BCS LEVEL 4 Software Developer Glossary

The intended purpose of this glossary is to cover common acronyms and terminology associated with the published BCS Software Developer syllabuses.

Phrase	Definition
A/B testing	*A/B testing (sometimes called split testing) is comparing two versions of a web page to see which one performs better.*
Abstraction	*The quality of dealing with ideas rather than events.*
Acceptance Testing	*Acceptance Testing is a level of the software testing where a system is tested for acceptability. The purpose of this test is to evaluate the system's compliance with the business requirements and assess whether it is acceptable for delivery.*
Activity diagrams	*Activity diagrams are graphical representations of workflows of stepwise activities and actions with support for choice, iteration and concurrency.*
Actors	*In software and systems engineering, a use case is a list of actions or event steps typically defining the interactions between a role (known in the Unified Modelling Language as an actor) and a system to achieve a goal. The actor can be a human or other external system.*
Adapter pattern	*The adapter pattern is a software design pattern (also known as Wrapper, an alternative naming shared with the Decorator pattern) that allows the interface of an existing class to be used as another interface.*
Agile	*Relating to or denoting a method of project management, used especially for software development, that is characterised by the division of tasks into short phases of work and frequent reassessment and adaptation of plans.*

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Agile Manifesto	*The Agile Manifesto, also called the Manifesto for Agile Software Development, is a formal proclamation of four key values and 12 principles to guide an iterative and people-centric approach to software development.*
Algorithms	*A process or set of rules to be followed in calculations or other problem-solving operations, especially by a computer.*
Analogue data	*Analog data is data that is represented in a physical way.*
Analyse	*Examine (something) methodically and in detail, typically in order to explain and interpret it.*
Anomaly	*Something that deviates from what is standard, normal, or expected.*
Antivirus	*Designed to detect and destroy computer viruses*
API	*A set of functions and procedures that allow the creation of applications which access the features or data of an operating system, application, or other service.*
Applicability	*An application is any program, or group of programs, that is designed for the end user. ... Applications software (also called end-user programs) include such things as database programs, word processors, Web browsers and spreadsheets.*
Application developer	*Application developers work in teams to identify ideas and concepts for the general public, or a specific need brought to them by a customer.*
Architectural pattern	*An architectural pattern is a general, reusable solution to a commonly occurring problem in software architecture within a given context.*
Array	*An ordered series or arrangement.*
Ascending	*To go up or climb*
Assembly languages	*A low-level symbolic code converted by an assembler.*
ATM	*A machine that dispenses cash or performs other banking services when an account holder inserts a bank card*

Attribute	*A piece of information which determines the properties of a field or tag in a database or a string of characters in a display.*
Authentication	*The process or action of verifying the identity of a user or process.*
Authorisation Matrix	*Only applicable to companies that require two signatories or companies needing to perform trade transactions in Business Internet Banking.) To enable dual authorisation on financial transactions or to perform trade transactions, the primary user has to set up the authorisation matrix in Business Internet Banking*
Authorisation mechanism	*Authorisation is a security mechanism used to determine user/client privileges or access levels related to system resources, including computer programs, files, services, data and application features. Authorisation is normally preceded by authentication for user identity verification.*
Backlog	*An accumulation of uncompleted work or matters needing to be dealt with.*
Backtracking	*Backtracking is an algorithm for capturing some or all solutions to given computational issues, especially for constraint satisfaction issues.*
Behavioural design pattern	*In software engineering, behavioural design patterns are design patterns that identify common communication patterns between objects and realise these patterns. By doing so, these patterns increase flexibility in carrying out this communication.*
Beta releases	*Beta version. A pre-release of software that is given out to a large group of users to try under real conditions. Bet aversions have gone through alpha testing in-house and are generally fairly close in look, feel and function to the final product; however, design changes often occur as a result.*
Big bang deployment	*Big bang adoption or direct changeover is the adoption type of the instant changeover, when everybody associated with the new system moves to the fully functioning new system on a given date.*
Binary chop	*Is a search algorithm that finds the position of a target value within a sorted array.*

Binary search	*Is a search algorithm that finds the position of a target value within a sorted array.*
Black box	*In science, computing, and engineering, a black box is a device, system or object which can be viewed in terms of its inputs and outputs (or transfer characteristics), without any knowledge of its internal workings.*
Blueprint	*A blueprint is a reproduction of a technical drawing, documenting an architecture or an engineering design, using a contact print process on light-sensitive sheets.*
Boolean	*A Boolean data type is a data type with only two possible values: true or false.*
Brainstorming	*Brainstorming is a group creativity technique by which efforts are made to find a conclusion for a specific problem by gathering a list of ideas spontaneously contributed by its members.*
Bridge pattern	*The bridge pattern is a design pattern used in software engineering that is meant to "decouple an abstraction from its implementation so that the two can vary independently", introduced by the Gang of Four.[1] The bridge uses encapsulation, aggregation, and can use inheritance to separate responsibilities into different classes.*
Bubble sort	*Bubble sort, sometimes referred to as sinking sort, is a simple sorting algorithm that repeatedly steps through the list to be sorted, compares each pair of adjacent items and swaps them if they are in the wrong order.*
Buffer overflows	*In computer security and programming, a buffer overflow, or buffer overrun, is an anomaly where a program, while writing data to a buffer, overruns the buffer's boundary and overwrites adjacent memory locations.*
Bug-fix	*A correction to a bug in a computer program or system.*
Builder pattern	*Builder pattern builds a complex object using simple objects and using a step by step approach.*

