**CIA Triad (Confidentiality, Integrity, Availability) in cybersecurity.**

Information security should be a top priority for all organisations. It involves protecting organisational data and optimising information systems. The purpose of information security is to prevent confidentiality breaches, data losses, inappropriate data deletion and inaccurate data production. The three fundamental bases of information security are represented in the CIA triad: confidentiality, integrity and availability. Confidentiality is limiting data access, integrity is ensuring our data is accurate, and availability is making sure it is accessible to those who need it. This triad can be used as a foundation to develop strong information security policies.

**What is Confidentiality?**  
The principle of confidentiality involves restricting data access strictly to authorised personnel. Users have a responsibility to ensure they maintain secure access control systems, including both logical (e.g. PC passwords) and physical restrictions (e.g. ID cards). For this reason, it is important that all employees receive thorough training in information security awareness and best practices. It is important to limit data sharing and state availability restrictions, so confidentiality is not inadvertently breached.

**What is Integrity?**  
Upholding integrity means that measures are taken to ensure that data is kept accurate and up to date. The integrity of your data impacts how trustworthy and conscientious your organisation is. One of the eight Data Protection Principles (which are the foundations of the Data Protection Act 2018) is that data should be ‘kept accurate and up to date’. Users must make sure that they comply with their legal duties and fulfil this requirement. It can be useful to assign individuals specific roles and responsibilities regarding data integrity. This way employees cannot shelve the responsibility and expect someone else to pick up the slack.

**What is Availability?**  
Availability means guaranteeing reliable access to information by authorised personnel. To be readily accessible, data must be stored in a logical yet secure system. High availability aids rapid business processing and ultimately benefits your organisation. It is every user’s responsibility to file desktop documents in a way that makes them easy to locate in the future. Similarly, paper copies should be filed securely and not left lying around.