It affects the aspects of quality above, including portability, usability and most importantly maintainability..  
Proficient programming usually requires expertise in several different subjects, including knowledge of the application domain, details of programming languages and generic code libraries, specialized algorithms, and formal logic.  
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.  
Trade-offs from this ideal involve finding enough programmers who know the language to build a team, the availability of compilers for that language, and the efficiency with which programs written in a given language execute.  
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 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.  
 Following a consistent programming style often helps readability.  
There are many approaches to the Software development process.  
One approach popular for requirements analysis is Use Case analysis.  
Methods of measuring programming language popularity include: counting the number of job advertisements that mention the language, the number of books sold and courses teaching the language (this overestimates the importance of newer languages), and estimates of the number of existing lines of code written in the language (this underestimates the number of users of business languages such as COBOL).  
They are the building blocks for all software, from the simplest applications to the most sophisticated ones.  
Ideally, the programming language best suited for the task at hand will be selected.  
The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA.  
Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards.  
This can be a non-trivial task, for example as with parallel processes or some unusual software bugs.