Business Analyst	*A business analyst (BA) is someone who analyses an organisation or business domain (real or hypothetical) and documents its business or processes or systems, assessing the business model or its integration with technology.*
Business Case	*A justification for a proposed project or undertaking on the basis of its expected commercial benefit.*
Business Drivers	*A business driver is a resource, process or condition that is vital for the continued success and growth of a business.*
Change management	*The controlled identification and implementation of required changes within a computer system.*
Changeover	*A change from one system or situation to another.*
Character	*A printed or written letter or symbol.*
Classification	*The action or process of classifying something.*
Client GUI	*A graphical user interface (GUI) is a human-computer interface (i.e., a way for humans to interact with computers) that uses windows, icons and menus and which can be manipulated by a mouse (and often to a limited extent by a keyboard as well).*
Cloud	*A network of remote servers hosted on the Internet and used to store, manage, and process data in place of local servers or personal computers.*
Code functions	*parameter in computer programming, a parameter is a value that is passed into a function or procedure.*
Code libraries	*A set of routines for a particular operating system. Depending on the environment, code libraries may be source code, in an intermediate language or in executable form.*
Cohesion	*The action or fact of forming a united whole.*
Collaboration	*The action of working with someone to produce something.*
Common failures	*A common cause failure (CCF) is a failure where: Two or more items fail within a specified time such that the success of the system mission would be uncertain.*

Compilers	*a program that converts instructions into a machine-code or lower-level form so that they can be read and executed by a computer.*
Component diagram	*Component diagrams show the dependencies and interactions between software components.*
Components	*A part or element of a larger whole, especially a part of a machine or vehicle.*
Comprising	*Consist of; be made up of.*
Computable problem	*Computability is the ability to solve a problem in an effective manner.*
Computational	*Using or relating to computers.*
Concurrency pattern	*In software engineering, concurrency patterns are those types of design patterns that deal with the multi-threaded programming paradigm.*
Concurrent	*Existing, happening, or done at the same time.*
Confidential data	*Confidential Data is a generalised term that typically represents data classified as Restricted.*
Configuration management	*Configuration management (CM) is a system engineering process for establishing and maintaining consistency of a product's performance, functional, and physical attributes with its requirements, design, and operational information throughout its life.*
Conjunction	*The action or an instance of two or more events or things occurring at the same point in time or space.*
Consequences	*A result or effect, typically one that is unwelcome or unpleasant.*
Constant	*Occurring continuously over a period of time.*
Constraint satisfaction	*In artificial intelligence and operations research, constraint satisfaction is the process of finding a solution to a set of constraints that impose conditions that the variables must satisfy.*
Constraints	*A limitation or restriction.*

Contextual enquiry	*Contextual inquiry is a semi-structured interview method to obtain information about the context of use, where users are first asked a set of standard questions and then observed and questioned while they work in their own environments.*
Continuity	*The unbroken and consistent existence or operation of something over time.*
Copyright law	*A copyright is a form of protection provided by the laws of the United States to authors of "original works of authorship." This includes literary, dramatic, musical, artistic and certain other creative works.*
Correction	*A change that rectifies an error or inaccuracy.*
Coupling	*The pairing of two items*
Creational design pattern	*In software engineering, creational design patterns are design patterns that deal with object creation mechanisms, trying to create objects in a manner suitable to the situation. The basic form of object creation could result in design problems or in added complexity to the design.*
Cross site scripting	*Cross-site scripting (XSS) is a type of computer security vulnerability typically found in web applications. XSS enables attackers to inject client-side scripts into web pages viewed by other users.*
Cryptography	*The art of writing or solving codes.*
Cyber resilience	*Cyber Resilience is an evolving perspective that is rapidly gaining recognition.*
Data	*The quantities, characters, or symbols on which operations are performed by a computer, which may be stored and transmitted in the form of electrical signals and recorded on magnetic, optical, or mechanical recording media.*
Data models	*Data models define how data is connected to each other and how they are processed and stored inside the system.*
Data storage	*Data storage is a general term for archiving data in electromagnetic or other forms for use by a computer or device.*

