8. tétel Presentation of the **JavaScript** language

I am working for a software development company which makes data processing software. Now I would like to present the JavaScript language.

**What is JavaScript?**

**JavaScript** is scripting language. It is powerful and easy to use. Scripts are small programs that can be used to perform simple tasks or tie other programs together. JavaScript is designed for use inside webpages to respond to a mouse click or input on a form. It can provide a way of moving through webpages and produce simple animation.

It is used to make webpages interactive and provide online programs, including video games. The majority of websites employ it, and all modern web browsers support it without the need for plug-ins by means of a built-in JavaScript engine.

JavaScript is an interpreted programming or script language from Netscape. It is used in Web site development to such things as, it automatically changes a formatted date on a Web page, causes a linked-to-page to appear in a popup window and causes text or a graphic image to change during a mouse rollover.

**How can we write a JavaScript?**

The Web browser runs a JavaScript program when the web page is first loaded, or in response to an event. JavaScript programs can either be placed directly into the HTML file or they can be saved in external files. Placing a program in an external file allows you to hide the program code from the user. Source code placed directly in the HTML file can be viewed by anyone.

A JavaScript program can be placed anywhere within the HTML file. Many programmers favour placing their programs between –head-tags in order to separate the programming code from the Web page content and layout. Some programmers prefer placing programs within the body of the Web page at the location where the program output is generated and displayed.

**How can we use the script Tag?**

We use elements: script commands and comments.

**What types of variables are there?**

JavaScript supports four different types of variables. Numeric variables can be a number, such as 13, 22.5 or 3.14159. String variables is any group of characters, such as ‘Hello’ or ‘Happy Holidays!’ Boolean variables are variables that accept one of two values, either true or false. Null variables is a variable that has no value at all. Before you can use a variable in your program, you need to declare a variable using the **var** command or by assigning the variable a value.

**How can we create JavaScript functions?**

There are parameters and JavaScript commands.

(JavaScript supports much of the structured programming syntax C (e.g. *if* statements, *while* loops, *switch* statements, *do while* loops). One partial exception is scoping: JavaScript originally had only function scoping with *var.* ECMAScript 2015 added keywords let and const for block scoping, meaning JavaScript now has both function and block scoping. Like C, JavaScript makes a distinction between expressions and statements. One syntactic difference from C is automatic semicolon insertion, which allows the semicolons that would normally terminate statements to be omitted.)