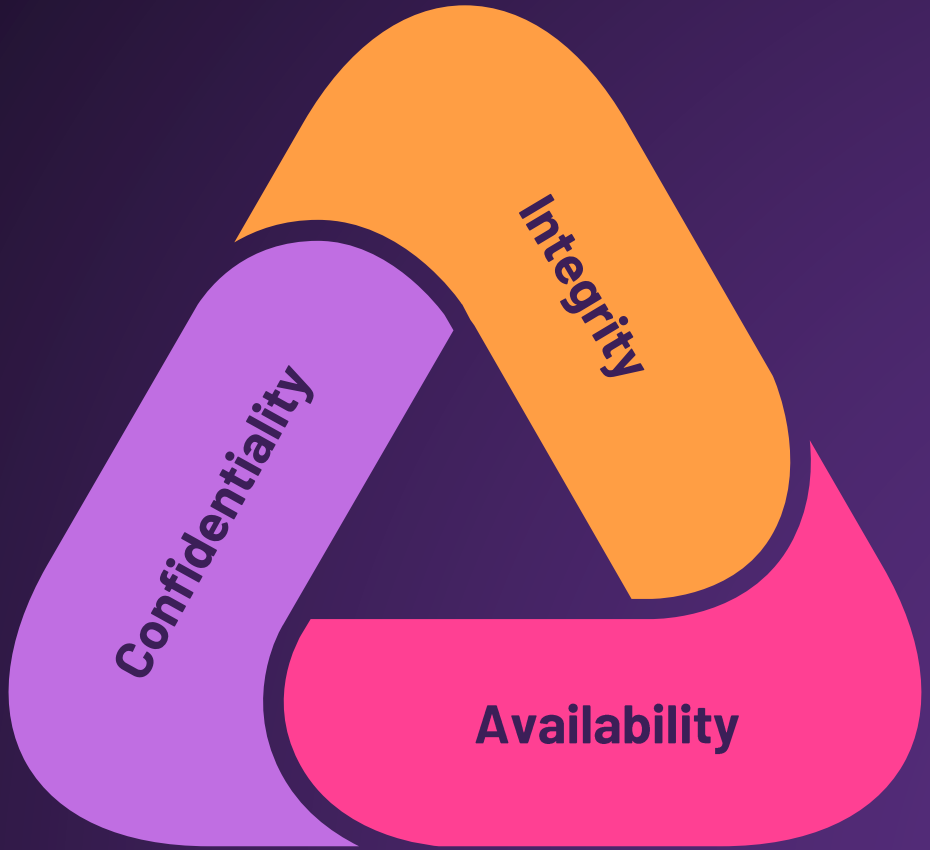
Confidentiality, Integrity, Availability have served as the industry standard for Computer Security since the time of first mainframes.

**C I A**

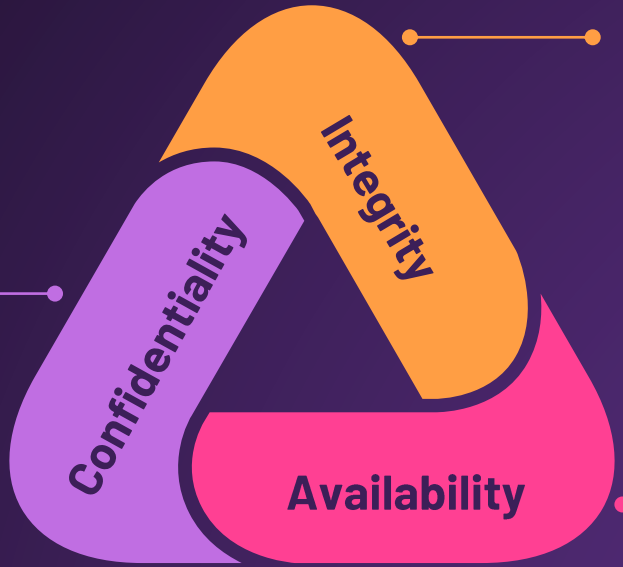


# Big Concept

## C I A


Integrity
Confidentiality
Availability

# CIA




The principles of confidentiality assert that information and functions can be added, altered, or removed only by authorized people & means.