Data-flow models	*A data flow model is diagrammatic representation of the flow and exchange of information within a system.*
DBMS	*A database-management system (DBMS) is a computer-software application that interacts with end-users, other applications, and the database itself to capture and analyse data.*
Debuggers	*A computer program that assists in the detection and correction of errors in other computer programs.*
Decomposition	*The state or process of decay.*
Decouple	*Separate, disengage, or dissociate (something) from something else.*
Defensive programming	*Defensive programming is a form of defensive design intended to ensure the Continuing function of a piece of software under unforeseen circumstances.*
Deletion	*The removal of data from a computer's memory.*
Deliverable	*A thing able to be provided, especially as a product of a development process.*
Denial of service	*An interruption in an authorised user's access to a computer network, typically one caused with malicious intent.*
Deployment	*The action of bringing resources into effective action.*
Design components	*In programming and engineering disciplines, a component is an identifiable part of a larger program or construction. Usually, a component provides a particular function or group of related functions.*
Design documentation	*Is a written description of a software product, that a software designer writes in order to give a software development team overall guidance to the architecture of the software project.*
Desktop	*The working area of a computer screen regarded as a representation of a notional desktop and containing icons representing items such as files.*
Detection	*The action or process of identifying the presence of something concealed.*

Development methodologies	*A system development methodology refers to the framework that is used to structure, plan, and control the process of developing an information system.*
DevOps	*Is a software development and delivery process that emphasises communication and collaboration between product management, software development, and operations professionals.*
Differentiation	*An electronic device whose output signal is proportional to the derivative of its input signal.*
Digital certificates	*An attachment to an electronic message used for security purposes. The most common use of a digital certificate is to verify that a user sending a message is who he or she claims to be, and to provide the receiver with the means to encode a reply.*
Digital data	*Digital data, in information theory and information systems, are discrete, discontinuous representations of information or works, as contrasted with continuous, or analogue signals which behave in a continuous manner, or represent information using a continuous function.*
Distributed denial of service	*The intentional paralysing of a computer network by flooding it with data sent simultaneously from many individual computers.*
DMZ	*DMZ or demilitarized zone (sometimes referred to as a perimeter network) is a physical or logical subnetwork that contains and exposes an organisation's external-facing services to an untrusted network, usually a larger network such as the Internet.*
Domain experts	*Domain expert is a person who is an authority in a particular area or topic. The term domain expert is frequently used in expert systems software development.*
Elaborate	*Involving many carefully arranged parts or details; detailed and complicated in design and planning.*

Elicitation	*Elicitation (intelligence), collecting intelligence information from people as part of human intelligence (intelligence collection) Elicitation technique or elicitation procedure, any of various data collection techniques in social sciences or other fields to gather knowledge or information from people.*
Encapsulation	*The action of enclosing something in or as if in a capsule.*
End-user license	*Is a legal contract between a software application author or publisher and the user of that application.*
Enhance	*Intensify, increase, or further improve the quality, value, or extent of.*
Enterprise license	*An enterprise license is one that is issued to a large company. It typically allows unlimited use of the program throughout the organisation, although there may be restrictions and limitations.*
Entity	*A thing with distinct and independent existence.*
Entity relationship models	*An entity-relationship model (ERM) is a theoretical and conceptual way of showing data relationships in software development.*
Equivalence classes	*The class of all members of a set that are in a given equivalence relation.*
Ergonomics	*The study of people's efficiency in their working environment.*
Error correction	*The automatic correction of errors that arise from the incorrect transmission of digital data.*
EU Anti-Spam law	*A European law against sending commercial spam emails.*
EU Cookie law	*The Cookie Law is a piece of privacy legislation that requires websites to get consent from visitors to store or retrieve any information on a computer, smartphone or tablet.*
Evaluate	*Form an idea of the amount, number, or value of; assess.*
Evolutionary	*Relating to the gradual development of something.*
Exception handling	*Exception handling is the process of responding to the occurrence, during computation, of exceptions – anomalous or exceptional conditions requiring special processing – often changing the normal flow of program execution.*

Executable code	Software in a form that can be run in the computer. It typically refers to machine language, which is the set of native instructions the computer carries out in hardware.
Exhibits	Manifest clearly (a quality or a type of behaviour).
Extreme Programming	Extreme programming (XP) is a software development methodology which is intended to improve software quality and responsiveness to changing customer requirements.
Facet	A particular aspect or feature of something.
Fault tree analysis	Fault tree analysis (FTA) is a top down, deductive failure analysis in which an undesired state of a system is analysed using Boolean logic to combine a series of lower-level events.
Feasibility phase	Feasibility is the measure of how well a proposed system solves the problems, and takes advantage of the opportunities identified during scope definition and how it satisfies the requirements identified in the requirements analysis phase of system development.
Feasibility study	An assessment of the practicality of a proposed plan or method.
Features	A distinctive attribute or aspect of something.
Financial feasibility	A financial feasibility study is an assessment of the financial aspects of something.
Finiteness	Having boundaries or limits.
Firewall	Protect (a network or system) from unauthorised access with a firewall.
First line support	This role is generally phone or sometimes internet support based.
Flowcharts	A graphical representation of a computer program in relation to its sequence of functions (as distinct from the data it processes).
Framework	A basic structure underlying a system, concept, or text.

