Building RESTful Services Workshop
ITB Houston, Texas – 2017

Prerequisites
- Introductory-level fluency with the ColdBox Framework
- The latest stable version of CommandBox installed on your machine

Agenda
- Introduction - 30 mins
- REST core principles - 30 mins
- Break 10 mins
- RESTful Architectural Patterns- 90 mins
- Lunch - 60 mins
- Securing RESTful services - 30 mins
- Hands-On: API Scaffolding - 30 mins
- Break 10 mins
- Hands-On: Building and Documenting a RESTful API - 120 mins
- Closing/Wrap-Up

Introductions
- Participant introductions and expectations
- Discussions of previous API design/consumption experience
- Key terms and syllabus review

REST Core Principles
- What is REST?
- Statelessness
- Let HTTP do what it was designed to do
- Hypermedia – what is it and how can your API benefit

RESTful Architecture Patterns
- Routing patterns
- HTTP Dialect patterns
- Response patterns
- Data marshalling patterns
Securing RESTful Services

- Stateless Security
- HTTP security
- Token-based authentication
  - Static tokens
  - Dynamic tokens
  - Token generation and security
- OAuth authentication
- SSO authentication without state

Hands On: API Scaffolding

In this segment the user will learn how to scaffold API models, controllers, and interceptors using CommandBox scaffolding and the ColdBox REST template.

By the break, users will have a limited, but functioning API which can be built upon during the final 120 minutes of the class.

Hands On: Building and Documenting a Restful API

In this segment the user will choose a business problem to be solved out of a hat. Using the existing scaffold and applying the RESTful techniques from the workshop, the user will build and document, using Swagger/RELAX, a functioning API to solve this business problem.

By the end of the session, the participant will have built a functioning API which may be used for future reference and as a starter template for future API development.

Closing/Wrap-Up

- Discuss individual takeaways and “ah ha’s” from the session
- share contact information,
- gather feedback on the session