

The first compiler related tool, the A-0 System, was developed in 1952 by Grace Hopper, who also coined the term 'compiler'. Use of a static code analysis tool can help detect some possible problems. Popular modeling techniques include Object-Oriented Analysis and Design (OOAD) and Model-Driven Architecture (MDA). The first compiler related tool, the A-0 System, was developed in 1952 by Grace Hopper, who also coined the term 'compiler'. Popular modeling techniques include Object-Oriented Analysis and Design (OOAD) and Model-Driven Architecture (MDA). Whatever the approach to development may be, the final program must satisfy some fundamental properties. One approach popular for requirements analysis is Use Case analysis. Whatever the approach to development may be, the final program must satisfy some fundamental properties. As early as the 9th century, a programmable music sequencer was invented by the Persian Banu Musa brothers, who described an automated mechanical flute player in the Book of Ingenious Devices. High-level languages made the process of developing a program simpler and more understandable, and less bound to the underlying hardware. By the late 1960s, data storage devices and computer terminals became inexpensive enough that programs could be created by typing directly into the computers. However, because an assembly language is little more than a different notation for a machine language, two machines with different instruction sets also have different assembly languages. While these are sometimes considered programming, often the term software development is used for this larger overall process – with the terms programming, implementation, and coding reserved for the writing and editing of code per se. Computer programming or coding is the composition of sequences of instructions, called programs, that computers can follow to perform tasks. There exist a lot of different approaches for each of those tasks. High-level languages made the process of developing a program simpler and more understandable, and less bound to the underlying hardware. Scripting and breakpointing is also part of this process. 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. Scripting and breakpointing is also part of this process. The following properties are among the most important: In computer programming, readability refers to the ease with which a human reader can comprehend the purpose, control flow, and operation of source code. Many factors, having little or nothing to do with the ability of the computer to efficiently compile and execute the code, contribute to readability. Techniques like Code refactoring can enhance readability. Allen Downey, in his book How To Think Like A Computer Scientist, writes: Many computer languages provide a mechanism to call functions provided by shared libraries. Scripting and breakpointing is also part of this process. Code-breaking algorithms have also existed for centuries.