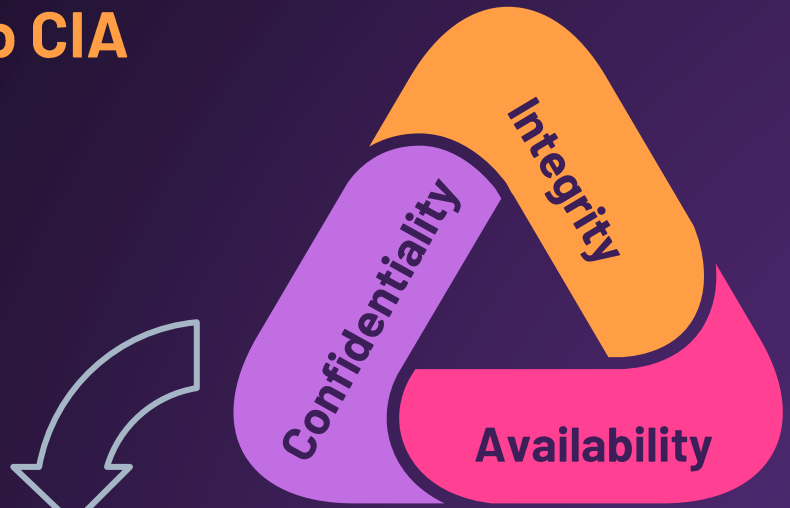
Example: Incorrect data entered by a user in the database

The principles of confidentiality assert that information and functions can be accessed only by authorized parties.

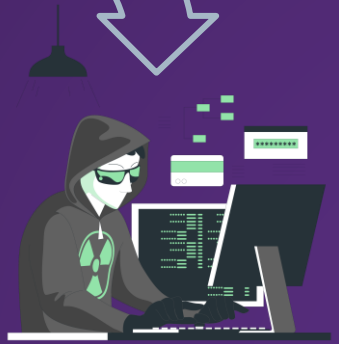
Example: Military Secrets

The principles of availability assets that systems, functions, and data must be available on demand according to agreed-upon parameters based on levels of service.

# Threats to CIA



Cybercrime



Hacking

# Threats to CIA-Cybercrime

Cybercrime is any criminal activity that involves a computer, network device or a network

Cybercrime are carried out against computers or devices directly to damage or disable the, spread malware, steal secret information, etc.

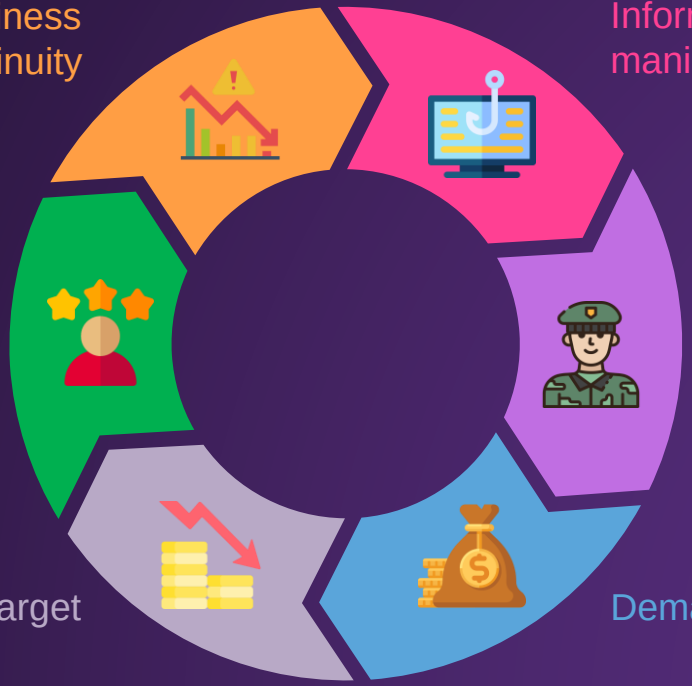
Most Cybercrime are carried out in order to generate profit for the Cyber Criminals.

