The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA..  
Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process.  
By the late 1960s, data storage devices and computer terminals became inexpensive enough that programs could be created by typing directly into the computers.  
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.  
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.  
 Following a consistent programming style often helps readability.  
Programming languages are essential for software development.  
  
The first compiler related tool, the A-0 System, was developed in 1952 by Grace Hopper, who also coined the term 'compiler'.  
 Code-breaking algorithms have also existed for centuries.  
Programmers typically use high-level programming languages that are more easily intelligible to humans than machine code, which is directly executed by the central processing unit.  
One approach popular for requirements analysis is Use Case analysis.  
 A similar technique used for database design is Entity-Relationship Modeling (ER Modeling).  
It is usually easier to code in "high-level" languages than in "low-level" ones.  
 It is very difficult to determine what are the most popular modern programming languages.  
 Programs were mostly entered using punched cards or paper tape.