

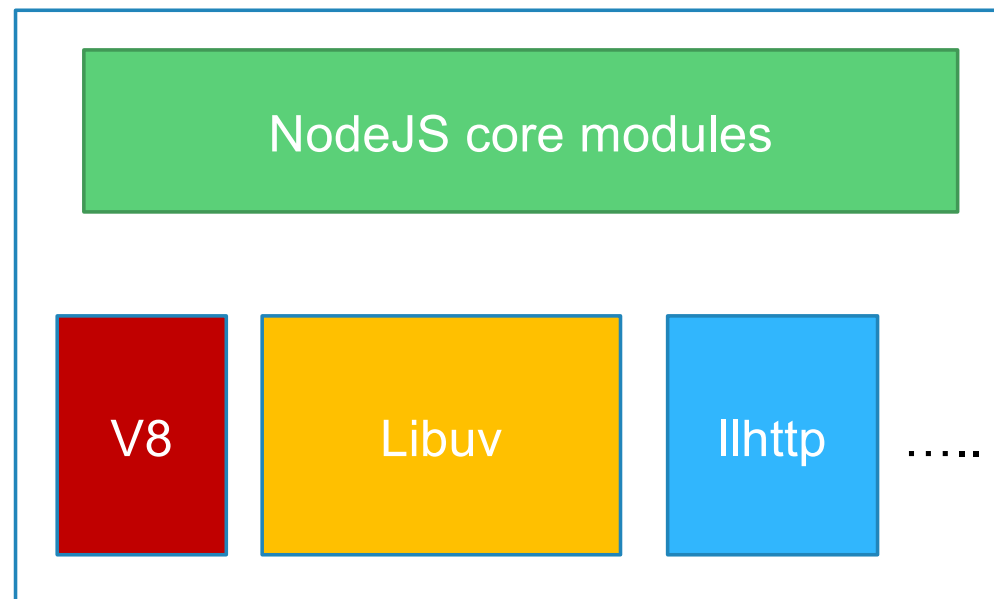
ITIS 5166

Network-Based Application Development

NodeJS

What is NodeJS?

- NodeJS is more than a wrapper for V8 JS engine
- Its core modules provide an API for working with OS, file system, network, etc
- A number of external dependencies
 - V8 JS engine
 - Libuv
 - llhttp
 - ...



Modules

- JavaScript supports modularization by using modules
- In NodeJS, each file is treated as a module, which can be used by other files
- Each module is wrapped in a function
- Therefore, local variables of a module have function scope, and is not accessible outside of the file
- A module can export its variables to be used by another module
 - `module.exports`
 - `exports`

Require Modules

- In NodeJS, to use a module, call the require function
 - Core module: call require function with module name

```
const fs = require('fs');
```
 - Local module: call require function with relative path to the file

```
const abc = require('./...');
```
 - Third party module: first install the package using NPM, and then call require function with module name