

Assembly languages were soon developed that let the programmer specify instruction in a text format (e.g., ADD X, TOTAL), with abbreviations for each operation code and meaningful names for specifying addresses. Computer programming or coding is the composition of sequences of instructions, called programs, that computers can follow to perform tasks. Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process. They are the building blocks for all software, from the simplest applications to the most sophisticated ones. Some languages are more prone to some kinds of faults because their specification does not require compilers to perform as much checking as other languages. For example, COBOL is still strong in corporate data centers often on large mainframe computers, Fortran in engineering applications, scripting languages in Web development, and C in embedded software. Various visual programming languages have also been developed with the intent to resolve readability concerns by adopting non-traditional approaches to code structure and display. FORTRAN, the first widely used high-level language to have a functional implementation, came out in 1957, and many other languages were soon developed—in particular, COBOL aimed at commercial data processing, and Lisp for computer research. Computer programming or coding is the composition of sequences of instructions, called programs, that computers can follow to perform tasks. Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages. Scripting and breakpointing is also part of this process. Different programming languages support different styles of programming (called programming paradigms). Programmers typically use high-level programming languages that are more easily intelligible to humans than machine code, which is directly executed by the central processing unit. However, with the concept of the stored-program computer introduced in 1949, both programs and data were stored and manipulated in the same way in computer memory. Readability is important because programmers spend the majority of their time reading, trying to understand, reusing and modifying existing source code, rather than writing new source code. Programmers typically use high-level programming languages that are more easily intelligible to humans than machine code, which is directly executed by the central processing unit. When debugging the problem in a GUI, the programmer can try to skip some user interaction from the original problem description and check if remaining actions are sufficient for bugs to appear. Techniques like Code refactoring can enhance readability. However, Charles Babbage had already written his first program for the Analytical Engine in 1837. Some of these factors include: The presentation aspects of this (such as indents, line breaks, color highlighting, and so on) are often handled by the source code editor, but the content aspects reflect the programmer's talent and skills. Some of these factors include: The presentation aspects of this (such as indents, line breaks, color highlighting, and so on) are often handled by the source code editor, but the content aspects reflect the programmer's talent and skills. The first step in most formal software development processes is requirements analysis, followed by testing to determine value modeling, implementation, and failure elimination (debugging). They are the building blocks for all software, from the simplest applications to the most sophisticated ones. It affects the aspects of quality above, including portability, usability and most importantly maintainability. However, readability is more than just programming style.