

CMSC 389N

Node!

Agenda

- Announcements
- Reminders
- Node
- Modules
- Basic Node Interactions

Announcements

- Exercise 4 will be posted tomorrow
 - Due Date will be in ~2 weeks
- Exercise 5 will be released the following week
 - Similar length to complete (~2 weeks)
- Final Exam will be posted 2-2.5 weeks from May 16th
 - Open ended with only a few guidelines

Reminders

Please use officehours.cs.umd.edu in order to do virtual office hours!

Please take advantage of office hours!

Node Basics

We've seen it before!

What was the purpose before?

Node Basics

- Just an environment
- Allows us access for different, powerful modules
- These modules allow us to communicate with servers
- Is Asynchronous, similar to React
- Window and Document Object don't exist!

Simple Example

If no Window or Document then what?

We have a couple of local elements to use:

- Our Operating System
- Our File System
- Event Queue
- http

Node Global Objects

Very strict amount of global objects:

<https://nodejs.org/api/globals.html>

Creating a variable “globally” will not add it to the global object

Node Program Design

Rely on the modularity of Node:

- Individual parts should be separated out.
- Variables created globally are very similar to private instance variables in Java.
- Only things explicitly exported will be visible outside the module

How do I pass information between modules?

```
module.exports.howYouWantToReferToThis = item;
```

In Current Directory, could be “../” or “./folder/”



```
const varName = require('./nameOfFile');
```

Built In Modules we will be using:

- OS
- Path
- File
- Event
- HTTP

Where are we going?

We are going to couple Node with Express-- a framework that makes creating websites easier.

Express is built overtop and extending the HTTP module we just learned about!

WTWAW (What To Walk Away With)

1. Create and run a Node application
2. Export and import modules
3. Raise events
4. Create a server