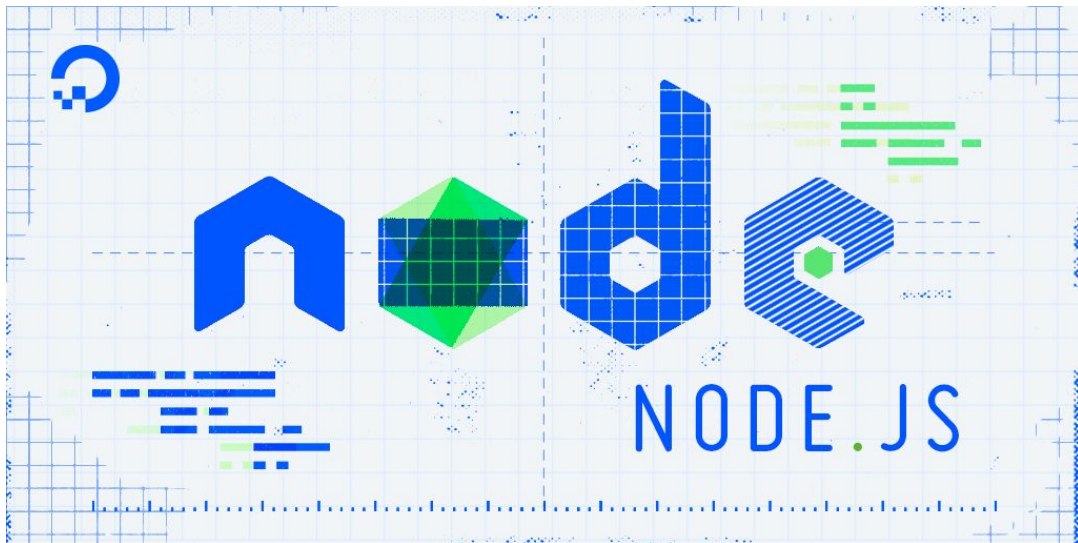# Node js Lecture 2

By Mona Soliman

Agenda

- custom modules
- NPM(node modules , package.json)
- HTTP Request & Response
- Express
- What is Restful api
- How to serve static files
- Node js debugging

Custom Modules

- How it works

- 5 Global Variables(require , module , __dirname , __filename , exports)

- Native Modules

- Caching

NPM

Every Node application has a package.json file that includes metadata about the application. This includes the name of the application, its version, dependencies,etc.

We use NPM to download and install 3rd-party packages from NPM registry.

