

Reading Data



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This Module

Reading Data



URI Design

- Nouns are Good, Verbs are Bad
 - The problem:

/getCustomers	/saveCustomers
/getCustomersByName	/getCustomersByPhone
/getCustomersByContact	/getCustomersUsingPaging
/getNewCustomers	/getCurrentCustomers
/createNewCustomer	/deleteCustomer
/verifyCreditCredit	/removeOldInvoice
...	

URI Design

- URIs Should Point at Nouns (e.g. Resources)
 - Prefer Plurals

```
http://.../api/Customers  
http://.../api/Games  
http://.../api/Invoices
```

URI Design

- Use Identifiers to locate individual items in URIs
 - Does not have to be internal key...

```
http://.../api/Customers/123  
http://.../api/Games/halo-3  
http://.../api/Invoices/2003-01-24
```

Status Codes

- HTTP Defines Status Codes

Code	Description	Code	Description
200	OK	400	Bad Request
201	Created	401	Not Authorized
202	Accepted	403	Forbidden
302	Found	404	Not Found
304	Not Modified	405	Method Not Allowed
307	Temp Redirect	409	Conflict
308	Perm Redirect	500	Internal Error

Status Codes

- At a minimum, use Http Status Codes

Code	Description	Real Story
200	OK	"It Worked"
400	Bad Request	"You did bad"
500	Internal Error	"We did bad"

- Probably (but no more than about 10):

Code	Description
201	Created
304	Not Modified
404	Not Found
401	Unauthorized
403	Forbidden

Formatting Results

- Content Types

Type	MIME Type
JSON	application/json
XML	text/xml
JSONP*	application/javascript
RSS	application/xml+rss
ATOM	application/xml+atom

** Requires callback query parameter too: <http://.../customers?callback=foo>*

Demo

Your First Controller



Demo

Your First Route



Demo

The Data Model



Demo

Using GET for Collections



Demo

Seeding the Database



Demo

Getting an Individual Item



Going
Deeper

Web API Design

www.pluralsight.com/courses/web-api-design

What We've Learned

Reading Data

Routing can be attributed or declarative

Serialization should be separated from the controller

Circular serialization can be configured