# Lesson: JavaScript Arrays, Strings & Functions

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# JavaScript Arrays

- Store multiple values in single Variable of same datatype
  - Var cars=["Toyota", "BMW", "Tesla"]

We need to use it for Lab8, Arrays will help you to save values and store them at one place.

- Imagine if I add 10 variables to save all the cars name-
  - Var car1="Toyota", var car2="BMW"

Tell me which one is efficient? and why?

#### JavaScript Data Types

- If you have learnt C/C++ or Java in past if you remember we need to mention data type of variable.
  - $\circ$  For example in Java (int x= 5;)
- JavaScript makes your life easy and variables can hold any data type. A
  variable can hold number, strings or object.
  - Var x= "test"; or var x=5; JavaScript is an interpreter so it identifies the type by itself
- JavaScript makes life easy, so let's assume we can use var and define our varaibles.

# JavaScript String

- If you want to store values which or not numbers or they are only characters use String.
  - Example var test= "Tesla";
- Decide your variables and type before you start programming, Strings should be always inside double quotes and number doesn't need to be in quotes.
  - For example var x=5; var x= "test";

# JavaScript Array Sort

- Now we know that benefits of array and when to use, Array offers more benefits such as sorting
  - Var test= ["Toyota", "Tesla", "BMW"];
  - Tell me the output we should see after sorting?
- JavaScript gives sort () method by default, it will sort and give you output
  - test.sort(), we can also do reverse sort by test.reverse()

#### Java Script Date

- JavaScript offers Date function to get the latest date
  - This can be thought of API's, for example var d= new Date();
- Next you may ask what is API?
  - Imagine if you are in a restaurant and you wish to have dinner, next step is your order the dinner item to the waiter. Waiter takes the order and communicates to the chef, and brings the dinner. Waiter's role can be thought as and API.
- Remember don't reinvent the wheel, use API's to get what you need for your programs

#### JavaScript Functions

- Functions can be thought as modules, modules are very important, make life easy for developers and keeps your code or project clean
  - function test () { return p1\*p2;}
  - Function name (parameter1, parameter2) {Code to be Executed}
- Live Demo

# JavaScript Timer

- We talked about API's lets user timer API
  - setInterval() API to repeat JavaScript function at a given time-interval
- Live-Demo