- All the installed packages and their dependencies are stored under node_modules folders.

```
// Install a package
npm i <packageName>

// Install a specific version of a package
npm i <packageName>@<version>

// Install a package as a development dependency
npm i <packageName> —save-dev

// Uninstall a package
npm uninstall <packageName>

Npm install
```
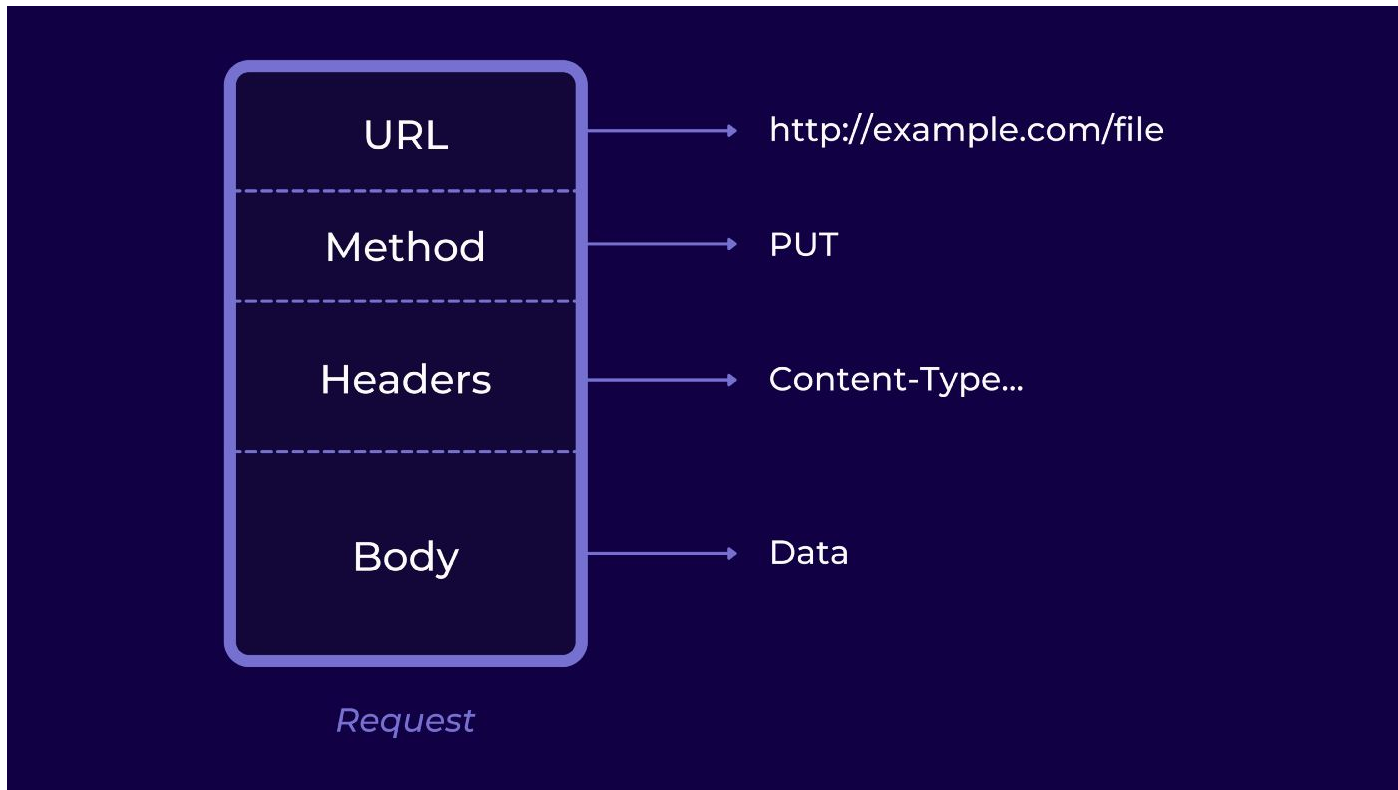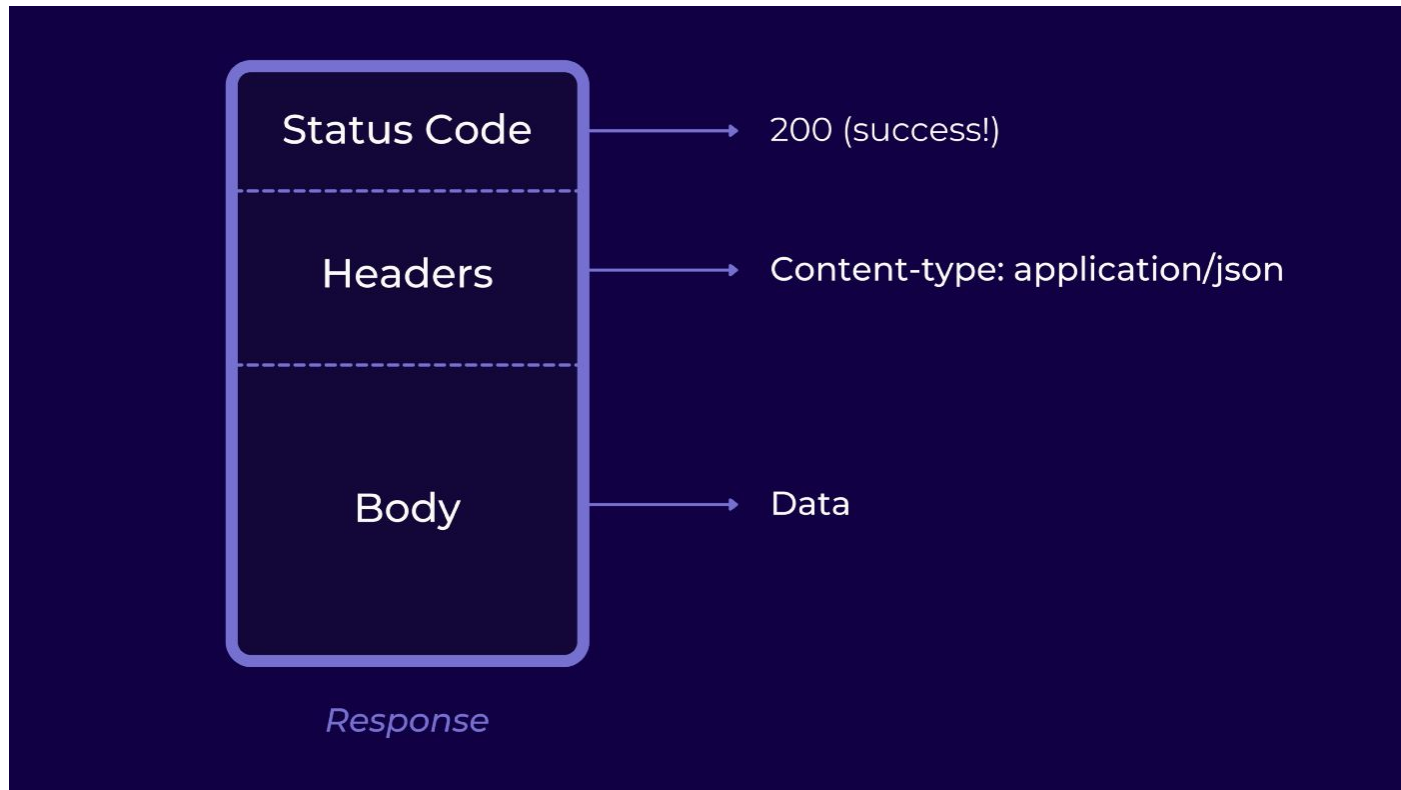
HTTP REQUEST

HTTP RESPONSE

Status Code → 200 (success!)

Headers → Content-type: application/json

Body → Data

Response

Express Js

Express is a minimal and flexible Node.js web application framework that provides a robust set of features to develop web and mobile applications. It facilitates the rapid development of Node based Web applications. Following are some of the core features of Express framework –

- Allows to set up middlewares to respond to HTTP Requests.
- Defines a routing table which is used to perform different actions based on HTTP Method and URL.
- Allows to dynamically render HTML Pages based on passing arguments to templates

```
// Install a package
npm i express
```

Restful API

Posts

GET	/posts/	Get Posts
POST	/posts/	Create Posts
GET	/posts/{id}	Get Post
PUT	/posts/{id}	Update Post
DELETE	/posts/{id}	Delete Post

Thank you