

BITMAKER LABS

HTTP & Intro to Sinatra

What we're covering

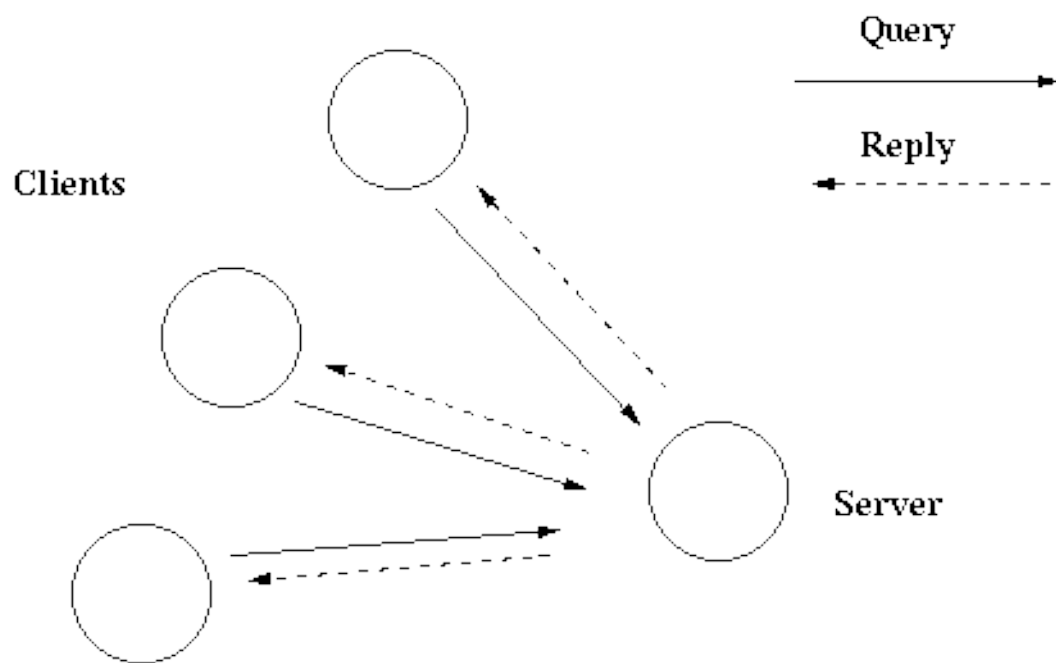
- HTTP & Requests and responses
- Request Methods
- “CRUD”
- Response Codes
- Sinatra

HTTP

HTTP (Hypertext Transfer Protocol) is a protocol that helps us define **how information should be passed around over the web**

How does information get passed around over the web?

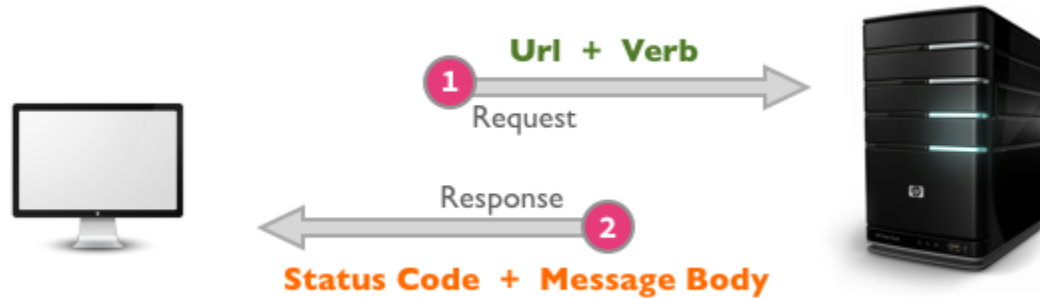
HTTP Requests & Responses



The Client-server model

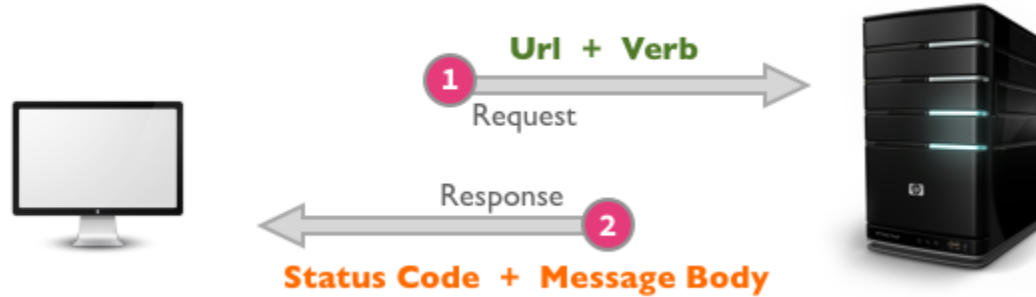
What's in a **request**?

- **URL** (Uniform resource locator): An address that helps us represent a particular resource
- **Request method** (like GET)
- Headers (Content-Type, etc.)
- *Sometimes* a body



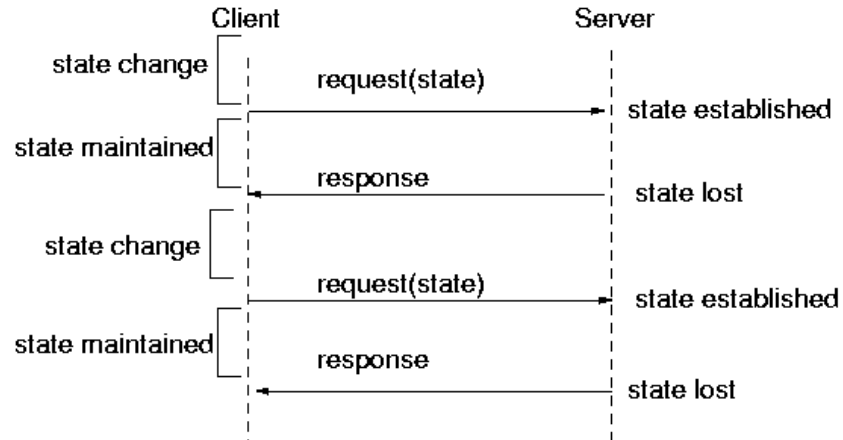
What's in a **response**?

- **Status code** (200 OK, 404 Not Found, etc)
- Headers
- **Body** (most of the time)



HTTP is **stateless**

- **State (or context) is never saved between requests**
- The server will forget who you are each time
- Each new request needs to provide the right context
- Can be solved with cookies



Request methods

An URL alone isn't enough to do everything we need to do on the web

We need an action / verb / method too!

The most popular ones:

GET: **fetch** data

POST: **create** data

PUT or **PATCH:** **update** data

DELETE: **delete** data

CRUD

These are the basic actions we do with data in a web application

- **CREATE**
- **READ**
- **UPDATE**
- **DELETE**

http://en.wikipedia.org/wiki/Create,_read,_update_and_delete

Response Codes

- **1xx**: Informational
- **2xx**: Successful
- **3xx**: Redirection
- **4xx**: Client Error
- **5xx**: Server Error

<http://www.w3.org/Protocols/rfc2616/rfc2616-sec10.html#sec10>

http://en.wikipedia.org/wiki/List_of_HTTP_status_codes