6.148
intro to backend
http://go.6148.io/backend
Hunter Gatewood
contents

recap
intro
frameworks
client-server
node+express
future
recap

HTML
CSS
JavaScript
JQuery
backends are cool

- someone built everything
Welcome to News Feed

Our goal with News Feed is to show you the stories that matter most to you every time you visit Facebook.
backend

- how to learn
  - dive in
  - ask questions
- basic Internet outline
- today: standalone, functional server
intro
frameworks
why frameworks

- static site vs. dynamic content
- complexity, consistency, security
- solution?
abstraction

- what is an abstraction?
- complexity is managed by abstraction
- frameworks provide abstraction
frameworks
client-server
client-server

- model for interaction
- two computers
  - requester (REQUEST)
  - responder (RESPONSE)
visually...
client vs server

Client 1
Client 2
Client 3

HTML/CSS/JS

Server

REQ
RES
client vs server

Client 1

Client 2

Client 3

HTML/CSS/JS

Server

JS

REQ

RES
client vs server

Client 1
Client 2
Client 3

HTML/CSS/JS

Server

REQUEST
RESPONSE

JS
point is…

client-side JS !== server-side JS
client-server
node+express
( one of many choices )
components

- Node.js
- Express
- also...
  - express-generator
  - npm
Node.js

- JavaScript runtime environment
- NOT a framework
- NOT JavaScript
- NOT JQuery
- NOT Express
- asynchronous (+ example)
- that’s pretty much it
express
Express.js

- Node.js framework
- THE server framework
- abstraction, structure, usability
- uses "middleware"
other things...
express-generator

- Node.js "executable"
- NOT Express
- used with Express
- 1-time-per-project
- "boilerplate"
npm

- Node Package Manager
- aka the App Store for Node.js
- NOT Node.js
visually...
Express

Node.js

your computer
node+express
future
personalization

- same for every user?
- templating with Handlebars--
  Thursday
consistency

- server goes down === data lost
- why?
- use an actual database--Thursday
security

- keep user data safe
- Passport.js--Tuesday
future
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