Functional decomposition	*A method of business analysis that dissects a complex business process to show its individual elements. Functional decomposition is used to facilitate the understanding and management of large and/or complex processes and can be used to help solve problems.*
Functional requirements	*In Software engineering and systems engineering, a functional requirement defines a function of a system or its component. A function is described as a set of inputs, the behaviour, and outputs.*
Fuzzing	*Make or become blurred or indistinct.*
Games Developer	*Game developers, more specifically known as videogame developers or video game designers, are software developers and engineers who create videogames.*
Gantt chart	*A chart in which a series of horizontal lines shows the amount of work done or production completed in certain periods of time in relation to the amount planned for those periods.*
GUI designers	*The graphical user interface (GUI /ɡuːiː/), is a type of user interface that allows users to interact with electronic devices through graphical icons and visual indicators such as secondary notation, instead of text-based user interfaces, typed command labels or text navigation.*
Hardware	*The machines, wiring, and other physical components of a computer or other electronic system.*
Hexadecimal	*Relating to or using a system of numerical notation that has 16 rather than 10 as its base.*
High-level languages	*A high-level language (HLL) is a programming language such as C, FORTRAN, or Pascal that enables a programmer to write programs that are more or less independent of a particular type of computer.*
Host services	*A hosting service is a type of Internet hosting service that allows individuals and organisations to make their website accessible via the World Wide Web.*

Human computer interaction	*HCI (human-computer interaction) is the study of how people interact with computers and to what extent computers are or are not developed for successful interaction with human beings.*
Idealisation	*The action of regarding or representing something as perfect or better than in reality.*
Impediment	*A hindrance or obstruction in doing something.*
Implementation	*The process of putting a decision or plan into effect; execution.*
Implications	*The conclusion that can be drawn from something although it is not explicitly stated.*
Incremental	*Relating to or denoting an increase or addition, especially one of a series on a fixed scale.*
Incur	*Become subject to (something unwelcome or unpleasant) as a result of one's own behaviour or actions.*
Independent tester	*An independent test organisation is an organisation, person, or company that tests products, materials, software, etc. according to agreed requirements.*
Inheritance	*A thing that is inherited.*
Initiation	*The action of beginning something.*
Insertion	*The action of inserting something.*
Intangible	*Unable to be touched; not having physical presence.*
Integers	*A number which is not a fraction; a whole number.*
Intent	*Intention or purpose.*
Interaction diagrams	*Interaction diagrams are models that describe how a group of objects collaborate in some behaviour - typically a single use-case.*
Interface	*A device or program enabling a user to communicate with a computer.*

Interface design	User Interface Design is the design of websites, computers, appliances, machines, mobile communication devices, and software applications with the focus on the user's experience and interaction.
Interpreters	A program that can analyse and execute a program line by line.
Ishakawa diagrams	A diagram that shows the causes of an event and is often used in manufacturing and product development to outline the different steps in a process, demonstrate where quality control issues might arise and determine which resources are required at specific times.
Iterative method	In computational mathematics, an iterative method is a mathematical procedure that generates a sequence of improving approximate solutions for a class of problems, in which the n-th approximation is derived from the previous ones.
ITIL	Information Technology Infrastructure Library
Kanban	A Japanese manufacturing system in which the supply of components is regulated through the use of an instruction card sent along the production line.
Kepner - Tregoe root cause analysis	Kepner-Tregoe Root Cause Analysis(RCA) consulting services are crucial to increase the speed of solving complex business problems or, eliminating those intractable problems once and for all.
Lean	Lean management is an approach to running an organisation that supports the concept of continuous improvement, a long-term approach to work that systematically seeks to achieve small, incremental changes in processes in order to improve efficiency and quality.
Library functions	Library functions in C language are inbuilt functions which are grouped together and placed in a common place called library.
Limitations	A limiting rule or circumstance; a restriction.
Linear	Resembling a straight line; having only one dimension

List data	A list or sequence is an abstract data type that represents a countable number of ordered values, where the same value may occur more than once.
Load testing	Load testing is the process of putting demand on a software system or computing device and measuring its response.
Local network	A local area network (LAN) is a network that connects computers and other devices in a relatively small area, typically a single building or a group of buildings.
Logical design	The process of logical design involves arranging data into a series of logical relationships called entities and attributes. An entity represents a chunk of information. In relational databases, an entity often maps to a table. An attribute is a component of an entity and helps define the uniqueness of the entity.
Logical operators	Logic operations include any operations that manipulate Boolean values. Boolean values are either true or false.
Loop	A structure, series, or process, the end of which is connected to the beginning.
Machine languages	A computer programming language consisting of binary or hexadecimal instructions which a computer can respond to directly.
Maintainability	Maintainability is defined as the probability of performing a successful repair action within a given time. In other words, maintainability measures the ease and speed with which a system can be restored to operational status after a failure occurs.
Major release	Traditionally, major releases are numbered as X.0; for example, WordPerfect 6.0 is a major release, significantly different from any previous version; whereas WordPerfect 6.1 has only minor changes, and is, thus, only a revision.
Malware	Software which is specifically designed to disrupt, damage, or gain authorised access to a computer system.

