Introduction to Data Security

What is Cyber Security?

Cyber Security is the field that deals with enacting counter measures against attacks, disruptions and thefts against and through technological systems, via the means of 'hacking'

Introduction to Data Security

What is Data Security?

The branch of Cyber Security that deals with the protection of data in specific is called **Data Security**

Introduction to Data Security

What is covered under Data Security?

- Cloud Data Security
- Data Encryption
- Hardware Security
- Password Management
- Payment Security
- Email and Messaging Security
- Mobile App Security
- Web Browser

Why do we need
Data Security?

Why do we need Data Security?

Google Data Leak

The Northern District of California granted preliminary approval of a **$7.5 million settlement** of a consumer class action against Google LLC over data leaks caused by software bugs in its now-defunct Google+ social network platform.

The suit alleges that two 2018 data leaks caused the personal information of up to **500,000 users** to be exposed because of software glitches that gave third-party application developers access to private **Google+ profile data**.

Source: Bloomberg Law

Why do we need Data Security?

BigBasket Data Breach

When you shop via any e-commerce platform including Amazon, Flipkart, or BigBasket and Grofers and make an online payment, you are required to fill up your card details. The details are then stored on the app to make your future transactions seamless. Along with debit and credit cards, users also enter their phone numbers, their delivery address. BigBasket is said to have comprised sensitive data of over 40 million users.

BigBasket has acknowledged the breach and filed a police complaint against the hackers

Source: India Today

big basket

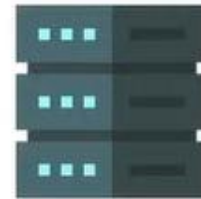India's largest online supermarket

Why do we need Data Security?

What is at stake?

User Data

Sales Data

Server

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What is at stake?

User Data

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Server

Proprietary Algo
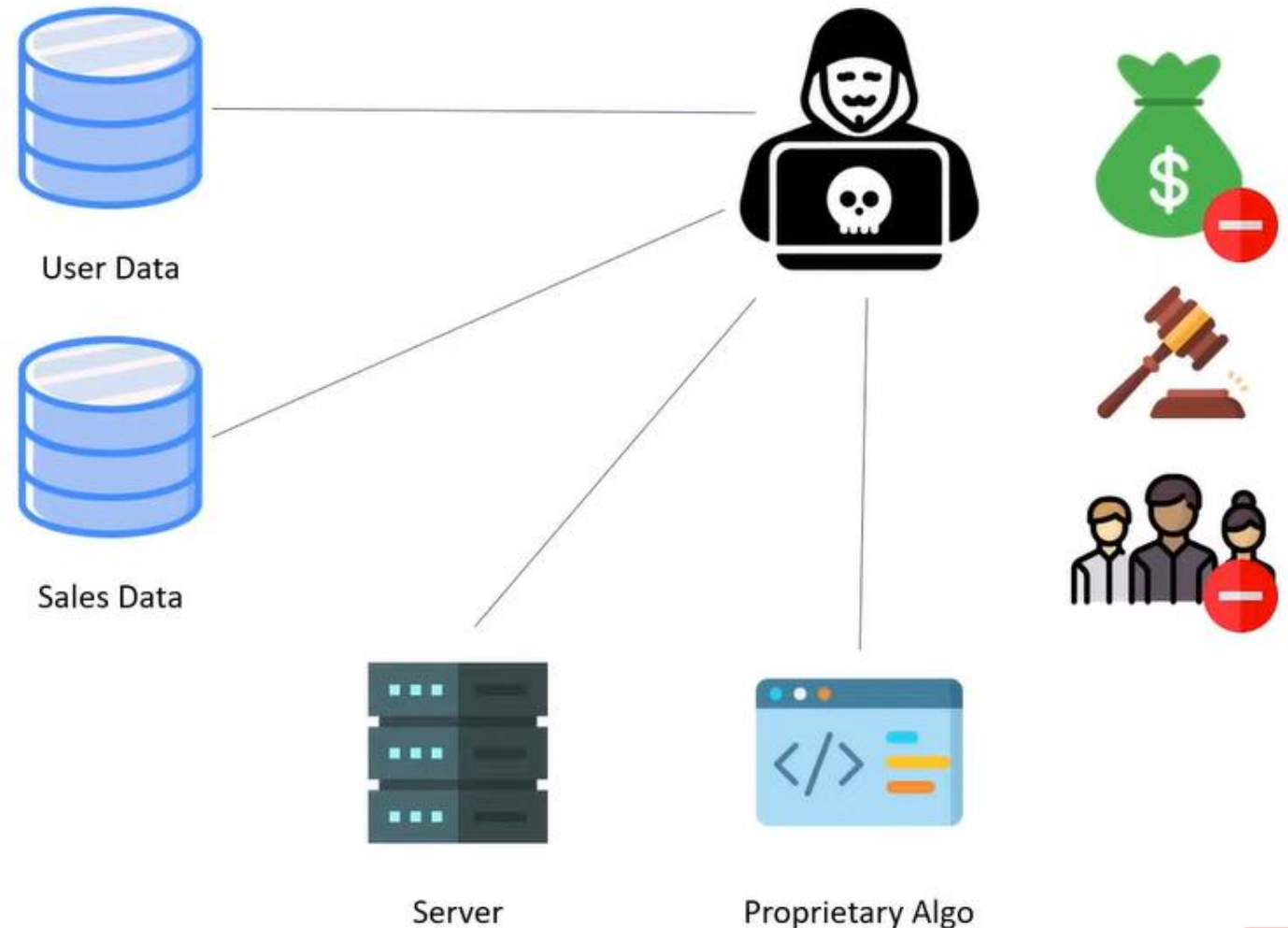
Why do we need Data Security?

