Introduction to RESTful Web Services
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REST Easy

What is REST?

- Representational State Transfer
- Not a Standard
- Architectural Style
- Set of Principles or Design Pattern

Why REST?

- Everybody’s Doing It!
- WDNNSA
    - We Don’t Need No Stinkin’ Abstractions
- Simplicity
- Leverages Web Fundamentals

Evolved RESTful Principles

- URL / URI
  - Subjective
  - Simplicity
  - Nouns over verbs
  - “Hackable”
- HTTP Verbs
  - GET, POST, PUT, DELETE, HEAD, OPTIONS

REST Examples

- GET /orders
- GET /orders/45
- GET /customers/32/orders
- GET /customers/32/orders/15
- POST /orders
- PUT /orders/45
- DELETE /orders/45

Evolved RESTful Principles

- Status
  - 200 – OK
  - 201 – Created
  - 202 – Accepted
  - 401 – Unauthorized
  - 404 – Not Found
- Metadata
- Representations
- Hypertext/Hypermedia

.NET REST Clients

- System.Net.WebRequest
- Hammock
- RestSharp

Awesome REST Client Demo

Creating RESTful APIs

- MVC
- WCF Web API (currently Preview 4)
- OpenRasta
- Node.js

Even More Awesomer REST Server Demo

Resources

- Google + Nuget
- O'Reilly "RESTful Web Services" and "RESTful Web Services Cookbook"
- http://restpatterns.org
- "Build Truly RESTful API and website using same ASP.NET MVC code" on http://codeproject.com
- https://dev.twitter.com/docs
- http://wcf.codeplex.com/
- Roy Fielding's Dissertation

Thank You!

Email: david@reverentgeek.com
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(coming soon… er… someday)

Source Code
https://github.com/reverentgeek/RestSamples