

Name:

Information Technology: Data Threats

| A | Types of attack |
|---|--|
| Hacking | Accessing someone else's data without consent |
| White hat | Hacking but with consent. Generally this is to test for weaknesses and is legal |
| Grey hat | Hacking without consent, and without intent to do damage. |
| Black hat | Hacking with malicious intent |
| Distributed Denial of Service (DDoS) | An attack which aims to stop a server working by using up all its bandwidth. Requests are sent to the server by several different clients at once, sometimes by using a botnet |
| Pharming | Redirecting a user to a malicious website when the follow a link from a legitimate one |

| B | Types of malware |
|-------------------|---|
| Adware | Software which displays advertising |
| Bot | A computer program which operates by itself |
| Botnet | A large collection of bots, working together |
| Ransomware | Malware which disrupts the use of a system until a ransom has been paid |
| Rootkit | Modifies operating system to avoid detection |
| Spyware | Gathers and reports data from the host |
| Trojan | Poses as legitimate software and must be installed by the user. Does not self-replicate |
| Virus | Hidden in an executable and self-replicates |
| Worm | Malware which self-replicates but does not require an executable file |

| C | Types of social engineering |
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| Social Engineering | Manipulating people so they give up confidential information |
| Phishing | Directing a user to a malicious website from a bogus email where they will, eg, enter their bank details |
| Pretexting | Pretending to confirm someone's identity in order to get the information they provide |
| Baiting | Users can get free goods (eg downloads) in return for their confidential details |
| Quid pro quo | Users can get free services (eg IT assistance) in return for their confidential details |
| Tailgating/ Piggybacking | Gaining entry to a room or building by following someone else in who holds the door open |
| Shoulder surfing | Getting access to confidential information by watching someone enter it (eg at a cash machine) |

| D | Threats to data |
|----------------------|---|
| Physical | The device storing the data could be stolen or lost |
| System | Data could be <i>lost, manipulated, modified</i> or <i>stolen</i> through hacking attempts |
| Environmental | Natural disasters, such as earthquakes or floods. These could affect the data systems, backups and power supplies |