

#### Hands On Workshop By Vijay Shivakumar



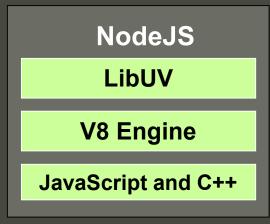


### What is NodeJS?



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**NodeJS** 

LibUV

**V8** Engine

JavaScript and C++

Was adapted in windows version of NodeJS to replace UNIX libraries

Google's JavaScript processing engine

Most of builtin modules are developed using JavaScript or C++

#### How node works?



V8 is an open source program written by Google. V8 is used inside chrome to understand JavaScript sent from a web server to your browser.

V8 is usually referred as a JavaScript engine

Because it takes JavaScript as input and converts it to machine code using ECMA standard

It supports AI-32, X86-64, ARM, MIPS etc.,



# **How NodeJs Works?**



\/R

JavaScript ES5 / ES Next

commands

• C++

hooks

 Assembly Languages based on AI-32, X86-64, ARM, MIPS etc,.

executes

Machine Code

#### Who?



Created by Ryan Dhal in the year 2009
He first spoke about it in JS Conf
Since then the growing community of
NodeJS users have been contributing
modules

# Where can I use it?



Real time data app that requires frequent updates

Fast file upload

Ads Server application

Multiplayer Games

Web Socket Applications (chat / meeting )

### NodeJS is not



A web framework

Multi threaded (its a single threaded server)

For everyone

For every project

# Lets the Fun begin



No Window Global

No Document Require

No Location Module

Process





# REPL: Read Evaluate Print Loop variables

# Blocking v/s Non Blocking

```
Fetch data

Display content

Continue

Fetch data

Fetch data

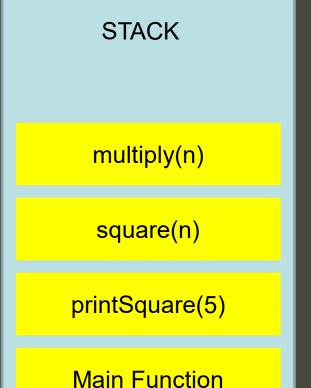
Let me know when it comes

continue
```





```
function multiply(a, b){
   return a * b;
function square(n){
    return multiply(n,n);
function printSquare(n){
    var squared = square(n);
    console.log(squared);
 printSquare(4);
```





# Hands On Workshop



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