Also, specific user environment and usage history can make it difficult to reproduce the problem..  
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.  
There exist a lot of different approaches for each of those tasks.  
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.  
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.  
 Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages.  
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.  
One approach popular for requirements analysis is Use Case analysis.  
In 1801, the Jacquard loom could produce entirely different weaves by changing the "program" – a series of pasteboard cards with holes punched in them.  
Programming languages are essential for 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 academic field and the engineering practice of computer programming are both largely concerned with discovering and implementing the most efficient algorithms for a given class of problems.  
They are the building blocks for all software, from the simplest applications to the most sophisticated ones.  
 High-level languages made the process of developing a program simpler and more understandable, and less bound to the underlying hardware.