



GESSA TUTORING

PRAMODH NATARAJAN

# AGENDA

- What is node.js?
- Setting up node.js
- Requirements for a node application
- Demo

# DISCLAIMER

I am not an expert in node.js!

If I don't know something, I'll try to get back to you later  
or you can let me know :)

# REFERENCES

1. Node.js - Wikipedia
2. Node Beginner by Manuel Kiessling
3. <https://www.npmjs.com/>

# WHAT IS NODE.JS?

Node.js is a cross-platform single threaded event driven non-blocking asynchronous runtime environment used to build server-side applications.

# WHAT IS A SERVER?

- Java (Servlets, JSP)
- Python (Flask, Django)
- Ruby (Rails)

# NON-BLOCKING

- What is a blocking operation?
- How does node.js execute a blocking operation?
- Why is blocking important?

# SINGLE THREADED

Node.js operates on a single thread, using non-blocking I/O calls, allowing it to support tens of thousands of concurrent connections without incurring the cost of thread context switching.



# SETTING UP NODE.JS

- Download from <https://nodejs.org/en/download/>
- Running on console - `node <server-file>.js`

# WHAT DO WE NEED?

To build a cool node.js application...

- HTTP Server
- Routers
- Request Handlers
- View Logic

# THE TRADITIONAL HELLO WORLD PROGRAM

```
var http = require("http");  
  
http.createServer(function(request, response) {  
    response.writeHead(200, {"Content-Type": "text/plain"});  
    response.write("Hello World");  
    response.end();  
}).listen(8888);
```

DEMO