

Intro to Web Development Using Python/Flask

By: Kaushal Parikh
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Who am I?

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Web Developer @ The Internet



Overview

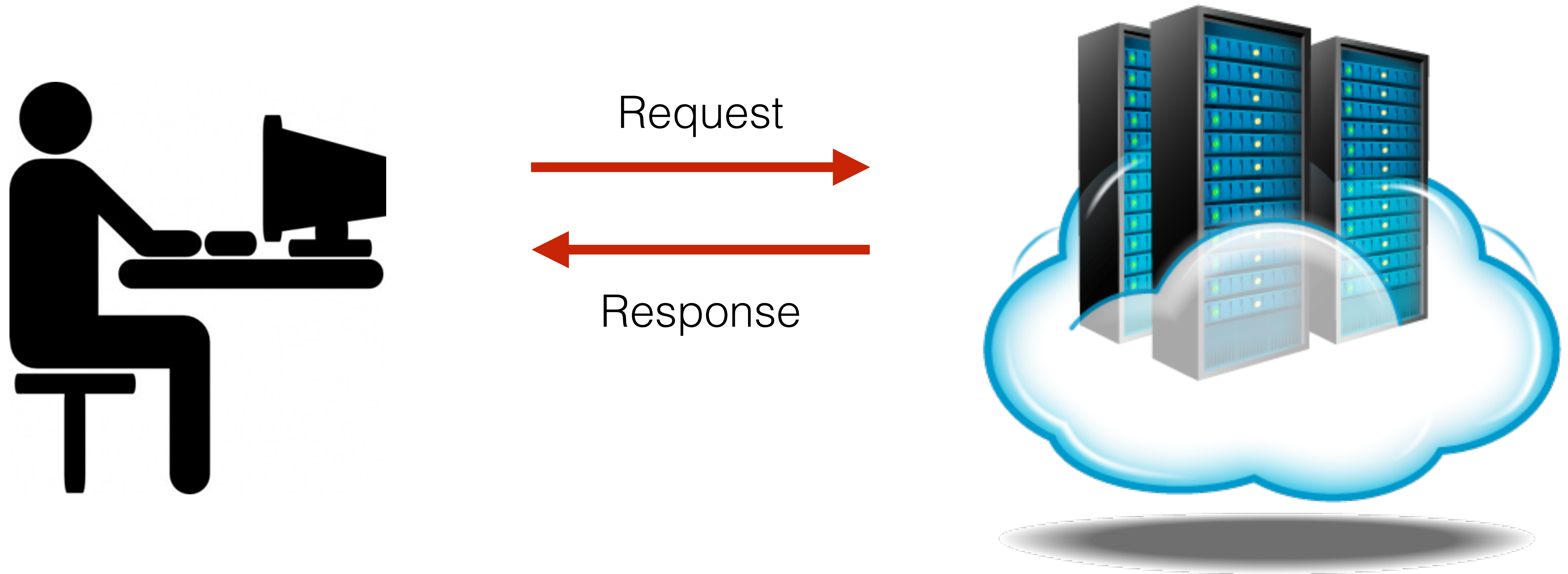
What is a web application?

Buzzwords/Terms: HTTP, REST, CRUD, Middleware, etc.

