

IE NITK Summer Mentorship Program - MEAN Stack

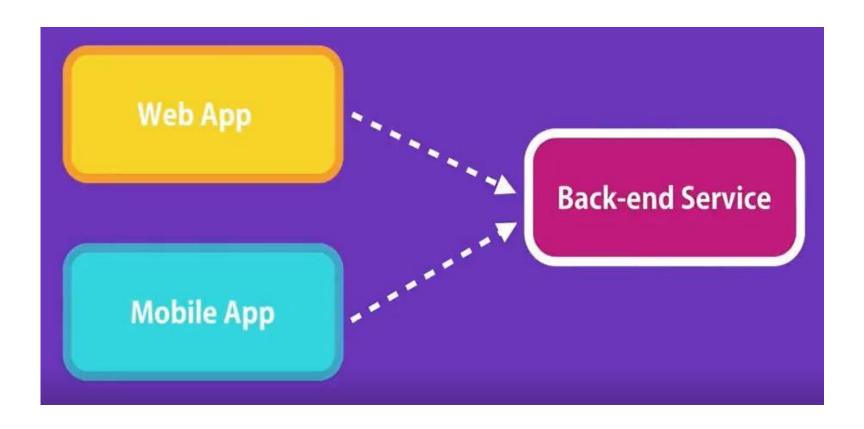
Speakers....



Shreyas Seshadri



Mishal Shah



Backend: Store data, send data, send email, push notifications etc....

HTTP Requests

HTTP defines a set of request methods to indicate the desired action to be performed for a given resource.

<u>GET</u>: The GET method requests a representation of the specified resource. Requests using GET should only retrieve data.

<u>POST</u>: The POST method is used to submit an entity to the specified resource, often causing a change in state or side effects on the server.

<u>PUT</u>: The PUT method replaces all current representations of the target resource with the request payload.

HTTP Requests

DELETE: The DELETE method deletes the specified resource.

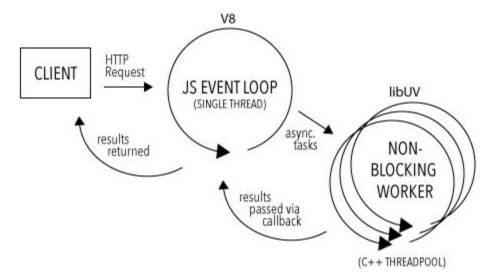
<u>OPTIONS</u>: The OPTIONS method is used to describe the communication options for the target resource.

Background

- Cross platform runtime environment to execute JavaScript code outside of browser
- Build backend services -- API
- Highly scalable, data-intensive real time applications, streaming, gaming
- Used by: PayPal, Uber, Netflix, Walmart
- JavaScript everywhere!
- Lot of open-source libraries NPM (node package manager)
- V8 is JavaScript Engine developed by Google
- Node.js runs on V8
- Not for DOM Manipulation
- Node is not a language, not a framework

Node.js Working

- Non-blocking Asynchronous I/O!
- Single Threaded
- Event Driven
- Do not use for CPU intensive applications!



What is non-blocking I/O?

Traditional

```
var result = db.query("select x from table_y");
doABC(result);
doBCD();
```

Non-blocking I/O

```
o db.query("select x from table_y", function (result) {
   doABC(result); }
```

o doBCD()

Node Core Modules (Important Ones)

- File System
- HTTP Server
- Event Emitter

Interesting Modules

- **Express:** to make things simpler e.g syntax, routing, DB connections
- Jade: HTML template system
- Socket.io: create real time applications
- **Nodemon:** automatically monitor node.js & push changes

Many more....