# Types of Cybercrime

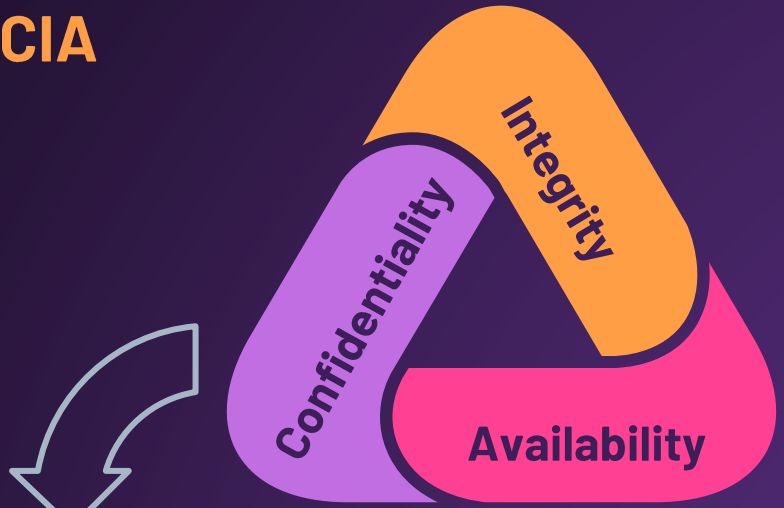
# Types of Cybercrime

# Motives behind Cybercrime

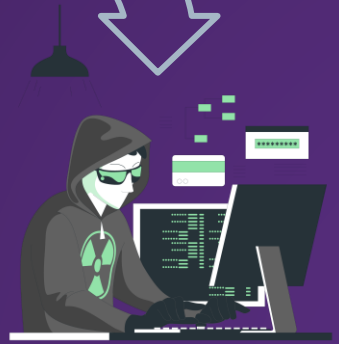
# Motives behind Cybercrime



# Threats to CIA

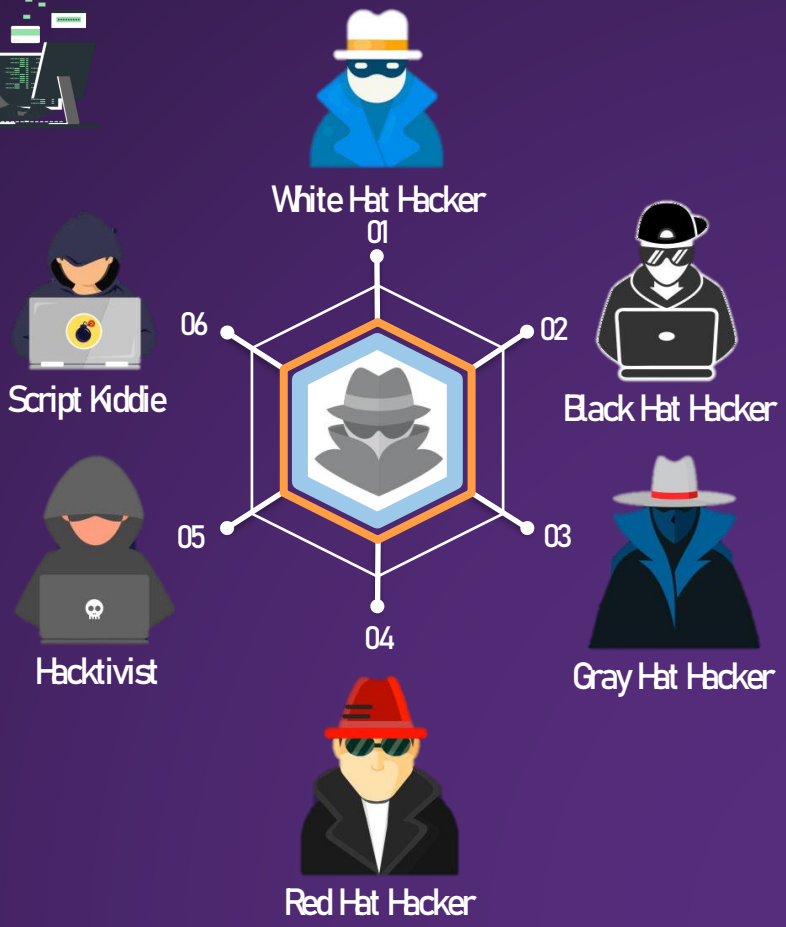


Cybercrime



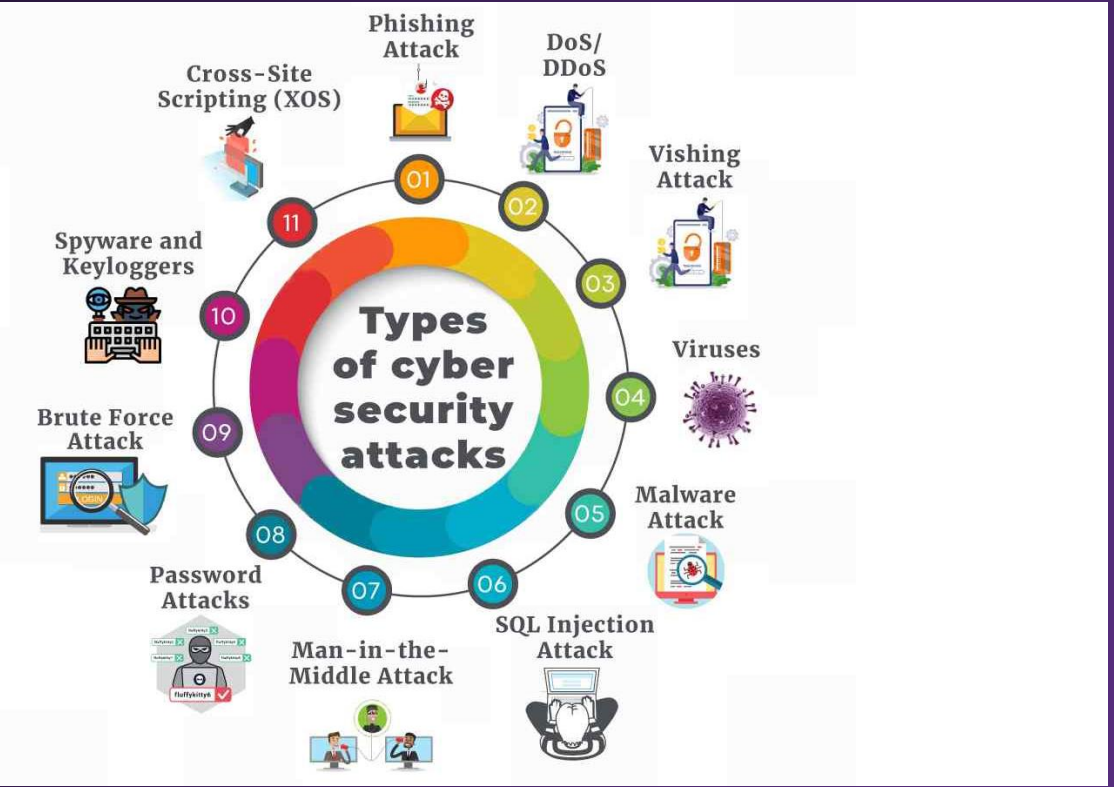
Hacking

# Types of Hackers



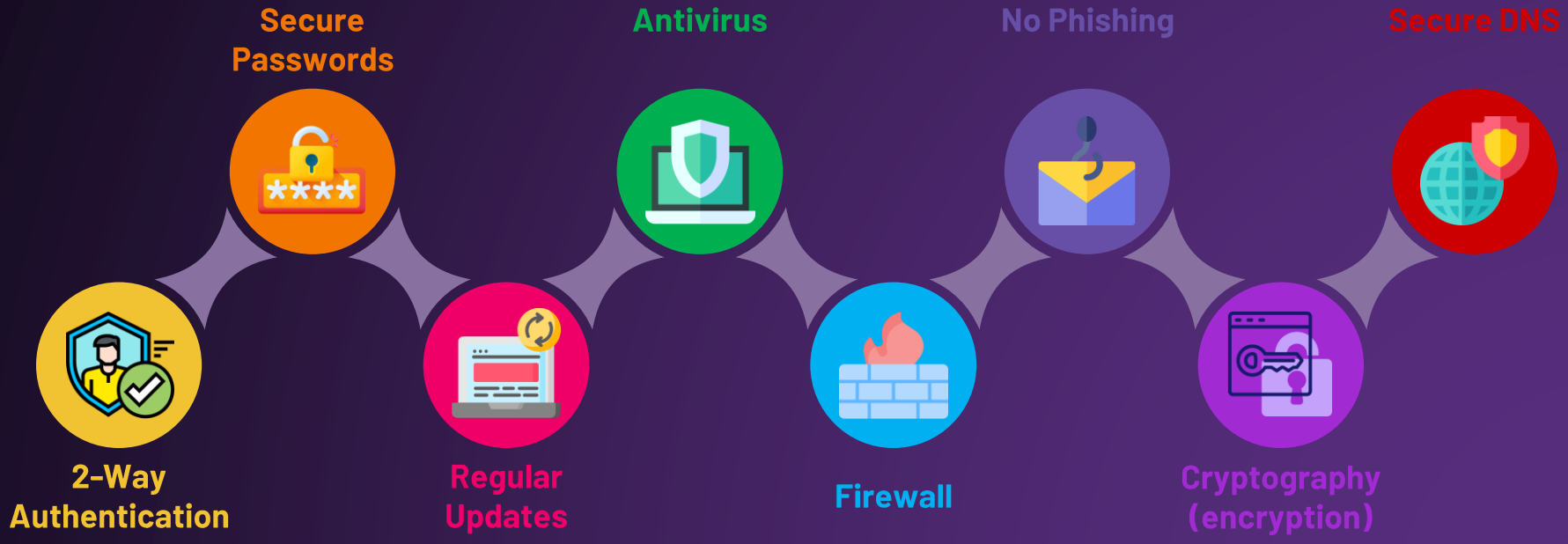
# Common attacks in Cyber Security

# Common attacks in Cyber Security



# How Cyber Security Works?

# How Cyber Security Works?



# Who is Cyber Security expert?

# Who is Cyber Security expert?

After they find weakness, they repair and strengthen the areas where an attack may have occurred.

## Cyber Security Average by Job

### Security Analyst
₹ 486,959

### Information Security Analyst
₹ 539,300

### Ethical Hacker
₹ 501,529

### Cyber Security Analyst
₹ 578,913

### Security Consultant, (Computing / Networking / IT)
₹ 868,697

### Technical Consultant
₹ 832,700

### Network Security Engineer
₹ 475,000

### Security Manager, IT
₹ 1,466,791

### Chief Information Security Officer
₹ 3,630,335

# Famous names in Cyber Security

**1988**

**Robert T Morris**

First Internet Worm

**1990**

**Kevin Lee Poulsen**

Hacked telephone lines of KIIS_FM (Los Angeles)

