Node.js Modules

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Node.js Modules

Outline
What are Modules?
Types of Modules
Listing Core Modules
Common Core Modules

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Node.js Modules

- Modules are the blocks of **encapsulated code**.

- Modules can be a single file or a collection of multiples files/folders.

- Developers are heavily reliant on modules because of their **re-usability**

- Types
  - Core Modules (Built-in)
  - Custom Modules (Local)
  - Third-Party Modules (External)

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Node.js Modules

- **Core Modules**
  - Many built-in modules that are part of its binary.
  - Modules can be loaded using the require() function

- **Custom Modules**
  - Unlike core and third-party modules, custom (local) modules are created locally in the Node.js application

- **Third-Party Modules**
  - Third-Party/External modules are available on-line
  - These modules need to be installed in the project folder
  - Done using **npm** (Node Package Manager)

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Core Modules

- Node.js has many built-in modules that are part of its binary.

- Modules can be loaded using the **require()** function

```javascript
const coreModules = require('module').builtinModules;

coreModules.forEach(theModule => {
    console.log(theModule);
});
```

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Common Core Modules

- Some of the most common core modules

Name	Description
http	Creates an HTTP server in Node.js
assert	Set of assertion functions
fs	Used to handle File System
os	Information about the Operating System
path	Methods to deal with file paths
process	Information and control about the current Node.js process
querystring	Parsing and formatting URL query strings
url	utilities for URL resolution and parsing
buffer	Helps in dealing with binary data

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