CPS 475/575
Secure Application Development

Lecture 10 –Asynchronous programming with Node.js
Introduction to Assignment 1

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Agenda

- A very useful resource for your skills:
  - "The Missing Semester of Your CS Education": https://missing.csail.mit.edu/
- Asynchronous programming in Node.js (Lab 3 – Task 3)
  - Hands-on: Common Node.js programs
  - Hands-on: EchoServer.js
  - Hands-on: telnet.js
- Introduction to Assignment1

Review: Node.js Architecture

- A Node.js program is single-threaded
  - Handle concurrency using
    - Non-blocking I/O
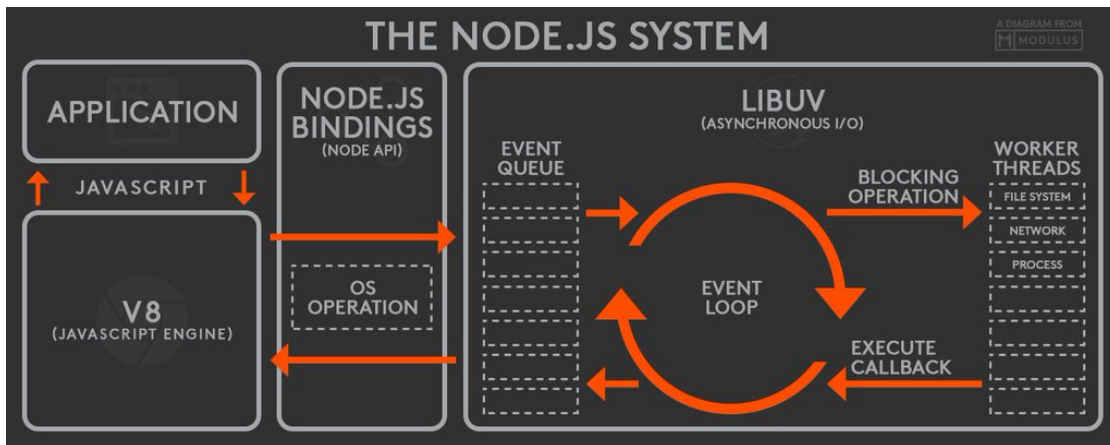   - Asynchronous event-driven model (Event loop)
    - Callbacks

Figure courtesy: Richard Key

Node.js: Get Started

- Node.js main resource: https://nodejs.org/
  - Binary distributions and source code
- Installation options:
  - Download and install the latest version from nodejs.org
  - Use:
    `$ sudo apt install nodejs-legacy`
    (Version 4.2.6, check with `$ node –v`)
  - Use Node Version Manager (nvm) – recommended for SEED VM (as homework – next slide)