Manual testing	*Manual testing is the process of manually testing software for defects. It requires a tester to play the role of an end user whereby they utilise most of the application's features to ensure correct behaviour.*
Market risk	*Market risk is the possibility for an investor to experience losses due to factors that affect the overall performance of the financial markets in which he is involved.*
Matrix structure	*A matrix organisational structure is a company structure in which the reporting relationships are set up as a grid, or matrix, rather than in the traditional hierarchy. In other words, employees have dual reporting relationships - generally to both a functional manager and a product manager.*
MDM	*Master data management (MDM) is a comprehensive method of enabling an enterprise to link all of its critical data to one file, called a master file, that provides a common point of reference.*
Minor release	*Is the release of a product that does not add new features or content.*
Mobile App Developer	*Mobile app development is a term used to denote the act or process by which a mobile app is developed for mobile devices, such as personal digital assistants, enterprise digital assistants or mobile phones.*
Mobile device management	*Mobile device management (MDM) is an industry term for the administration of mobile devices, such as smartphones, tablet computers, laptops and desktop computers.*
Mobile platform	*The hardware/software environment for laptops, tablets, smartphones and other portable devices.*
Mobilising	*Make (something) movable or capable of movement.*
Modules	*Each of a set of standardised parts or independent units that can be used to construct a more complex structure, such as an item of furniture or a building.*

MoSCoW Prioritisation	The MoSCoW method is a prioritisation technique used in management, business analysis, project management, and software development to reach a common understanding with stakeholders on the importance they place on the delivery of each requirement - also known as MoSCoW prioritisation or MoSCoW analysis.
Motivation	A reason or reasons for acting or behaving in a particular way.
Non-functional requirements	A non-functional requirement (NFR) is a requirement that specifies criteria that can be used to judge the operation of a system, rather than specific behaviours. They are contrasted with functional requirements that define specific behaviour or functions.
Object-orientated models	Object-oriented modelling (OOM) is the construction of objects using a collection of objects that contain stored values of the instance variables found within an object. Unlike models that are record-oriented, object-oriented values are solely objects.
On-demand self-service	On-demand self-service, as defined by the National Institute of Standards and Technology, is the process through which "a consumer (or any user for our purposes here) can unilaterally provision computing capabilities, such as server time and network storage, as needed automatically without requiring human interaction.
Open-source license	Open source licenses are licenses that comply with the Open Source Definition — in brief, they allow software to be freely used, modified, and shared. To be approved by the Open Source Initiative (also known as the OSI), a licence must go through the Open Source Initiative's license review process.
Operational risk	Operational risk is the prospect of loss resulting from inadequate or failed procedures, systems or policies. Employee errors. Systems failures. Fraud or other criminal activity. Any event that disrupts business processes.
Operational software	An operating system (OS) is system software that manages computer hardware and software resources and provides common services for computer programs.

Organisational Behaviour Theory	*Organisational behaviour (OB) is the study of the way people interact within groups. Normally this study is applied in an attempt to create more efficient business organisations.*
Outsource	*Contract (work) out.*
Paradigm	*A set of linguistic items that form mutually exclusive choices in particular syntactic roles.*
Parallel running	*Parallel running is one of the ways to change from an existing system to a new one. This conversion takes place as the technology of the old system is outdated so a new system is needed to be installed to replace the old one.*
Parameter	*A numerical or other measurable factor forming one of a set that defines a system or sets the conditions of its operation.*
Patent infringement	*Patent infringement is the commission of a prohibited act with respect to a patented invention without permission from the patent holder.*
Pattern recognition	*Pattern recognition is a branch of machine learning that focuses on the recognition of patterns and regularities in data, although it is in some cases considered to be nearly synonymous with machine learning.*
Peer reviews	*Evaluation of scientific, academic, or professional work by others working in the same field.*
Penetration testing	*Penetration testing (also called pen testing) is the practice of testing a computer system, network or Web application to find vulnerabilities that an attacker could exploit.*
Perpetual license	*A perpetual software license is a type of software license that authorises an individual to use a program indefinitely.*
Phased deployment	*Phased deployment is a method of changing from an existing system to a new one. Phased deployment is a changeover process that takes place in stages.*
Polymorphism	*The condition of occurring in several different forms.*

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Precision	Refinement in a measurement, calculation, or specification, especially as represented by the number of digits given.
Prevention	The action of stopping something from happening or arising.
Principle of least privilege	The principle of least privilege (POLP) is the practice of limiting access to the minimal level that will allow normal functioning. Applied to employees, the principle of least privilege translates to giving people the lowest level of user rights that they can have and still do their jobs.
Privacy law	Privacy law refers to the laws that deal with regulating, storing, and using of Personally identifiable information of individuals, which can be collected by governments, public or private organisations, or by other individuals.
Privileged access	A privileged user, by definition, is a "user who, by virtue. of function, and / or seniority, has been allocated powers within the computer system, which are. significantly greater than those available to the majority of users."
Procedure call	A programmatic subroutine (function, procedure, or subprogram) or a sequence of code which performs a specific task, as part of a larger program that is grouped as one or more statement blocks with the typical intention of doing one thing well.
Product owner	The product owner is typically a project's key stakeholder. Part of the product owner responsibilities is to have a vision of what he or she wishes to build, and convey that vision to the scrum team.
Program documentation	The program documentation is a kind of documentation that gives a comprehensive procedural description of a program.
Programming	The process of writing computer programs.
Programming language	In computer technology, a set of conventions in which instructions for the machine are written. There are many languages that allow humans to communicate with computers; C++, BASIC, and Java are some common ones.

