

# Module

A group of code and data related to a particular piece of functionality. It encapsulates implementation details, exposes a public API, and is combined with other modules to build a larger application.

# The Goals of Modularity

Create higher-level abstractions

Encapsulation

Reusability

Simplify dependency management



# A Brief History of JavaScript Modules

**Once upon a time...in 1995.**



# A Brief History of JavaScript Modules

**No support for modules.**



# A Brief History of JavaScript Modules

**Popularity grows.**

**Popularity leads to bigger apps.**

**Bigger apps lead to greater complexity.**



# A Brief History of JavaScript Modules

**We need modules!!!**



# A Brief History of JavaScript Modules

**Lots of solutions were developed.**



# A Brief History of JavaScript Modules

**Packaging and distribution is hard.**





# A Brief History of JavaScript Modules

**Lots of solutions were developed.**



# A Brief History of JavaScript Modules

**Meanwhile...**



# A Brief History of JavaScript Modules

**JavaScript supports modules!**



# A Brief History of JavaScript Modules

**There was much confusion...until now!**



# Course Modules

Module Patterns in ES5

Module Formats and Loaders

Modules in ES2015

Module Bundlers





## Visual Studio Code

- <https://code.visualstudio.com>

## Node.js

- <https://nodejs.org>

## npm

## Various npm packages