**1999**

**David L Smith**

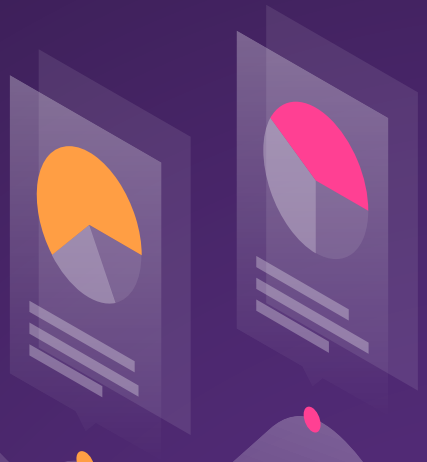
Created Melissa virus

**2004**

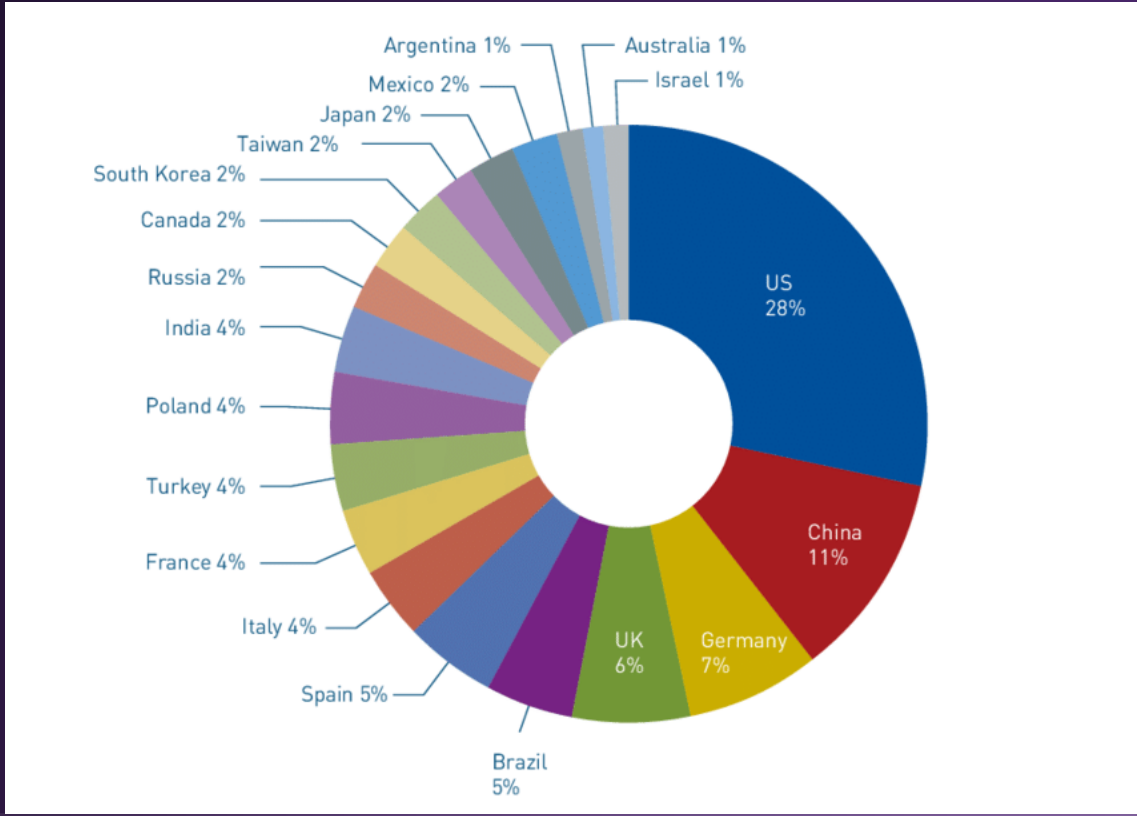
**Adam Botbyl**

Steal credit card information

# Statistics & Facts about Cyber Security



# TOP 20-COUNTRIES GENERATING CYBER CRIME



**44,546**

Number of cyber crimes

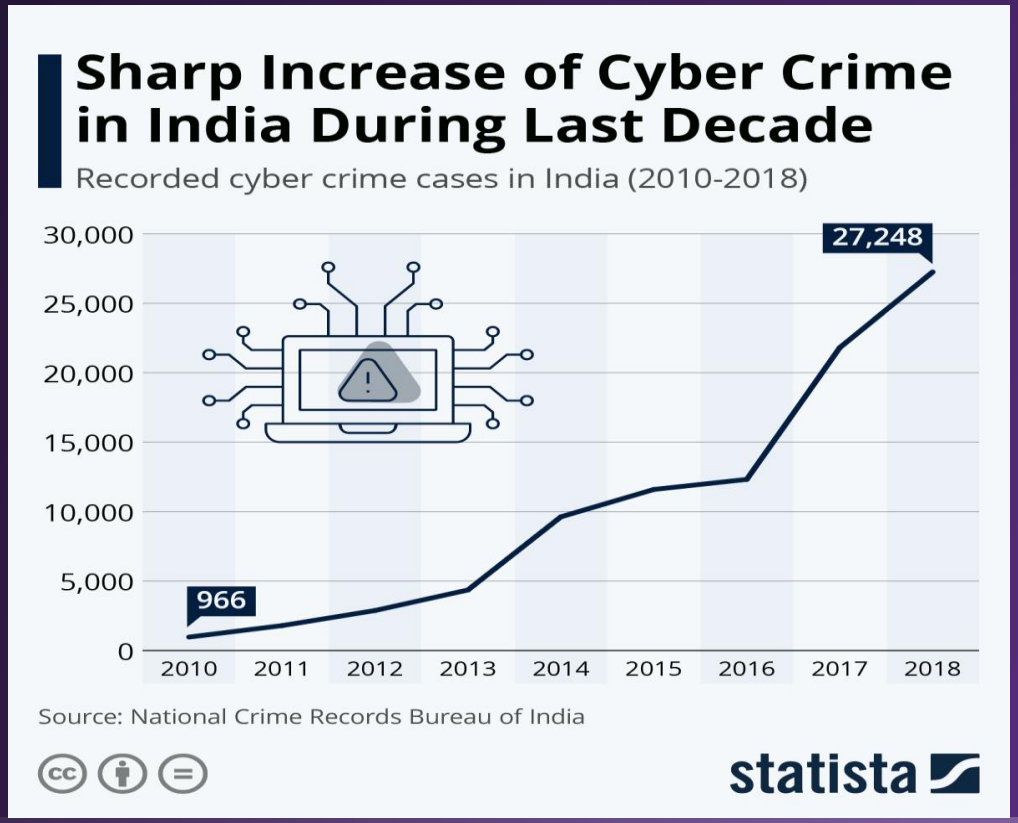
**Karnataka**

State with most cyber crime cases (2019)