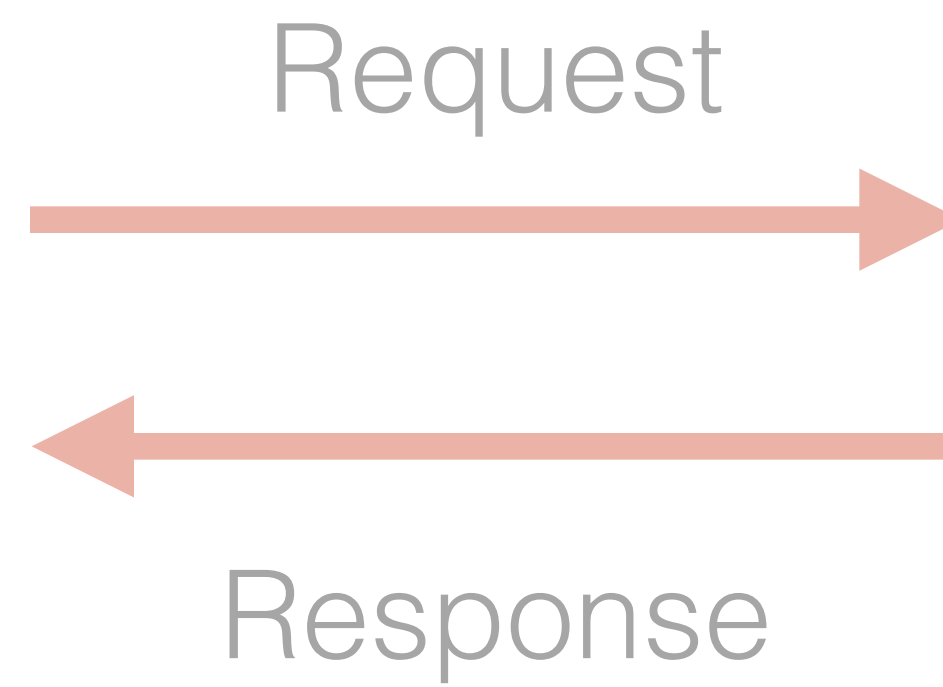
Data flow through web applications

How requests/responses work

What is a web application?



