Computer Science

Class-VIII (Jan)

Chapter-25: Privacy

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Class VIII (all sections)

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Privacy

privacy is a state in which one is not observed or disturbed by other people. When something is private to a person, it usually means that something is inherently special or sensitive to them.

Personal Data:

Personal data is any information that is personal and unique to an individual.

Every time you post an update on social media, sign up for an online account, use a web-based email service or a search engine you are adding, knowingly or unknowingly, to an enormous hoard of personal data that is held about you-where you live, what you look like, who your friends are your likes and dislikes, your bank account details, products you're interested in buying, the route you take to school each morning.

UK Data Protection Act (1998)

• Data must be processed fairly and lawfully.

• Data must be obtained and used only for the specific and lawful purposes for which it was collected.

• Data must be adequate, relevant and not excessive.

• Data must be accurate and up to date.

• Data must be kept for no longer than necessary.

• Data must be kept secure.

• Data must not be transferred to others regions

Big data

Big data is a field that treats ways to analyze, systematically extract information from a data sets that are too large or complex.

How Big Data Works:

➢ Big data can be categorized as **unstructured** or **structured**. Structured data consists of information already managed by the organization in databases and spreadsheets;

➢ unstructured data is information that is unorganized and does not fall into a pre-determined model or format.

The Uses of Big Data:

➢ Nearly every department in a company can utilize findings from data analysis, from human resources and technology to marketing and sales

➢ increase the speed at which products get to market

➢ reduce the amount of time and resources required to gain market adoption

➢ target audiences, and to ensure that customers remain satisfied.

Surveillance

Surveillance is the monitoring of behavior, activities, or information for the purpose of information gathering, influencing, managing or directing. E.g. CCTV, drones, tracking devices.

Advantages of surveillance technology:

➢ An Increased Sense of Security

➢ Improved Productivity

➢ Lowered Chance of Crimes

➢ Enable remote monitoring.

location-based service (LBS)

A location-based service (LBS) is a general term denoting software services which utilize geographic data and information to provide services or information to users. E.g. Google Maps, GPS.

how does location based services work:

Location-based services (LBS) use real-time geo-data from a mobile device or smartphone to provide information, entertainment or security. The service can identify his or her location down to a street address without the need for manual data entry.

Uses of location-based services:

➢ Store locators

➢ Proximity-based marketing

➢ Travel information

➢ Roadside assistance

Privacy Enhancing Technologies (PET):

A privacy-enhancing technology is a method of protecting data.

Privacy enhancing tools:

➢ Encryption (Prevent unauthorized persons from reading data)

➢ Cookie Cleaner, anti-spyware & ad blocker (it's a software that detect and remove cookies, spyware, and ads)

➢ Identity management services (conduct transactions with other parties without revealing any personal information.)

➢ Password manager (store all login information with a encrypted database with master password)

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Cyber Security:

Cyber security refers to the body of technologies, processes, and practices designed to protect networks, devices, programs, and data from attack, damage, or unauthorized access.

The computer misuse act 1990:

1. Unauthorized access to computer materials

2. Unauthorized access with intent to commit or facilitate commission of further offence

3. Intentional and unauthorized destruction of software or data.