REST Review

* Representation State Transfer
* A convention for how to create your API
  + A standard that you want to adhere to
* Resources
  + A collection of objects (usually your entities. Usually persisted in a database)
* Representation of a resource
  + You do not send a Java Object
  + You send a JSON which represents that Java Object
    - Can be in XML
    - Or plain Text
* REST Naming conventions
  + A resource should be named in the plural
    - /drivers – represents all drivers
    - /drivers/25 – get me driver with id 25
    - /drivers/25/trips – get me all trips by driver 25
    - /drivers/25/trips/4- get me trip 4 by driver 25
* HTTP verbs are used to denote what should happen to a resource
  + /drivers
    - Get – get all drivers
    - POST – create a new driver
    - PUT – update an existing driver
    - DELETE – delete a driver

HTTP

* HyperText Transfer Protocol
  + Main protocol of the internet
  + All requests are guaranteed a response
* HTTP Request
  + URL – where you are sending the request
  + VERB – what you are doing
  + Body (optional)- any content/information you want to send
    - GET requests do not have a body
  + Headers – meta information
    - Authorization keys
    - Content type
* HTTP Response
  + Status code
    - 100’s - information
    - 200’s - successes
    - 300’s- redirects
    - 400’s – client side error
      * 404 – client requested resource that does not exist
    - 500’s
      * Server experienced an error while processing request
  + Headers – meta information
  + Body – contains content