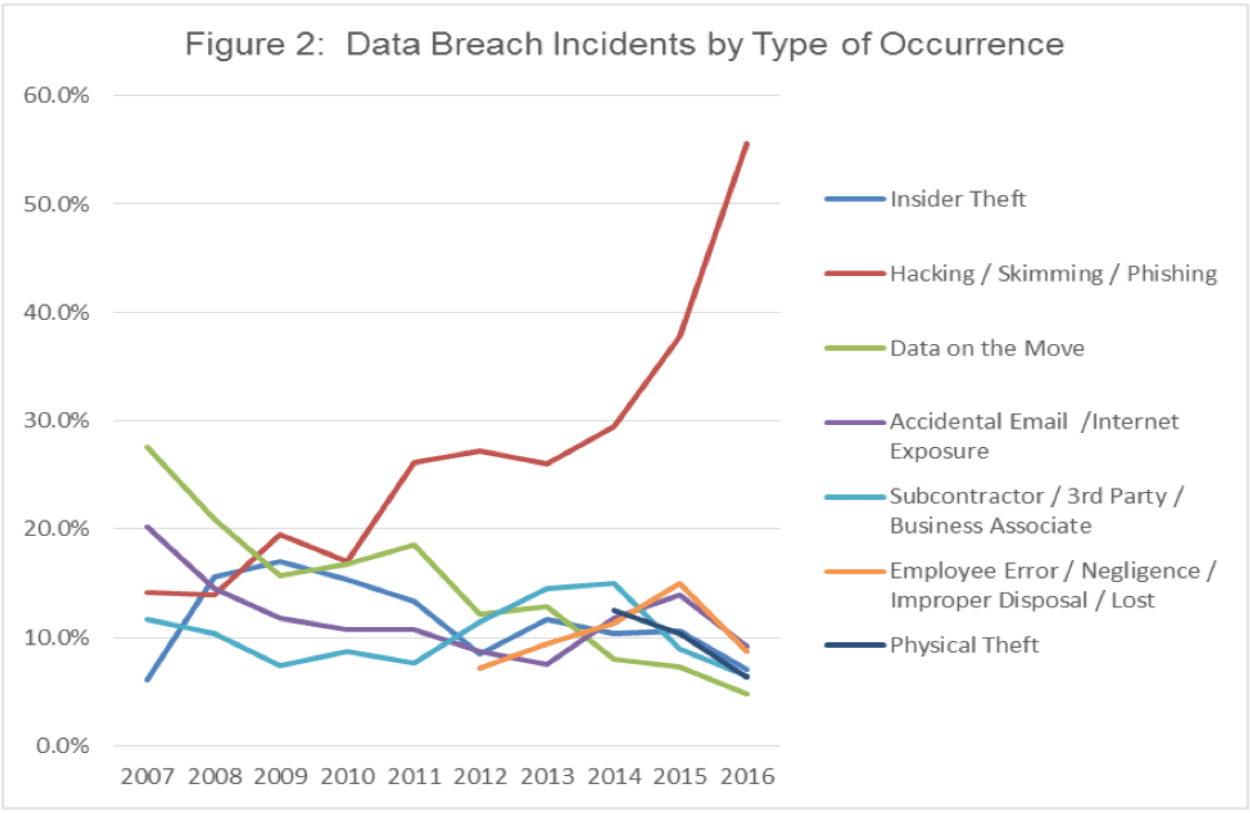
**₹ 14,50,91,800**

Cost of data breach in 2020

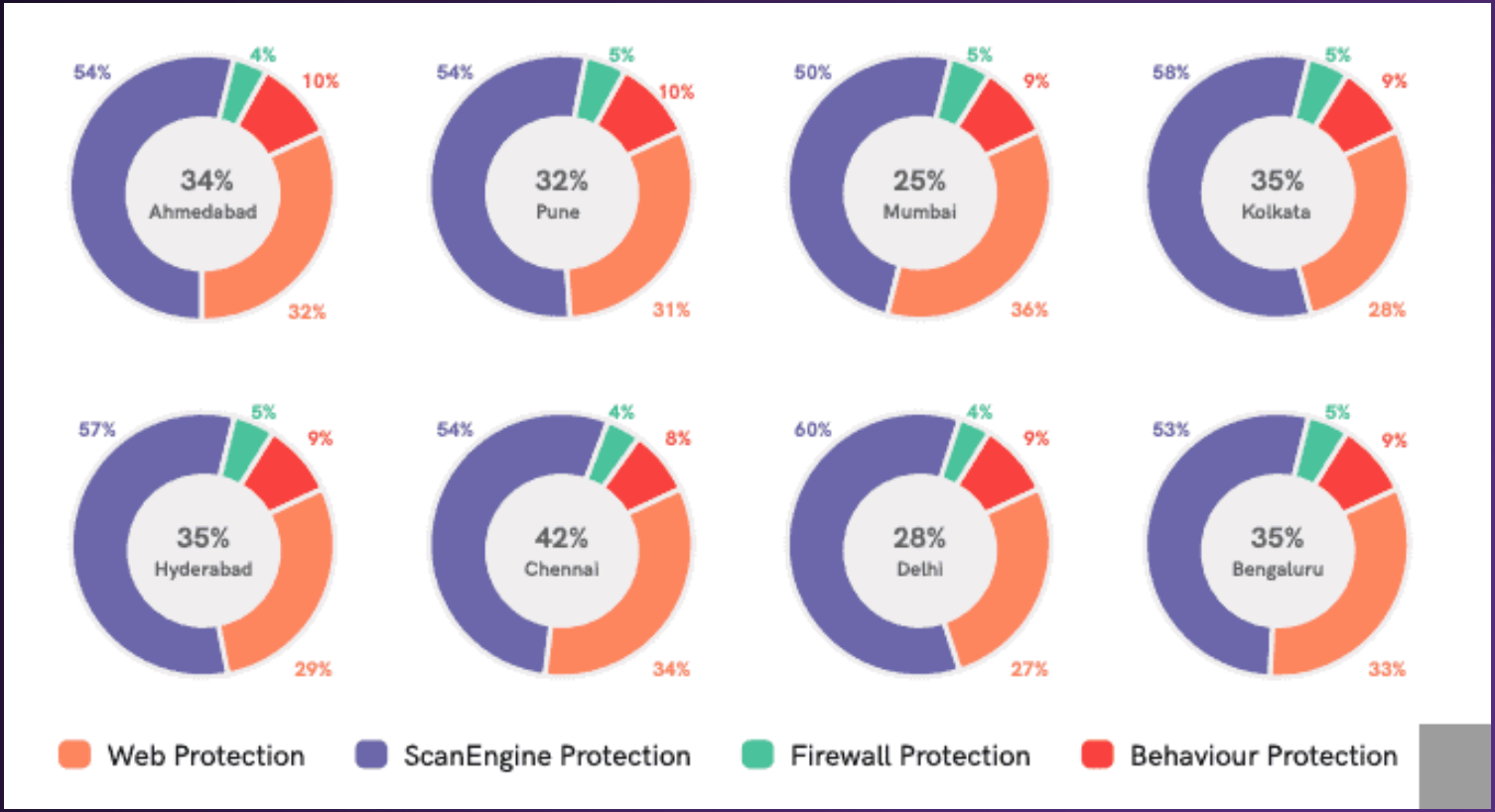
# CYBER CRIME Graph



# Data Breaches till 2016



# Cyber-Attacks in the city during COVID-19



# The quieter you become, the more you are able to hear...

- Kali Linux

# THANKS!

Any questions?

You can find me at: