

FEWD - INTRO PROGRAMMING KARA YU

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AGENDA

- Introduction To ProgrammingIntroduction To JS

INTRODUCTION TO PROGRAMMING

The computer will do what you tell it to do.

WHAT IS A PROGRAM

A $\overline{\mathbf{program}}$ is a set of instructions that you write to tell a computer what to do

WHAT IS PROGRAMMING

Programming is the task of writing those instructions in a language that the computer can understand.

BECOMING A PROGRAMMER

It isn't about the programming language. It is about changing how you think. We have to know how the computer thinks to change how we think.

HOW COMPUTERS THINK

The short answer is that they don't think.

The slightly longer answer is that while computers don't think, they act as if they do, by sequentially executing simple instructions.

The only things a computer knows are the things we tell it.

PROGRAMMER'S JOKE

A woman asks her husband, a **programmer**, to go shopping:

Dear, please, go to the nearby grocery store to buy some bread. Also, if they have eggs, buy 6.

O.K., hun.

Twenty minutes later the husband comes back bringing 6 loaves of bread.

His wife is flabbergasted:

Dear, why on earth did you buy 6 loaves of bread?

They had eggs.

PSEUDO CODE

Pseudocode is the process of writing a program without using the syntax of a programming language.



THERMOSTAT

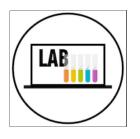


ROCK PAPER SCISSORS

WHAT IS JAVASCRIPT



COLOR SWITCHER



TRAFFIC LIGHT

AGENDA

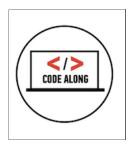
- JS Basics (Syntax) Variables

JS BASICS SYNTAX

Syntax: Spelling and grammar rules of a programming language.

JS SYNTAX

- Semicolon
- Brackets
- Parentheses
- Quotation Marks



JS BASICS

VARIABLES

What are variables?

VARIABLES

- We can tell our program to remember values for us to use later on.
- The action of saving a value to memory is called assignment
- The entity we use to store the value is called a variable

VARIABLES

- $\bullet\,$ The action of getting the value from a variable is called accessing the variable
- We will use all the above techniques to store values into variables, and generate new values using existing variables

VARIABLES DECLARATION

Declaration: var age;
Assignment: age = 21;

Both at the same time: var age = 21;

VARIABLE RE-ASSIGNMENT

var name = "Jo";
name = Amir;

VARIABLE CONVENTIONS

- Variables start with a lower case letter
- If they contain multiple words, subsequent words start with an upper case letter. var numberOfStudents = 10;

VARIABLES & DATA TYPES

What can you store in a variables?