

# REST & APIS

Code 301

# REST

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"How I Explained REST to My Brother..."

-https://gist.github.com/brookr/5977550

### **REST CONCEPTS**

- ➤ REST:
  - ➤ Representational State Transfer
- ➤ HTTP:
  - ➤ Like GPS for knowledge; applying VERB to NOUN.
- > URL:
  - ➤ Points to the representation of a resource
- ➤ Web page:
  - > representation of some info in HTML



### **REST CONCEPTS**

- ➤ REST Verbs
  - ➤ Act on a "noun" resource (hint: your Models!)
  - ➤ GET: Fetch a resource (usually to display it)
  - ➤ POST: Send info about a new resource
  - ➤ PUT: Send info about changing a resource
  - ➤ DELETE: Remove a resource, duh.



# XML-RPC/SOAP



- Same method, varying endpoints:
  - ➤ GET /getComment
  - ➤ GET /getComments
  - ➤ GET /addComment
  - ➤ GET /editComment
  - ➤ GET /deleteComment

# RESTFUL ROUTES

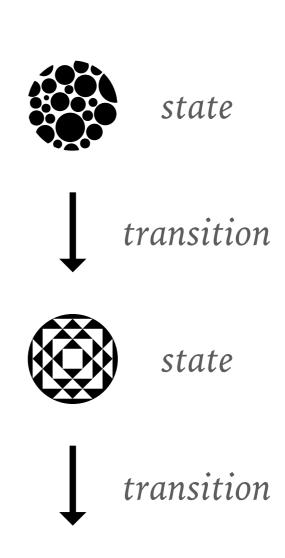
- ➤ HTTP method + resource:
- ➤ GET /comments/:id
- ➤ GET /comments
- ➤ POST /comments
- ➤ PUT /comments/:id
- ➤ DELETE /comments/:id
- ➤ Resource Oriented Architecture
- ➤ Methods address the same web-based **resource**

## RESTFUL ROUTES

- ➤ Each "endpoint" is a route, made of noun and verb.
- > HTTP is stateless
  - Requests do not have "memory"
  - ➤ No individual request may be assumed to know anything about any other request.
  - ➤ All the required information representing the possible actions to take should be present in every **response**.
  - ➤ Hypermedia: "Here's the thing you asked for, here's what you can do next"

# **APP STATE AND TRANSITION**

- ➤ GET:
  - ➤ asks for the current state
- ➤ POST/PATCH/PUT/DELETE:
  - changes the state



state