Measures for Data Security

Data encryption
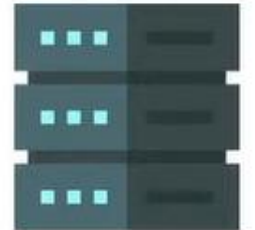
Data masking

Data erasure

Data resilience

Endpoint Security

Endpoint Security

What are Endpoints?

Endpoints are also known as **entry-points** or **end-user devices**
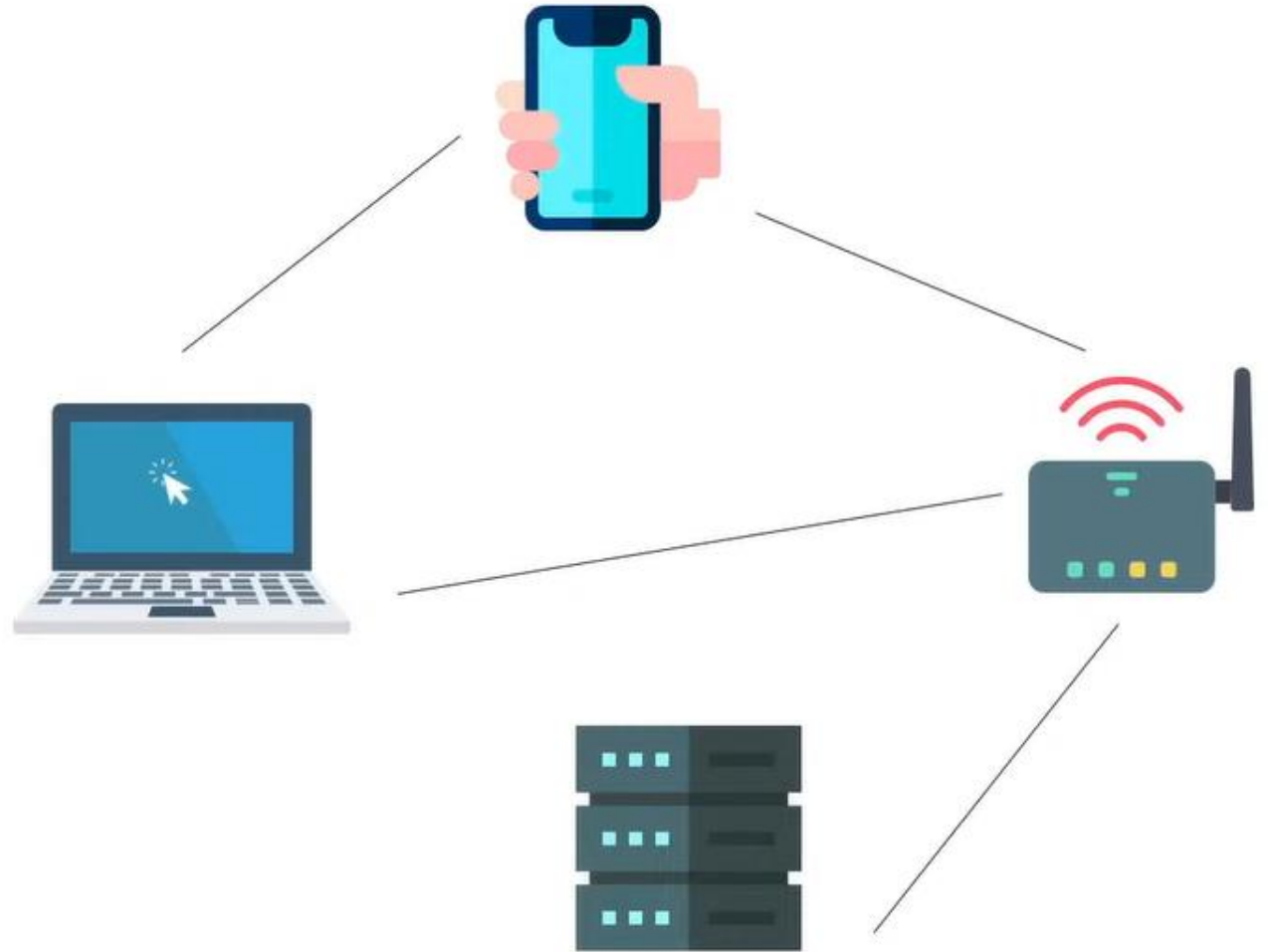
Endpoint Security

What is Endpoint Security?

