Unreadable code often leads to bugs, inefficiencies, and duplicated code..  
 Popular modeling techniques include Object-Oriented Analysis and Design (OOAD) and Model-Driven Architecture (MDA).  
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.  
 The first computer program is generally dated to 1843, when mathematician Ada Lovelace published an algorithm to calculate a sequence of Bernoulli numbers, intended to be carried out by Charles Babbage's Analytical Engine.  
 Following a consistent programming style often helps readability.  
However, Charles Babbage had already written his first program for the Analytical Engine in 1837.  
It affects the aspects of quality above, including portability, usability and most importantly maintainability.  
  
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.  
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).  
Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process.  
Compilers harnessed the power of computers to make programming easier by allowing programmers to specify calculations by entering a formula using infix notation.  
 Different programming languages support different styles of programming (called programming paradigms).  
Trial-and-error/divide-and-conquer is needed: the programmer will try to remove some parts of the original test case and check if the problem still exists.