The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA..  
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.  
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.  
Programming languages are essential for software development.  
It affects the aspects of quality above, including portability, usability and most importantly maintainability.  
Unreadable code often leads to bugs, inefficiencies, and duplicated code.  
  
The first compiler related tool, the A-0 System, was developed in 1952 by Grace Hopper, who also coined the term 'compiler'.  
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 choice of language used is subject to many considerations, such as company policy, suitability to task, availability of third-party packages, or individual preference.  
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.  
Integrated development environments (IDEs) aim to integrate all such help.  
One approach popular for requirements analysis is Use Case analysis.  
 Following a consistent programming style often helps readability.  
It involves designing and implementing algorithms, step-by-step specifications of procedures, by writing code in one or more programming languages.  
They are the building blocks for all software, from the simplest applications to the most sophisticated ones.