**Script**

**Slide 1:**

Our presentation today will be on programming languages, a bit about their history, uses, pros and cons. Within this presentation there will be questions to see if you’re paying attention. The Vevox code is now on screen and will also be on every slide in the top right.

**Slide 2:**

We will be covering five programming languages, these will be:

* C++
* C#
* HTML
* Python
* JAVA

Questions will be asked after each programming language has been talked about.

**Slide 3:**

The first language we will talk about is C++, C++ was developed by a man named Bjarne Stroustrup and was first released in 1979. It was created to make writing programs easier for developers, due to their power and ease of use, C and C++ were used in programming for the special effects of Star Wars.

**Slide 4:**

There are a lot of uses for C++, these are some of the main ones**:**

* Operating Systems – Whether that be windows, Mac OSX or Linux, C++ is used to program all of these. C++ is a fast programming language, so it makes it an ideal choice for developing a operating system. Also, C is quite close to the assembly language which further helps in writing low-level operating system modules.
* Compilers – Because C++ is a lower level language it is an ideal choice for compilation systems.
* Web browsers – The rendering engines are programmed in C++ just because the speed that the language offers.
* Games- Some popular games that are heavy on graphics use C++ to programme because of the speed it offers.
* Database Access – Two of the most widely used database are written in C++, those databases are MySQL and Postgres.

**Slide 5:**

The pros of C++ are:

* Portability
* Object Orientated
* Multi Paradigm
* Memory Management
* Large Community Support

**Slide 6:**

The cons of C++ are:

* Use of Pointers
* Security Issues
* Absence of a Garbage Collector
* Absence of Built-In Thread

**Slide 7:**

This is the first question. When was C++ developed?

* 1992
* 1979
* 1982
* I don’t know

We’ll wait a bit for everyone to get their answers in.

The correct answer was 1979.

**Slide 8:**

C# was created by Microsoft and was created in 2000. It was created for windows to make alterations to java with their own language.

**Slide 9:**

Some uses for C# are:

* .NET based programs
* Games – widely-used to create games using the Unity game engine, which is the most popular game engine today. C# is a very popular tool for creating these applications and is a great choice for any programmer to use.
* Web services – Applications which provides functionality over HTTP
* Applications for web – Client Server Applications
* Windows in general – Applications which run on desktops

**Slide 10:**

The pros of C# are:

* Easier to learn than C++
* Easily integrated into Windows
* Easy to find other programmers due to ease of use
* Compiled Language

**Slide 11:**

The cons of C# are:

* Uses more memory than C++
* Work must be complied each time which can cause bugs
* Must be run on windows
* Must be run on a fairly new operating system

**Slide 12:**

HTML was developed in 1990 but was released in 1993. It was developed by Tim Berners-Lee, who was a contractor at CERN. It was invented both for ease of use to mark-up documents, but also to link multiple documents together and allow people to search through links.

**Slide 13:**

Who developed C#?

* Sony
* Microsoft
* What is C#?

You should now be able to answer on the app. (Wait for a bit)

The correct answer was Microsoft.

**Slide 14:**

Uses for HTML are:

* Web page development – HTML is used for creating pages that are displayed on the internet. Every page contains a set of HTML tags.
* Web document creation – Document creation on the internet is dominated by HTML.
* Client-Side storage – Before, a user could not save the user’s browser data that would persist across sessions. With HTML5, client-side storage is feasible using localStorage and IndexDB.
* Responsive images on web pages
* Data entry support with HTML

**Slide 15:**

The pros of HTML are:

* Widely used
* Every browser supports HTML
* Easily integrated with PHP
* It is by default in every windows machine so you don’t need to purchase extra software.

**Slide 16:**

The cons of HTML are:

* It can create only static and plain pages so if we need a dynamic page then HTML is not useful
* Need to write lot of code for making a simple webpage
* Security features are not good
* If we need to write long code for making a webpage then it produces some complexity

**Slide 17:**

Python was created by Guido Van Rossum and was released in 1991. Python emphasizes code readability; it is dynamically typed and is object orientated.

**Slide 18:**

Uses for python are:

* Data Science
* Game development – Used in the development of interactive games.
* Web development – Python can be used to make web-applications at a fast rate, this is because of the frameworks python uses to create applications.
* Machine Learning and AI – Python is one of the popular choses for machine learning and AI because it has libraries that exist already, such as Pandas and NumPy.

**Slide 19:**

If you look at the Vevox app you should now be able to answer this question.

What is HTML mainly used for?

* Web Development
* Operating Systems
* Recording Software

(Wait for a bit)

The correct answer is web development.

**Slide 20:**

The pros of Python are:

* Easy to learn
* Supports multiple systems and platforms
* Scale complex applications with ease
* Large number of resources available

**Slide 21:**

The cons of Python are:

* Slow
* Not good for memory intensive tasks
* Limitations with database access
* Not good for multi-processor/core work

**Slide 22:**

The last programming language we will look at is JAVA. JAVA is an Object-Oriented language and is a language where you can write once, run anywhere (WORA). JAVA was developed by James Gosling at Sun Microsystems. It is multithreaded and interpreted.

**Slide 23:**

**The uses for JAVA are:**

* Mobile applications – Applications for android, one of the most popular mobile operating systems are usually scripted in JAVA.
* Financial Services servers
* Web applications – JAVA provides support for web applications through Servlets, Struts or JSPs. The high security allows government applications for health and education be based on JAVA.
* Trading Applications.

**Slide 24:**

The pros of JAVA are:

* Cheap to maintain
* Built in security
* Long term Stability
* Automatic Memory management

**Slide 25:**

This is the last question of this presentation.

Who was python developed by?

* Wanda Maximoff
* Alan Turing
* Guido Van Rossum

(Wait for bit)

The correct answer is Guido Van Rossum.

**Slide 26:**

The cons of JAVA are:

* Nonstandard GUI
* Consumes more memory and runs slower than C counterparts
* Complex Architecture
* Paid commercial license
* Slow due to interpretation

**Slide 27:**

Thanks for listening! Any questions?