Project Lifecycle	*All projects can be mapped to the following simple life cycle structure: starting the project, organising and preparing, carrying out the work, and closing the project. This is known as a four-phase life cycle and the phases are usually referred to as: initiation, planning, execution, and closure.*
Project manager	*The person in overall charge of the planning and execution of a particular project.*
Proprietary license	*Proprietary software is software that is owned by an individual or a company (usually the one that developed it).*
Pros and Cons	*The pros and cons of something are its advantages and disadvantages, which you consider carefully so that you can make a sensible decision.*
Prototypes	*A first or preliminary version of a device or vehicle from which other forms are developed.*
Prototypes	*A first or preliminary version of a device or vehicle from which other forms are developed.*
Pseudocode	*A notation resembling a simplified programming language, used in program design.*
Quality control	*A system of maintaining standards in manufactured products by testing a sample of the output against the specification.*
Randomised	*Make random in order or arrangement; employ random selection or sampling in (an experiment or procedure).*
Recursive	*Relating to or involving a program or routine of which a part requires the application of the whole, so that its explicit interpretation requires in general many successive executions.*
Refactor code	*Code refactoring is the process of restructuring existing computer code—changing the factoring—without changing its external behaviour.*

Regression testing	Regression testing is a type of software testing which verifies that software which was previously developed and tested still performs the same way after it was changed or interfaced with other software.
Regulated	Control (something, especially a business activity) by means of rules and regulations.
Release management	Release management is the process of managing, planning, scheduling and controlling a software build through different stages and environments; including testing and deploying software releases.
Release management	Release management is the process of managing, planning, scheduling and controlling a software build through different stages and environments; including testing and deploying software releases.
Requirements Analysis	Requirements analysis, also called requirements engineering, is the process of determining user expectations for a new or modified product. These features, called requirements, must be quantifiable, relevant and detailed. In software engineering, such requirements are often called functional specifications.
Requirements documentation	Requirements Document (PRD) is a document containing all the requirements to a certain product. It is written to allow people to understand what a product should do.
Retrospective	Looking back on or dealing with past events or situations.
Return on investment	Return on investment (ROI) is usually expressed as a percentage and is typically used for personal financial decisions, to compare a company's profitability or to compare the efficiency of different investments. The return on investment formula is: ROI = (Net Profit / Cost of Investment) x 100.
Rigour	The quality of being extremely thorough and careful.
Risk reduction	Measures to reduce the frequency or severity of losses, also known as loss control. May include engineering, fire protection, safety inspections, or claims management.
ROI	Return on investment.

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Routine upgrade	*Commonplace tasks, chores, or duties as must be done regularly or at specified intervals; typical or everyday activity.*
Scalability	*The ability of a computing process to be used or produced in a range of capabilities.*
Scope creep	*Scope creep (also called requirement creep, function creep, or kitchen sink syndrome) in project management refers to changes, continuous or uncontrolled growth in a project's scope, at any point after the project begins. This can occur when the scope of a project is not properly defined, documented, or controlled.*
Screen magnifier	*A screen magnifier is software that interfaces with a computer's graphical output to present enlarged screen content. By enlarging part (or all) of a screen, people with visual impairments can better see words and images.*
Scrum master	*A scrum master is the facilitator for an agile development team. Scrum is a methodology that allows a team to self-organise and make changes quickly, in accordance with agile principles. The scrum master manages the process for how information is exchanged.*
SDLC	*Software development life cycle.*
Second line support	*Onsite IT requests are usually passed to the 2nd Line Support personnel.*
Secure development	*Secure development is a practice to ensure that the code and processes that go into developing applications are as secure as possible. Secure development entails the utilisation of several processes, including the implementation of a Security Development Lifecycle (SDL) and secure coding itself.*
Security scanning	*A test of a network's vulnerabilities. A security scan does not attempt to break into the network illegally; rather it tries to find areas of vulnerability. A security scan uses a variety of automated software tools, typically performing hundreds of routine tests and checks.*

Semantics	*The branch of linguistics and logic concerned with meaning. The two main areas are logical semantics, concerned with matters such as sense and reference and presupposition and implication, and lexical semantics, concerned with the analysis of word meanings and relations between them.*
Sensitive data	*Sensitive data encompasses a wide range of information and can include: your ethnic or racial origin; political opinion; religious or other similar beliefs; memberships; physical or mental health details; personal life; or criminal or civil offences. These examples of information are protected by your civil rights.*
Sequence diagrams	*A sequence diagram is an interaction diagram that shows how objects operate with one another and in what order. It is a construct of a message sequence chart. A sequence diagram shows object interactions arranged in time sequence.*
Sequential File	*A file that contains records or other elements that are stored in a chronological order based on account number or some other identifying data. In order to locate the desired data, sequential files must be read starting at the beginning of the file.*
Sequential running	*Something that is sequential often follows a numerical or alphabetical order, but it can also describe things that aren't numbered but still need to take place in a logical order, such as the sequential steps you follow for running a program on your computer.*
Server	*A computer or computer program which manages access to a centralised resource or service in a network.*
Server GUI	*Is a graphical (rather than purely textual) user interface to a computer.*
Service Desk	*A Service Desk is a primary IT function within the discipline of IT service management (ITSM) as defined by the Information Technology Infrastructure Library (ITIL).*

