

Key Vocabulary for Spring Term Overviews

Subject: Computer Science		Year Group: 12
Key Learning Points/End Points	Key Vocabulary	
Exchanging data	<p>Lossy compression - data in a file is removed and not restored to its original form after decompression.</p> <p>Lossless compression - reduces a file's size with no loss of quality.</p> <p>Symmetric encryption - is a type of encryption where only one key (a secret key) is used to both encrypt and decrypt electronic information.</p> <p>Asymmetric encryption - is a cryptographic system that uses pairs of keys. Each pair consists of a public key and a private key.</p> <p>Hashing - is any function that can be used to map data of arbitrary size to fixed-size values.</p> <p>Relational database - a database structured to recognize relations between stored items of information.</p> <p>Flat file - a file having no internal hierarchy.</p> <p>Primary key - a special relational database table column (or combination of columns) designated to uniquely identify each table record.</p> <p>Foreign key - is a column or group of columns in a relational database table that provides a link between data in two tables.</p> <p>Secondary key - is made on a field that you would like to be indexed for faster searches.</p> <p>Normalisation - is the process of structuring a database, usually a relational database, in accordance with a series of so-called normal forms in order to reduce data redundancy and improve data integrity.</p> <p>SQL - is a domain-specific language used in programming and designed for managing data held in a relational database management system.</p> <p>ACID - (Atomicity, Consistency, Isolation, Durability)</p>	
Networks and web technology	<p>Protocols - is an established set of rules that determine how data is transmitted between different devices in the same network.</p> <p>TCP/IP Stack - is a protocol stack used when connecting a device to the internet.</p> <p>DNS - Domain Name System, translates human readable domain names (for example, www.amazon.com) to machine readable IP addresses.</p> <p>Protocol layering - layering means to break up the sending of messages into separate components and activities.</p> <p>LANs - A local area network (LAN) consists of a series of computers linked together to form a network in a circumscribed location.</p> <p>WANs - Wide-Area Network (WAN) Definition. We define WAN, or wide-area network as a computer network that connects smaller networks.</p>	

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Packet switching - transmits data across digital networks by breaking it down into blocks or packets for more efficient transfer using various network devices.

Circuit switching - is a method of implementing a telecommunications network in which two network nodes establish a dedicated communications channel (circuit)

Proxies - A proxy server is a system or router that provides a gateway between users and the internet.

Client-server - Client-server denotes a relationship between cooperating programs in an application, composed of clients initiating requests for services and servers providing that function or service.

Peer to peer - a group of computers are linked together with equal permissions and responsibilities for processing data.

HTML - hypertext markup language, a formatting system for displaying material retrieved over the Internet.

CSS - CSS is a computer language for laying out and structuring web pages.

JavaScript - is a scripting languages, primarily used on the Web.