## 11. Programming Languages

Perform a research (e.g. in Google or Wikipedia) and provide a short list with information about the most popular programming languages. How similar are they to C#? How do they differ from C#? Write in a text file called “programming-languages.txt” at least five languages along with 2-3 sentences about each of them. Use English.

C

C is a general-purpose, high-level language that was originally developed by Dennis M. Ritchie to develop the UNIX operating system at Bell Labs. C was originally first implemented on the DEC PDP-11 computer in 1972.

In 1978, Brian Kernighan and Dennis Ritchie produced the first publicly available description of C, now known as the K&R standard.

The UNIX operating system, the C compiler, and essentially all UNIX applications programs have been written in C. The C has now become a widely used professional language for various reasons:

* Easy to learn
* Structured language
* It produces efficient programs.
* It can handle low-level activities.
* It can be compiled on a variety of computer platforms.

Java

Java programming language was originally developed by Sun Microsystems which was initiated by James Gosling and released in 1995 as core component of Sun Microsystems' Java platform (Java 1.0 [J2SE]).

As of December 2008, the latest release of the Java Standard Edition is 6 (J2SE). With the advancement of Java and its widespread popularity, multiple configurations were built to suite various types of platforms. Ex: J2EE for Enterprise Applications, J2ME for Mobile Applications.

Sun Microsystems has renamed the new J2 versions as Java SE, Java EE and Java ME respectively. Java is guaranteed to be Write Once, Run Anywhere.

*Java is:*

* Object Oriented
* *Platform independent*
* *Simple*
* *Secure*
* *Architectural-neutral*
* *Portable*
* *Robust*
* *Interpreted*
* *High-performance*
* *Distributed*
* *Dynamic*
* *Multithreaded*

PHP

PHP is a server-side scripting language designed for web development but also used as a general-purpose programming language. As of January 2013, PHP was installed on more than 240 million websites (39% of those sampled) and 2.1 million web servers. Originally created by Rasmus Lerdorf in 1994, the reference implementation of PHP (powered by the Zend Engine) is now produced by The PHP Group. While PHP originally stood for Personal Home Page, it now stands for PHP: Hypertext Preprocessor, which is a recursive backronym.

JavaScript

JavaScript started life as LiveScript, but Netscape changed the name, possibly because of the excitement being generated by Java.to JavaScript. JavaScript made its first appearance in Netscape 2.0 in 1995 with a name LiveScript.

JavaScript is a lightweight, interpreted programming language with object-oriented capabilities that allows you to build interactivity into otherwise static HTML pages.

The general-purpose core of the language has been embedded in Netscape, Internet Explorer, and other web browsers

The ECMA-262 Specification defined a standard version of the core JavaScript language.

JavaScript is:

* JavaScript is a lightweight, interpreted programming language
* Designed for creating network-centric applications
* Complementary to and integrated with Java
* Complementary to and integrated with HTML
* Open and cross-platform

C++

C++ is a statically typed, compiled, general-purpose, case-sensitive, free-form programming language that supports procedural, object-oriented, and generic programming.

C++ is regarded as a middle-level language, as it comprises a combination of both high-level and low-level language features. C++ was developed by Bjarne Stroustrup starting in 1979 at Bell Labs in Murray Hill, New Jersey, as an enhancement to the C language and originally named C with Classes but later it was renamed C++ in 1983. C++ is a superset of C, and that virtually any legal C program is a legal C++ program.

Sources:

<http://www.tutorialspoint.com/cprogramming/c_overview.htm>

<http://www.tutorialspoint.com/java/java_overview.htm>

<http://en.wikipedia.org/wiki/PHP>

<http://www.tutorialspoint.com/javascript/javascript_overview.htm>

<http://www.tutorialspoint.com/cplusplus/cpp_overview.htm>