Service Manager	*The Service Manager has overall accountability for defining the service, ensuring services meet the business need and are delivered in accordance with agreed business requirements, and managing the service lifecycle – often in conjunction with a Service Team.*
Singleton pattern	*In software engineering, the singleton pattern is a software design pattern that restricts the instantiation of a class to one object. This is useful when exactly one object is needed to coordinate actions across the system.*
Site License	*A site license is a type of software license that allows the user to install a software package in several computers simultaneously, such as at a particular site (facility) or across a corporation.*
SLA	*Service level agreement.*
Social engineering	*The use of deception to manipulate individuals into divulging confidential or personal information that may be used for fraudulent purposes.*
Software	*The programs and other operating information used by a computer.*
Software architecture	*Software architecture is the structure of structures of an information system consisting of entities and their externally. visible properties, and the relationships among them.*
Software designer	*A Software designer is responsible for the process of implementing software solutions to one or more sets of problems.*
Software developer	*A software developer is a person concerned with facets of the software development process, including the research, design, programming, and testing of computer software. Other job titles which are often used with similar meanings are programmer, software analyst, and software engineer.*
Software licensing	*A software license is a legal instrument (usually by way of contract law, with or without printed material) governing the use or redistribution of software. Under United States copyright law all software is copyright protected, in source code as also object code form.*

Software release engineer	*Release engineering, frequently abbreviated as RE or as the clipped compound Releng, is a sub-discipline in software engineering concerned with the compilation, assembly, and delivery of source code into finished products or other software components.*
Software specifications	*A software requirements specification (SRS) is a description of a software system to be developed. It lays out functional and non-functional requirements, and may include a set of use cases that describe user interactions that the software must provide.*
Sprint leader	*The leader of a sprint is responsible for designing and running the sprint. The leader must choose / describe the tickets in the sprint and completes (or at least coordinates) reviewing of the code submitted during the sprint.*
SQL	*SQL is an abbreviation for structured query language, and pronounced either see-kwell or as separate letters.SQL is a standardised query language for requesting information from a database.*
SQL injection vulnerability	*SQL injection is a code injection technique, used to attack data-driven applications, in which nefarious SQL statements are inserted into an entry field for execution (e.g. to dump the database contents to the attacker).*
SSADM	*SSADM (Structured Systems Analysis & Design Method) is a widely-used computer application development method in the UK, where its use is often specified as a requirement for government computing projects. It is increasingly being adopted by the public sector in Europe.*
Stakeholder	*A person with an interest or concern in something, especially a business.*
State pattern	*The state pattern is a behavioural software design pattern that implements a state machine in an object-oriented way.*
Static code analysis	*Static code analysis, is a method of computer program debugging that is done by examining the code without executing the program. The process provides an understanding of the code structure, and can help to ensure that the code adheres to industry standards.*

Storage devices	*A piece of computer equipment on which information can be stored.*
Strategy pattern	*The strategy pattern (also known as the policy pattern) is a behavioural software design pattern that enables selecting an algorithm at runtime.*
String searching	*A search string is the combination of characters and words that make up the search being conducted.*
Strong password protection	*Encrypt passwords to make them more difficult to crack or guess.*
Structural decomposition	*Structural decomposition refers to the process by which a complex problem or system is broken down into parts that are easier to conceive, analyse, develop, or maintain.*
Structural design pattern	*Structural design patterns are design patterns that ease the design by identifying a simple way to realise relationships between entities. Examples of Structural Patterns include: Adapter pattern: 'adapts' one interface for a class into one that a client expects.*
Structure	*The arrangement of and relations between the parts or elements of something complex.*
Sub-network	*A part of a larger network such as the Internet.*
Supplier relationship management	*Supplier relationship management (SRM) is the discipline of strategically planning for, and managing, all interactions with third party organisations that supply goods and/or services to an organisation in order to maximise the value of those interactions.*
Syllabus	*The subjects in a course of study or teaching.*
Synonymous	*Having the same meaning as another word or phrase in the same language.*
Syntax	*The structure of statements in a computer language.*

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Systems architect	Systems architects define the architecture of a computerised system (i.e., a system composed of software and hardware) in order to fulfil certain requirements. Such definitions include: a breakdown of the system into components, the component interactions and interfaces (including with the environment, especially the user), and the technologies and resources to be used in the design.
Systems components	A system component is a process, program, utility, or another part of a computer's operating system that helps to manage different areas of the computer.
Tangible	Perceptible by touch.
TDD	Test-driven development (TDD) is a software development process that relies on the repetition of a very short development cycle: Requirements are turned into very specific test cases, then the software is improved to pass the new tests, only.
Technical Architect	Responsible for defining the overall structure of a program or system. You'll act as project manager, overseeing IT assignments that are aimed at improving the business, and ensuring all parts of the project run smoothly.
Technical feasibility	Is the measure of how well a proposed system solves the problems, and takes advantage of the opportunities identified during scope definition and how it satisfies the requirements identified in the requirements analysis phase of system development.
Technical specialists	An information technology specialist applies technical expertise to the implementation, monitoring, or maintenance of IT systems. Specialists typically focus on a specific computer network, database, or systems administration function.
Technical support	A service provided by a hardware or software company which provides registered users with help and advice about their products.

