Relatedly, software engineering combines engineering techniques and principles with software development.  
Later a control panel (plug board) added to his 1906 Type I Tabulator allowed it to be programmed for different jobs, and by the late 1940s, unit record equipment such as the IBM 602 and IBM 604, were programmed by control panels in a similar way, as were the first electronic computers.  
The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA.  
To produce machine code, the source code must either be compiled or transpiled.  
However, Charles Babbage had already written his first program for the Analytical Engine in 1837.  
Provided the functions in a library follow the appropriate run-time conventions (e.g., method of passing arguments), then these functions may be written in any other language.  
When debugging the problem in a GUI, the programmer can try to skip some user interaction from the original problem description and check if remaining actions are sufficient for bugs to appear.  
Languages form an approximate spectrum from "low-level" to "high-level"; "low-level" languages are typically more machine-oriented and faster to execute, whereas "high-level" languages are more abstract and easier to use but execute less quickly.  
Unreadable code often leads to bugs, inefficiencies, and duplicated code.  
It is usually easier to code in "high-level" languages than in "low-level" ones.  
Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards.  
In 1801, the Jacquard loom could produce entirely different weaves by changing the "program" – a series of pasteboard cards with holes punched in them.  
When debugging the problem in a GUI, the programmer can try to skip some user interaction from the original problem description and check if remaining actions are sufficient for bugs to appear.  
Also, specific user environment and usage history can make it difficult to reproduce the problem.  
However, Charles Babbage had already written his first program for the Analytical Engine in 1837.