RESTful Web API Design with Node.js

Saleh Hamadeh

Video 1.4

Identifying REST Resources



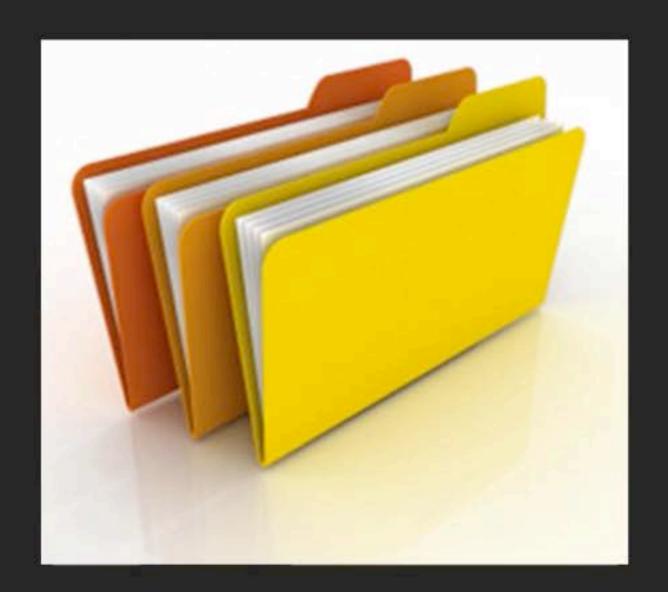
In this Video, we are going to take a look at...

- Collection
- Element
- Procedure



Collection

 A collection is a group of elements with the same representation





A Collection's Interface

A collection's endpoint, or HTTP URL path, ends with the collection's name

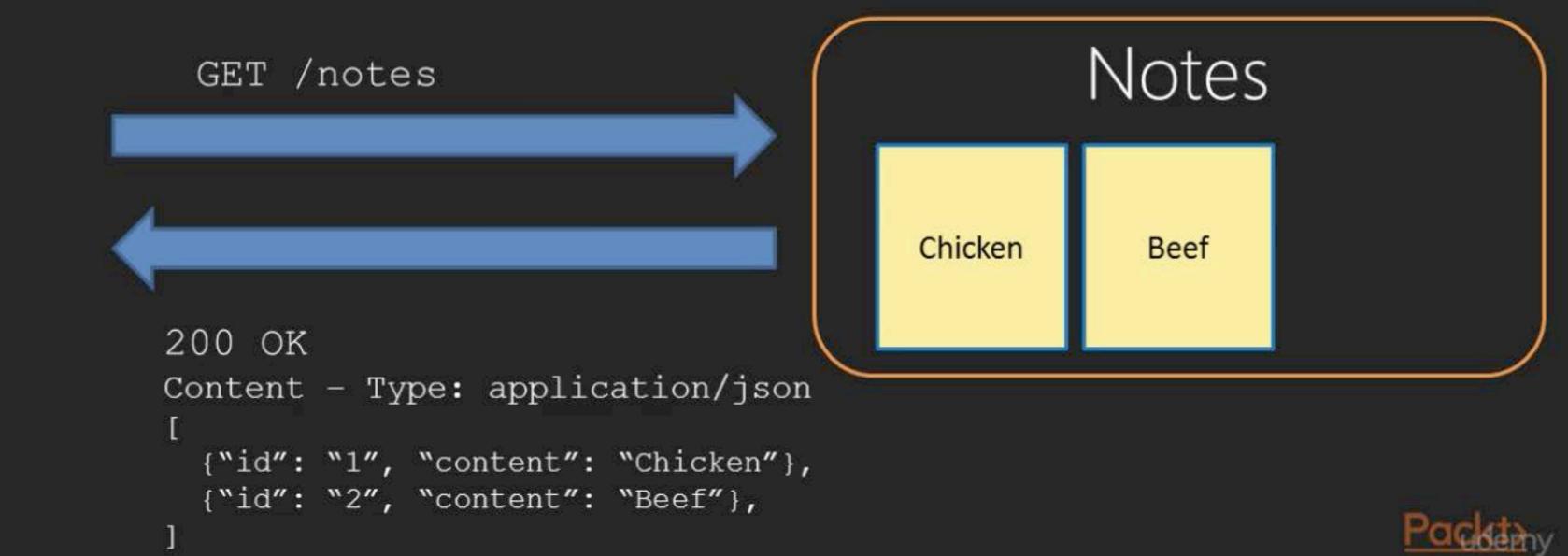


A Collection's Interface

- Collection endpoints support the following HTTP methods
 - GET
 - List the collection's elements
 - POST
 - o Insert an element to the collection
 - PUT
 - o Replace the entire collection with another collection
 - DELETE
 - Delete the entire collection



GET a Collection



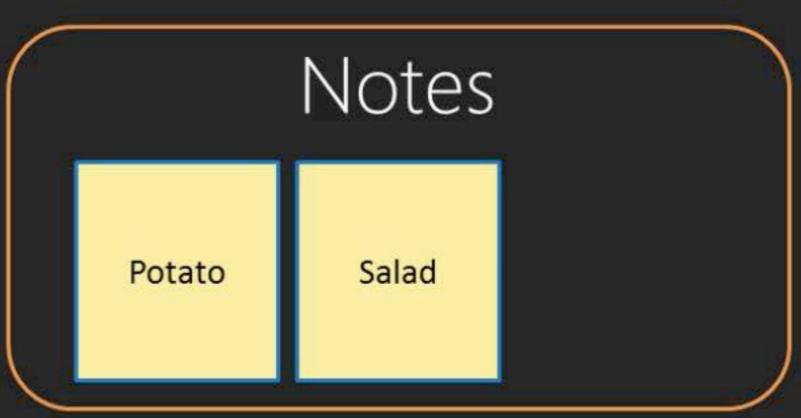
POST to a Collection

```
POST /notes
    "content": "Ham"
                                              Notes
                                                 Beef
                                      Chicken
                                                            Ham
201 Created
 "id": "3",
 "content": "Ham"
```



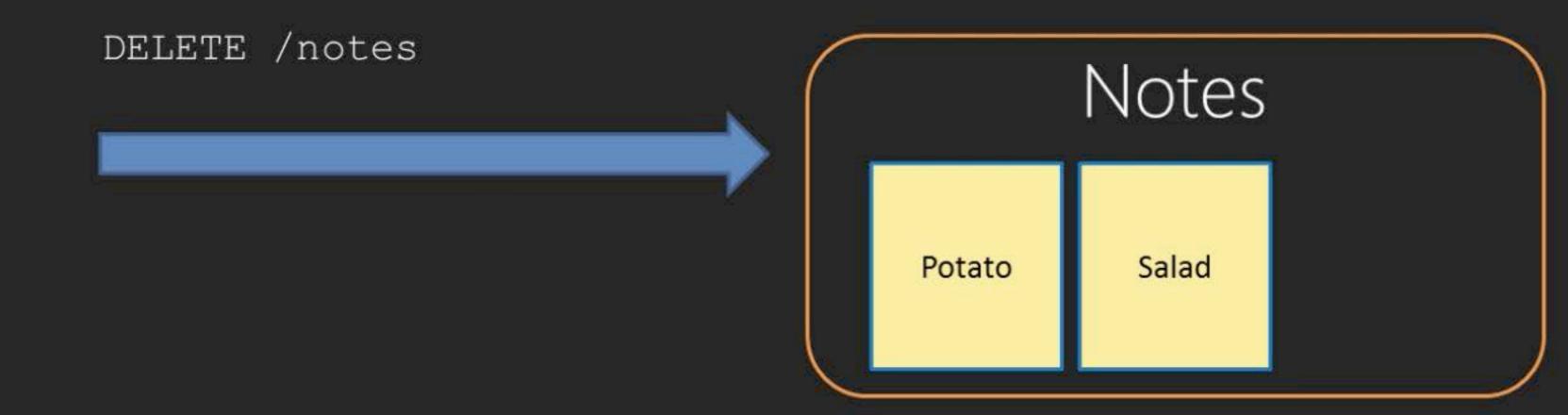
PUT a Collection

```
PUT /notes
 {"id": "100", "content": "Potato"},
  {"id": "101", "content": "Salad"}
  200 OK
```



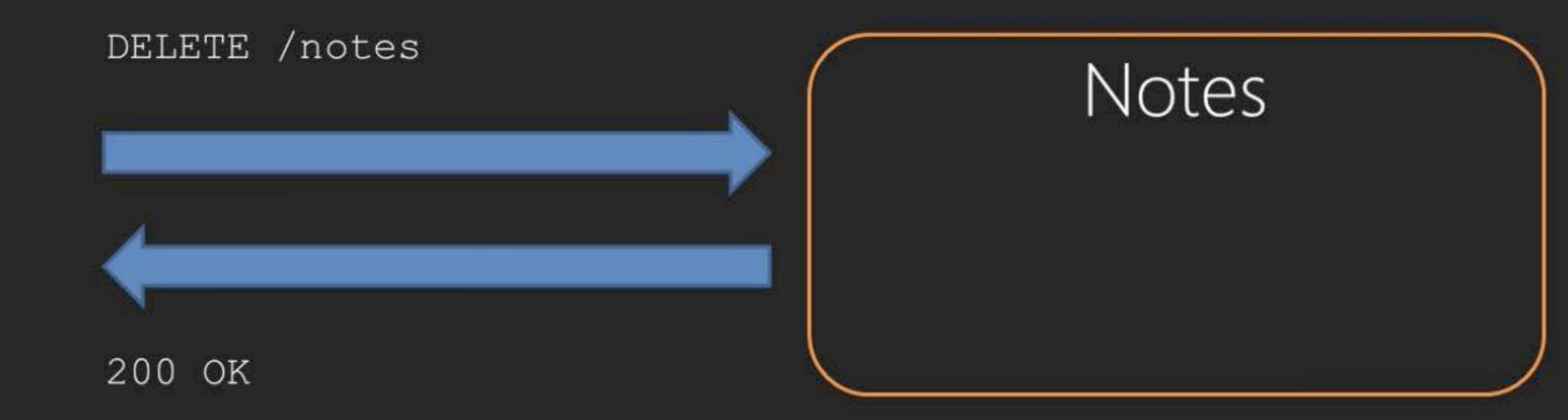


DELETE a Collection





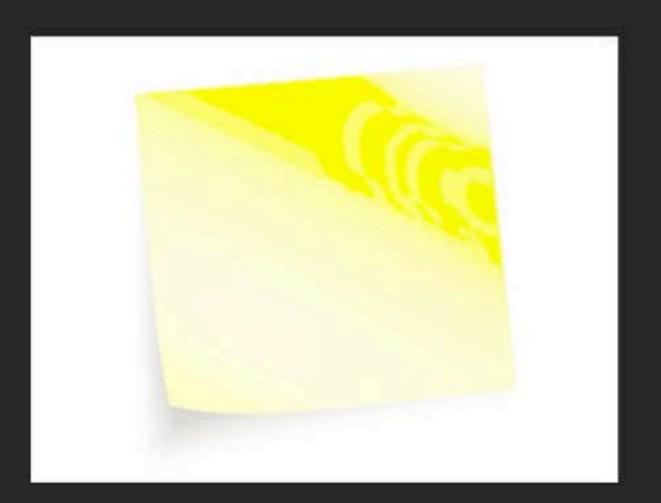
DELETE a Collection





Element

An element represents a single entity





An Element's Interface

- An element's endpoint, or HTTP URL path, ends with the element's ID
 - o /events/12345
 - o /user-500/messages/16



An Element's Interface

- Element endpoints support the following HTTP methods
 - GET
 - o Get the element
 - PUT
 - o Update the element
 - DELETE
 - o Remove the element from the collection



Remote Procedures

Remote procedures do not have a standard for naming their endpoints



Remote Procedures

- Remote procedures do not have a standard for naming their endpoints
- Rules of thumb:
 - Use verbs that describe the procedure that is being executed. For example, /search or /reply



Remote Procedures

- Remote procedures do not have a standard for naming their endpoints
- Rules of thumb:
 - Use verbs that describe the procedure that is being executed. For example, /search or /reply
 - Use GET for safe procedures and POST, PUT, or DELETE for unsafe procedures



Next Video

Properties of RESTful APIs