Temporary workaround	A workaround is a bypass of a recognised problem in a system. A workaround is typically a temporary fix that implies that a genuine solution to the problem is needed.
Terminology	The body of terms used with a particular technical application in a subject of study, theory, profession, etc.
Test coverage	Test coverage is defined as a technique which determines whether our test cases are actually covering the application code and how much code is exercised when we run those test cases.
Test data	Test data is data which has been specifically identified for use in tests, typically of a computer program. Some data may be used in a confirmatory way, typically to verify that a given set of input to a given function produces some expected result.
Test Driven Development	Test-driven development (TDD) is a software development process that relies on the repetition of a very short development cycle: Requirements are turned into very specific test cases, then the software is improved to pass the new tests, only.
Test engineer	A test engineer is a professional who determines how to create a process that would best test a particular product in manufacturing, quality assurance or related areas.
Test management tool	Test management most commonly refers to the activity of managing the computer software testing process. A test management tool is software used to manage tests (automated or manual) that have been previously specified by a test procedure. It is often associated with automation software.
Test plan	A test plan is a document detailing the objectives, target market, internal beta team, and processes for a specific beta test for a software or hardware product.

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Test script	A test script in software testing is a set of instructions that will be performed on the system under test, to test that the system functions as expected. There are various means for executing test scripts. Manual testing. These are more commonly called test cases. Automated testing.
The Data Protection Act	The Data Protection Act 1998 (DPA 1998) is an act of the United Kingdom (UK) Parliament defining the ways in which information about living people may be legally used and handled. The main intent is to protect individuals against misuse or abuse of information about them.
The stages of the SDLC	The systems development life cycle (SDLC), also referred to as the application development life-cycle, is a term used in systems engineering, information systems and software engineering to describe a process for planning, creating, testing, and deploying an information system.
Traceability	Traceability is the capability to trace something. In some cases, it is interpreted as the ability to verify the history, location, or application of an item by means of documented recorded identification.
Transferrable	Able to be transferred or made over to the possession of another person.
UML	Unified Modelling language (UML) is a standardised modelling language enabling developers to specify, visualise, construct and document artefacts of a software system.
Unified Process (UP)	Unified Process is a popular iterative and incremental software development process framework.
Uniqueness	The quality of being the only one of its kind.
Unit testing	Unit testing is a software development process in which the smallest testable parts of an application, called units, are individually and independently scrutinised for proper operation.

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Usability testing	*Usability testing is a way to see how easy to use something is by testing it with real users. Users are asked to complete tasks, typically while they are being observed by a researcher, to see where they encounter problems and experience confusion.*
Use cases	*In software and systems engineering, a use case is a list of actions or event steps typically defining the interactions between a role (known in the Unified Modelling Language as an actor) and a system to achieve a goal. The actor can be a human or other external system.*
User interface	*The means by which the user and a computer system interact, in particular the use of input devices and software.*
Validation	*The action of checking or proving the validity or accuracy of something.*
Variable	*Not consistent or having a fixed pattern; liable to change.*
Variate	*A quantity having a numerical value for each member of a group, especially one whose values occur according to a frequency distribution.*
Version control	*A component of software configuration management, version control, also known as revision control or source control, is the management of changes to documents, computer programs, large web sites, and other collections of information.*
V-model	*In software development, the V-model represents a development process that may be considered an extension of the waterfall model, and is an example of the more general V-model.*
Vulnerability	*The quality or state of being exposed to the possibility of being attacked.*
Waterfall	*Relating to or denoting a method of project management that is characterised by sequential stages and a fixed plan of work.*
Web developer	*A web developer is a programmer who specialises in, or is specifically engaged in, the development of World Wide Web applications, or applications that are run over HTTP from a web server to a web browser.*

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White box	*In computer hardware, a white box is a personal computer or server without a well-known brand name. For instance, the term applies to systems assembled by small system integrators and to home-built computer systems assembled by end users from parts purchased separately at retail.*
Wireframes	*A skeletal three-dimensional model in which only lines and vertices are represented.*
Work package management	*A work package is a group of related tasks within a project. Because they look like projects themselves, they are often thought of as sub-projects within a larger project. Work packages are the smallest unit of work that a project can be broken down to when creating your Work Breakdown Structure (WBS).*
Work station license	*Is a license that may be used on a computer, where the host application (3ds Max, Cinema 4D, ...) is running in "full" mode - with graphical user interface, material editor, and all other features enabled, as opposed to node license.*
XP	*Extreme programming (XP) is a software development methodology which is intended to improve software quality and responsiveness to changing customer requirements.*

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