

## ★ JavaScript Functions - Explained Simply

A **function** in JavaScript is a reusable block of code that performs a specific task whenever you call it. Instead of writing the same code multiple times, you can put it inside a function and just **call the function** whenever needed.

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### ◆ Example Without a Function (Repetitive Code)

Imagine you need to show an alert with the **current time** on multiple pages. You would have to **repeat this code** every time:

```
var now = new Date();
var theHr = now.getHours();
var theMin = now.getMinutes();
alert("Time: " + theHr + ":" + theMin);
```

This works, but repeating the same code **again and again** is inefficient.

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### ◆ Using a Function to Avoid Repetition

We can **package this code into a function** and reuse it **anywhere** with a **single line**:

```
function tellTime() {
  var now = new Date();
  var theHr = now.getHours();
  var theMin = now.getMinutes();
  alert("Current time: " + theHr + ":" + theMin);
}
```

```
// Calling the function
tellTime();
```

✓ Now, whenever we need to **show the time**, we just call:  
tellTime();

Instead of repeating the full block of code! ✨

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### ◆ Breakdown of the Function

Code	Explanation
function tellTime() {	✓ Declares a function named <b>tellTime</b> . The function keyword defines it.

Code	Explanation
{ ... }	✓ Curly braces <code>{ }</code> <b>enclose</b> the function's code.
var now = new Date();	✓ Creates a new <b>Date</b> object to get the current date & time.
var theHr = now.getHours();	✓ Extracts the <b>current hour</b> (0-23 format).
var theMin = now.getMinutes();	✓ Extracts the <b>current minutes</b> (0-59).
alert("Current time: " + theHr + ":" + theMin);	✓ Displays an <b>alert</b> with the current time.
tellTime();	✓ Calls the function, executing all the above code in <b>one line!</b>

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## ✈ Function Naming Rules

- Function names **follow variable naming rules**.
  - They should be **descriptive** (e.g., `tellTime`, `showAlert`).
  - Use **camelCase** (`showUserProfile`) OR **underscore\_case** (`show_user_profile`).
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## ◆ Where to Place Functions?

Functions can be placed: ✓ In an **external JavaScript file** (`script.js`).  
 ✓ At the **end of the HTML <body>** (before `</body>`).  
 ✓ Inside the **HTML <head>** (but avoid this for better performance).

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## 🎯 Key Takeaways

- ✓ Functions **save time** by avoiding code repetition.
- ✓ Functions **make your code easier to read and maintain**.
- ✓ You **define** a function once, and **call** it anytime.