Endpoint security or endpoint protection is an approach to the protection of computer networks that are remotely bridged to client devices. The connection of laptops, tablets, mobile phones, Internet-of-things devices and other wireless devices to corporate networks creates attack paths for security threats
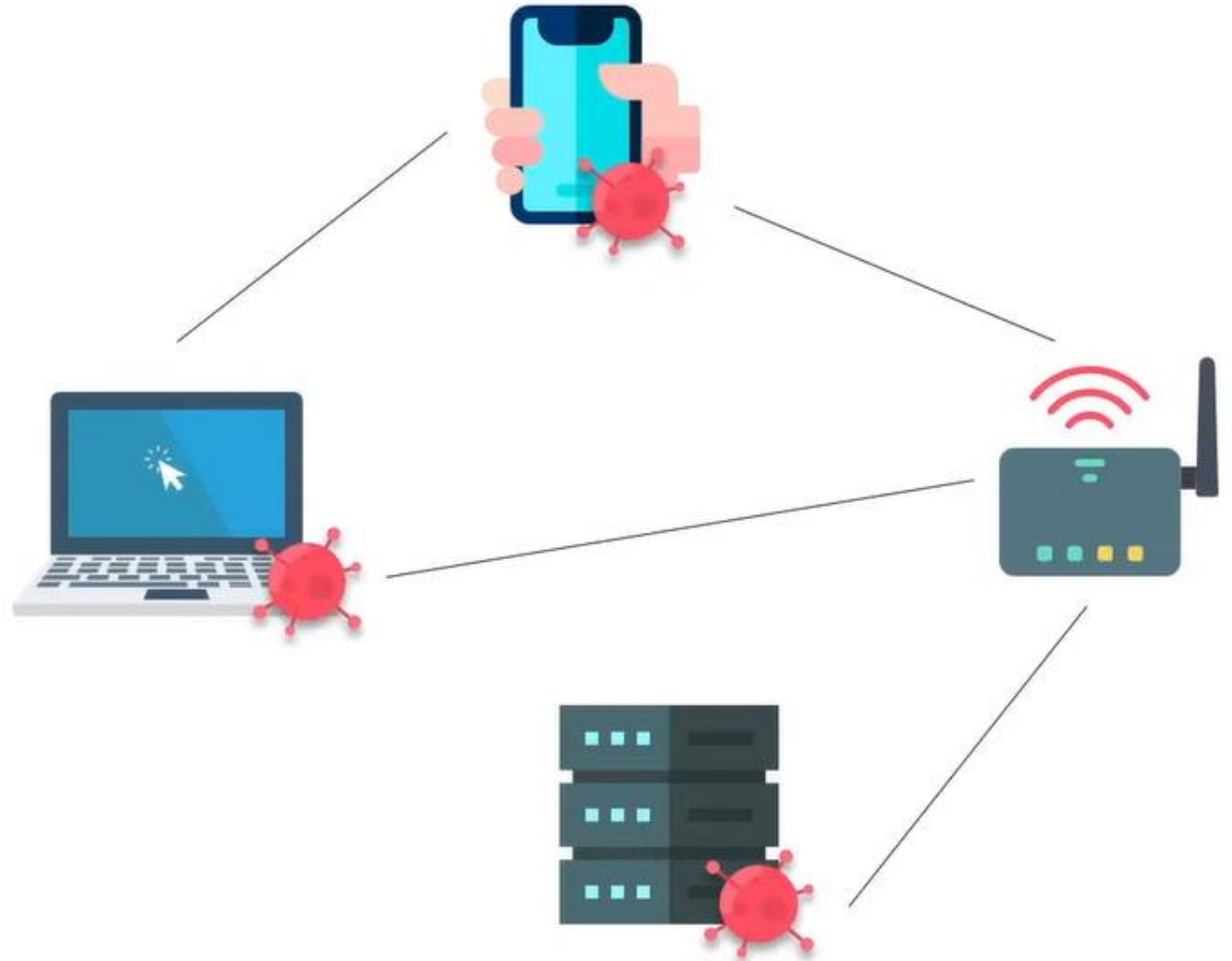
The need to secure an Endpoint

Endpoint Security

The need to secure an Endpoint

Endpoint Security

Ways to implement Endpoint Security

- Educating and briefing personnel on cyber threats
- Antivirus with event logs
- Network security
- Strong passwords
- Secure Device Policies
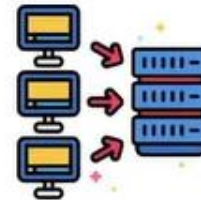
Cyber Threats

Common Attacks

Malware

Phishing

SQL Injection

Cross-Site
Scripting

Denial
Of Service

Man in
The middle