The User



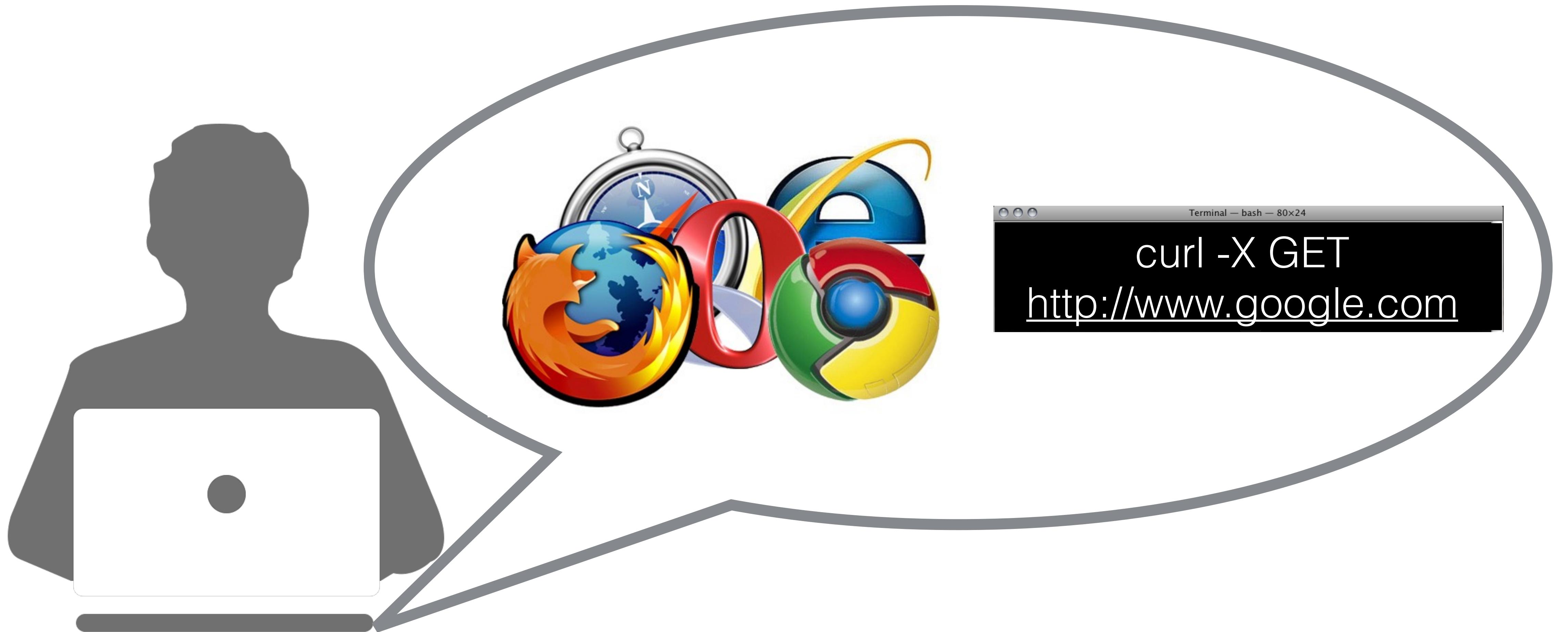
Your User

Makes requests

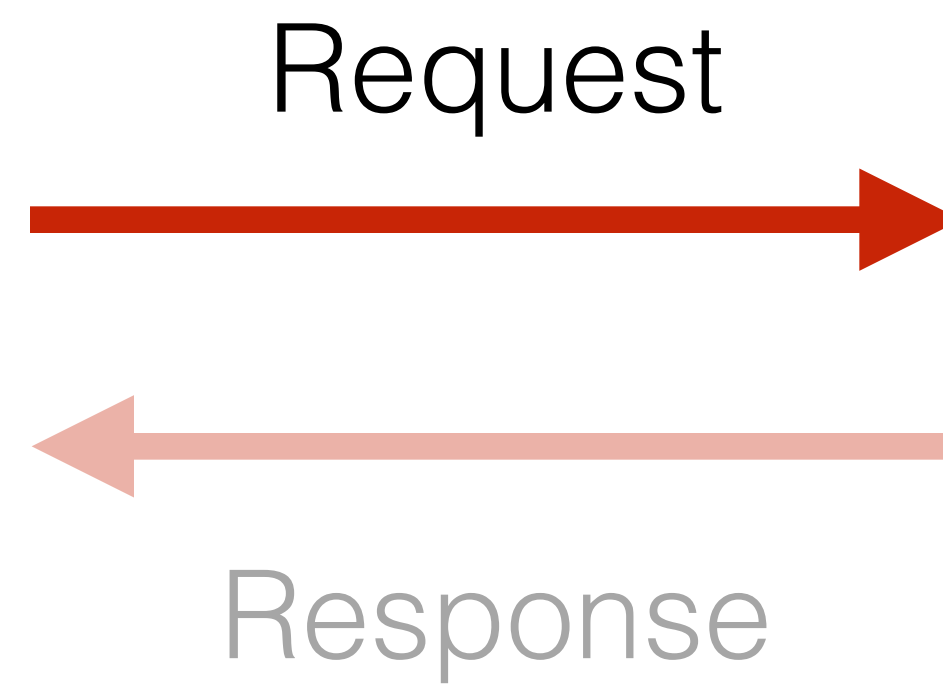
Typing in a url, form submissions, button clicks

Receives responses

Displays content



The Request



The Request

Made over HTTP

Uses the HTTP methods

Typically uses the Rest Paradigm

HTTP

Hyper Text Transport Protocol

Verbs:

Commonly Used

GET
POST
PUT
DELETE

Less Commonly Used

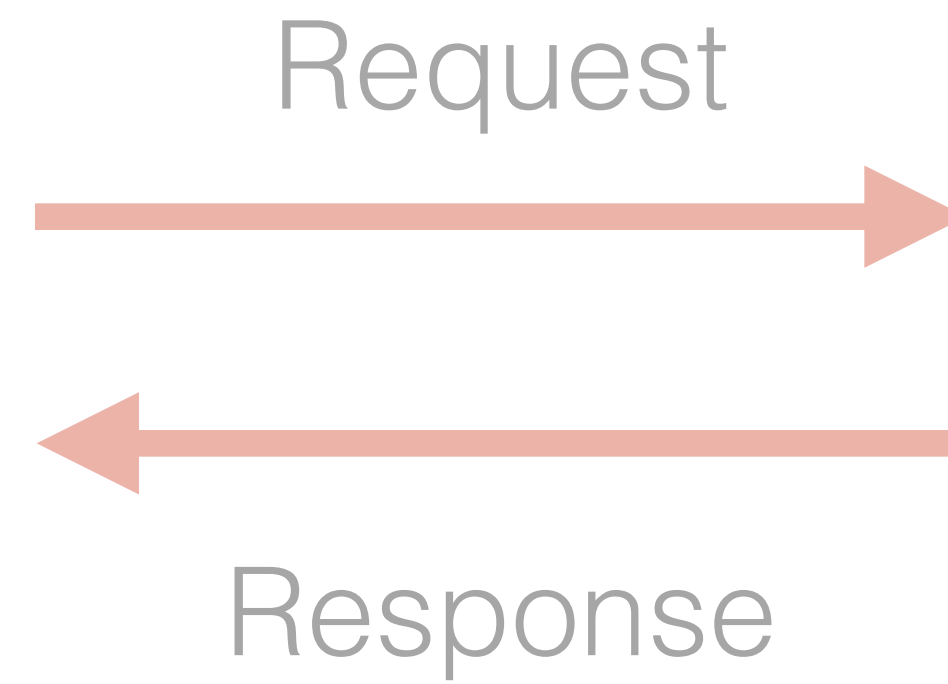
TRACE
CONNECT
OPTIONS
PATCH
etc.

REST

Representational State Transfer

Paradigm for how to use the HTTP protocol

The Application



What is a server?

Server(hardware) vs Server(software)

Place where the application is running

Accepts requests

Sends response

HTTP Middleware

Server (hardware)

Physical machine

Can have several programs/processes running on it

Server (software)

Program that will accept requests and send responses

‘Back end’

Responsibilities:

Talking to databases

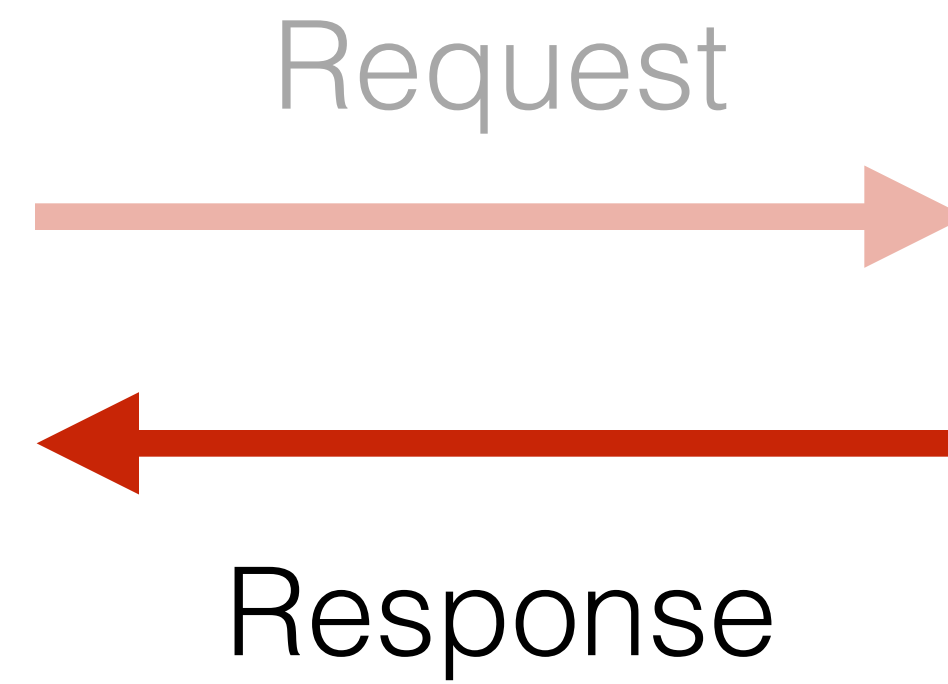
Keeping state

HTTP Middleware

Parses and sanitizes requests

Makes sending responses easy

The Response



Response

Generated by server (software)

Types of responses:

