Syntax

LECTURE SUMMARY

PRE-PROGRAMMING

Covered in this lecture:

Explaining the concept of syntax

- All programming languages have the same core concepts, they are just expressed / written in a different way
- Every language has its own rules and its own vocabulary
- One of the first things you do when you learn programming is learn these rules
- Syntax can be strict or expressive
- Older languages have strict syntax, which means if you forget to put one sign or you capitalize the wrong letter, the code will fail
- Python, for example, will still work even if you get a few things wrong

See you next lecture!

Variables

LECTURE SUMMARY

PRE-PROGRAMMING

Covered in this lecture:

Explaining the concept of a variable

- Variables are stored information that you can then manipulate and use
- They are used in order to make the sites dynamic
- If you want to change something on the website that shows up on multiple pages, you just have to modify the variable and the change will happen in all the places

See you next lecture!

Printing

LECTURE SUMMARY

PRE-PROGRAMMING

Covered in this lecture:

Explaining the concept of printing

- Printing is a command that you can put into your code in order to tell it to output the result of the code you're running
- If you want the website to make a calculation, it's not enough to write the code for it, you have to "print" it on the screen if you want the user to see the actual result
- There is a specific syntax for printing in each programming language

See you next lecture!

Commenting

LECTURE SUMMARY

PRE-PROGRAMMING

Covered in this lecture:

Explaining the concept of commenting

- When developers are working on an application that someone else built, they need to know some more details about the code in order to be able to modify it
- Comments are a way of adding notes to explain what you're doing
- In order for the computer to know that what you're writing is not code, you have to "comment it out" by using specific symbols for each language
- This way, it will ignore that part and the program will run properly

See you next lecture!

Strings

LECTURE SUMMARY

PRE-PROGRAMMING

Covered in this lecture:

Explaining the concept of strings

- If you want to save a variable as text, you have to store it as a string
- There are different rules for each language, but usually you would use quotations to delimitate text
- The computer will consider whatever is between the quotations as human language and won't run it as code
- Escape commands allow you to modify the text within your quotations, like put in on two separate lines

  Example: "This is /n a text"

See you next lecture!

Arrays

LECTURE SUMMARY

PRE-PROGRAMMING

Covered in this lecture:

Explaining the concept of arrays

- Array = Series of pieces of information that are all formatted the same
- Arrays can include numbers, strings, or variables (but not combined)
- Using arrays saves time and it allows you to show more information more easily
- If you need to use only one item from the array, you use a pointer
- Pointers show what position each item of the array is in

See you next lecture!