

Introduction to Computer Coding



What do we use it for?

A computer can be made to do most anything, but first someone has to write a program for it to follow. They have to be written in languages that the computer can understand. HTML, CSS, and JavaScript are the three most important languages used by web-developers to create websites and web-based applications.

Overview

Computers are an important part of our lives today. We use them all the time to do many different things. But did you know that smartphones, ATMs, washing machines, game consoles, and even cars are all computers? They each look different but have one thing in common, they have to follow a set of instructions or 'programs' to complete their tasks.

Types of Languages

There are many different coding languages that you can program in:

- C and C++ for operating systems
- C#, Java, PHP, and Ruby build websites
- SQL extracts information from databases

The most commonly used programs are Scratch that use block-based program and Python.

Python is known more as a 'universal' language; sites/apps like Instagram use Python.

Coding and the Web

World Wide Web-The internet is made up of lots of smaller networks. The web is made up of lots of individual web pages which are files written in computer code by a programmer.

Web Browsers-Computer programs that allow us to view web pages.

Web Servers-Computers that provide other computers with information. Can be hardware or software.

Web Addresses-Also known as URLs, are a way for a web browser to find the web server and HTML.

Web Pages-When the server sends your web browser to a web page, it sends the information in an HTML document. These are made of elements, such as text, images, as well as instructions for the browser to display and position the elements.

What is HTML?

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml"><!-- InstanceBegin template="/Templates/HomeNew.dwt" codeOutsideHTMLOIsLocked="false" -->
<head>
<META http-equiv="Page-Enter" content="blendTrans(Duration=0.4)" />
<META http-equiv="Page-Exit" content="blendTrans(Duration=0.4)" />
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />
<!-- InstanceBeginEditable name="doctitle" -->
<title>Welcome to Turves Green Girls' School & Technology College</title>
<!-- InstanceEndEditable -->
<style type="text/css">
<!--
.style22 {
    font-size: small;
    font-family: Verdana, Arial, Helvetica, sans-serif;
    color: #0F1F4E;
}
.style24 {color: #FFFFFF; font-size: small; font-family: Verdana, Arial, Helvetica, sans-serif; }
.style26 {color: #FFFFFF}
a:hover {
    color: #0F1F4E;
    text-decoration: none;
}
a:link {
    text-decoration: none;
    color: #0F1F4E;
}
a:visited {
    text-decoration: none;
    color: #0F1F4E;
}
```

What is HTML?

HTML stands for HyperText Markup Language.

The basic language that websites are written in!

Some Clever Coders

Ada Lovelace

Grace Hopper

Tim Berners-Lee

Alan Turing

Paul Allen

Brendan Eich

Marks Persson

Sergey Brin

Larry Page

https://padlet.com/courtney_speer/5bnkz95eif5f