HTML page

Strings

JSON

Status codes

Also included in the response

Gives the users more information about the response

1xx - Informational Codes

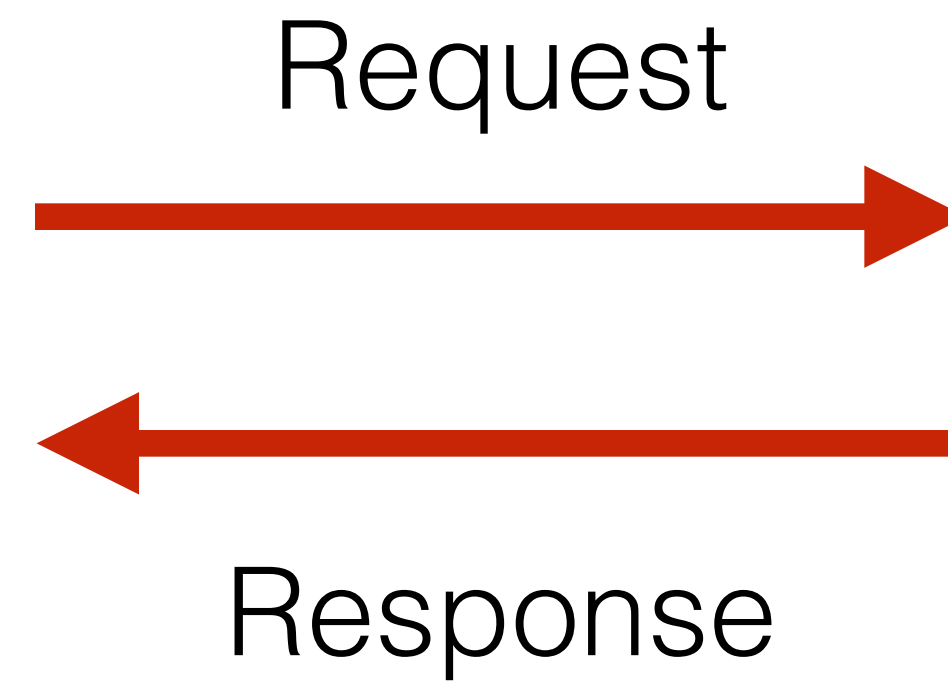
2xx - Success! Received! Understood!

3xx - Redirect

4xx - Client Error Detected

5xx - Server Error Detected

Your web application!



Lets write some code!

Example app in Python/Flask

<https://github.com/kaushal/localhackday>

Conclusion

Web development isn't that complicated

Data flow

Request/response

Use tools/frameworks

Ask for help!

Helpful links

Flask - <http://flask.pocoo.org/>

HTTP - http://en.wikipedia.org/wiki/Hypertext_Transfer_Protocol

HTTP status codes - <http://www.w3.org/Protocols/rfc2616/rfc2616-sec10.html>

REST - http://en.wikipedia.org/wiki/Representational_state_transfer

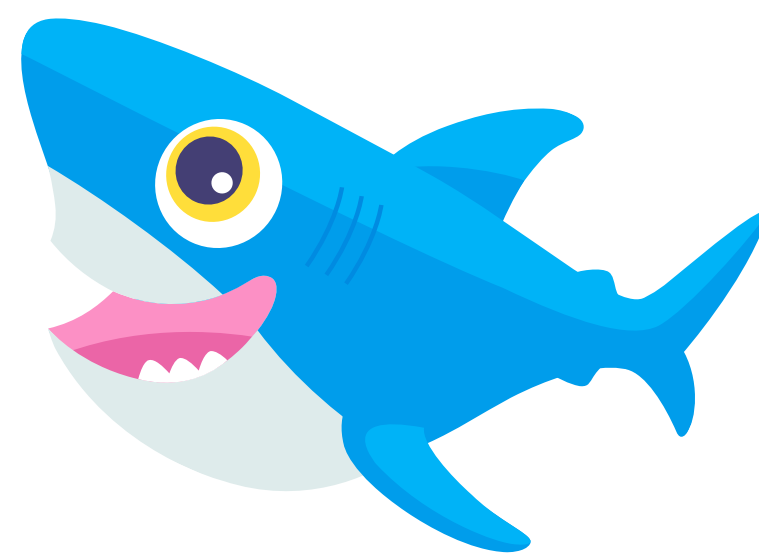
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The End.