History of Computer Languages

Eric Marcondes & Jared Curry
History of Computer Languages

1943
Plankalkü
Konrad Zuse
First high-level language.
Actually implemented in 1970s

1947
ARC Assembly
Kathleen Booth
Very first assembly language

1949
Short Code
John William Mauchly
Allowed for branching and calls to library functions.
50x slower than machine code
1952

A-0 System

Grace Hopper
Allowed English-like words instead of numbers to give a computer instructions.

UNIVAC 1 computer, the first commercial business computer system in the United States.
Speedcode

John Backus
IBM’s first large-scale scientific computer.

Demanded a significant amount of scarce memory, but greatly reduced the time required to write a program.
IBM team led by John Backus

Became the most often used language for scientific and technical computing for several decades.

IBM 704 mainframe computer
History of Computer Languages

1959
- **LISP**
  - John McCarthy
  - 2nd oldest high-level programming language in use today.
  - Famous for its linked lists

1965
- **Simula**
  - Ole-Johan Dahl & Kristen Nygaard
  - First object-oriented programming language.
  - Designed for doing simulations.
## History of Computer Languages

<table>
<thead>
<tr>
<th>Year</th>
<th>Language</th>
<th>Creator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1972</td>
<td>Smalltalk</td>
<td>Alan Kay</td>
<td>Object-oriented, created for educational use. To underpin the &quot;new world&quot; of computing.</td>
</tr>
<tr>
<td>1972</td>
<td>C</td>
<td>John William Mauchly</td>
<td>Supports structured programming, lexical variable scope and recursion. Most widely used language of all time.</td>
</tr>
</tbody>
</table>
MATLAB

Cleve Moler

A multi-paradigm numerical computing environment.

Primarily for numerical computing

1978
# History of Computer Languages

<table>
<thead>
<tr>
<th>Year</th>
<th>Language</th>
<th>Inventor(s)</th>
<th>Description</th>
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<tbody>
<tr>
<td>1983</td>
<td>C++</td>
<td>Bjarne Stroustrup</td>
<td>General-Purpose programming language designed for performance, efficiency and flexibility.</td>
</tr>
<tr>
<td>1984</td>
<td>Common LISP</td>
<td>Guy L. Steele et. al</td>
<td>Open source multi-paradigm programming language</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Fully parenthesized prefix notation</td>
</tr>
<tr>
<td>1987</td>
<td>Perl</td>
<td>Larry Wall</td>
<td>General-purpose language, designed for flexibility and power</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Borrows features from other languages</td>
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<td>1991</td>
<td>Python</td>
<td>Guido van Rossum</td>
<td>An interpreted high-level programming language for general-purpose programming. Emphasizes code readability. Syntax that allows programmers to express concepts in fewer lines of code.</td>
</tr>
<tr>
<td>1993</td>
<td>AppleScript</td>
<td>Apple Inc.</td>
<td>Facilitates control for Mac applications. Used as an accessible end-user scripting language.</td>
</tr>
</tbody>
</table>
1995

Ruby
Yukihiro "Matz" Matsumoto
Incorporates multiple programming paradigms.
Has a dynamic type system and automatic memory management.

1995

Javascript
National Center for Supercomputing Applications (NCSA)
One of the core technologies of World Wide Web content production.

2000

C#
Microsoft
General-purpose, object-oriented language.
For writing applications for both hosted and embedded systems.
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<td>2010</td>
<td>Rust</td>
<td>Mozilla</td>
<td>Safe, concurrent, practical language. Syntactically similar to C++, but its designers intend it to provide better memory safety.</td>
</tr>
<tr>
<td>2011</td>
<td>Dart</td>
<td>Google</td>
<td>Used to build web, server and mobile applications, and for Internet of Things.</td>
</tr>
<tr>
<td>2014</td>
<td>Swift</td>
<td>Apple Inc.</td>
<td>For iOS, macOS, watchOS, tvOS, and Linux. Considered one of top 10 most popular languages.</td>
</tr>
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</table>
Sources:

https://en.wikipedia.org/wiki/Timeline_of_programming_languages

http://www.computerhistory.org/timeline/software-languages/

https://www.extremetech.com/g00/computing/91572-the-evolution-of-computer-languages-infographic