

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. Scripting and breakpointing is also part of this process. Techniques like Code refactoring can enhance readability. In the 1880s, Herman Hollerith invented the concept of storing data in machine-readable form. Whatever the approach to development may be, the final program must satisfy some fundamental properties. He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm. Later a control panel (plug board) added to his 1906 Type I Tabulator allowed it to be programmed for different jobs, and by the late 1940s, unit record equipment such as the IBM 602 and IBM 604, were programmed by control panels in a similar way, as were the first electronic computers. The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA. Their jobs usually involve: Although programming has been presented in the media as a somewhat mathematical subject, some research shows that good programmers have strong skills in natural human languages, and that learning to code is similar to learning a foreign language. 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. The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA. Popular modeling techniques include Object-Oriented Analysis and Design (OOAD) and Model-Driven Architecture (MDA). After the bug is reproduced, the input of the program may need to be simplified to make it easier to debug. 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. Use of a static code analysis tool can help detect some possible problems. Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process. One approach popular for requirements analysis is Use Case analysis. 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. There are many approaches to the Software development process. Compilers harnessed the power of computers to make programming easier by allowing programmers to specify calculations by entering a formula using infix notation. This can be a non-trivial task, for example as with parallel processes or some unusual software bugs. There exist a lot of different approaches for each of those tasks. Computer programmers are those who write computer software. He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm.