JavaScript Fundamentals

Module_1_Variables

A variables is a "named storage for data".

To create a variable in modern Js use ***let*** keyword.

In older code you will see ***var*** as a keyword for variables.

Variables are case-sensitive name != NamE

```javascript
//Here we declaread a variable with let keyword

let message;


//We can asign a values with " = " operator.

let message = "Hello World!";
```

This string is now stored in memory associated with her name ***message.***

```javascript
//Let's print the content of message now.
alert(message);
```

We can also declare multiple variables in one line.

```javascript
//Is shorter but for the sake of readability please take a look at the next
one.
//Imagine if you had 10 varialbes declared in one line.
```

```javascript
let name = "Tony" ,age = 21, hobby = "PC";
```

Readable one

```javascript
//The multiline one is longer but more readable.
let name= "Tony";
let age = 21;
let hobby = "PC";
```

Copy data from a variable to another variable

```javascript
let name = "AYAYA";
let copy_var = name; //"AYAYA"
name = "Another String";


alert(name); //OUT: "Another String"
alert(copy_var); //OUT: "AYAYA"
```

Variable Naming

Must containt only A-Z , a-z , 0-9 , $, _

The First character must not be a digit.

Naming convention: CamelCase or Snake_Case

```javascript
let firstName; //CamelCase
```

```
let first_Name; //SnakeCase

let test123; // It's OK

let 1test; // Don't do that. Will cause an error anyway.


let $ = 1;

let _ = 2;

alert($ + _);// 3
```

Reserved names

let , class, return , function

```
//This will couse an error.

let let = 5; //error let is an reserved word.

let class = 25; //error let is an reserved word.

let return = 15; //error let is an reserved word.

let function = 20; //error let is an reserved word.
```

Constants

Declare a constant with *const* keyword.

Constants cannot be changed once they already have assigned an value.

```
const myBirth = "17.01.1998";

myBirth = "20.10.1956"; // error, can't reassign the constant!
```

UpperCase Constants

There is a widespread practice to use constants as aliases for difficult-to-remember values that are known prior to execution.

Such constants are named using capital letters and underscores.

Like this:

```js
const COLOR_RED = "#F00";

const COLOR_GREEN = "#0F0";

const COLOR_BLUE = "#00F";

const COLOR_ORANGE = "#FF7F00";


// ...when we need to pick a color

let color = COLOR_ORANGE;

alert(color); // #FF7F00
```

TASKS

Task 1.

1. Declare two variables: admin and name.
2. Assign the value "John" to name.
3. Copy the value from name to admin.
4. Show the value of admin using alert (must output "John").

```js
let admin;

let name = "John";

admin = name;

alert(admin); //"John"
```

Task 2.

1. Create a variable with the name of our planet. How would you name such a variable?
2. Create a variable to store the name of a current visitor to a website. How would you name that variable?

```js
let ourPlanetName = "Earth";

let currentUserName = "John";
```