

Workshop: Fundamentals of Designing a Great REST API

This interactive workshop focuses on accelerating the API design process while avoiding costly mistakes and improving API adoption by partners and public developers.

The workshop involves the entire product development team, including: developers, technical writers, QA, operations, scrum masters, business software analysts, product owners, product managers, and business leaders.

Objectives

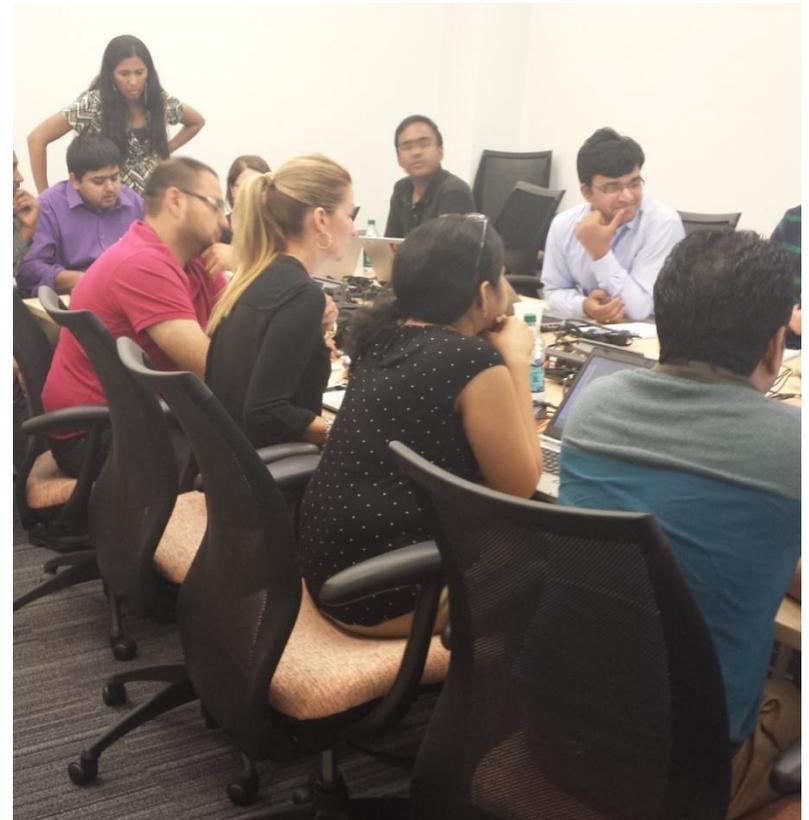
- Understand API fundamentals and adopting an API-centric strategy
- Examine successful business cases for a successful API strategy
- How to build a great API that developers will love
- Team-based API modeling and design that involves everyone, from managers to developers

Duration

1 and 2 day options available. The training is interactive with exercises will build on previous work, so it's important that all team members are able to attend the entire course. The pace is rapid, and there is substantial time dedicated to group discussion and assignments. It is recommended to avoid assigning job duties during this period.

Prerequisites

No current or prior software development skills are necessary. All exercises will be performed in groups, will involve all aspects of the software development life cycle, and will not require writing code. Laptops are recommended for the hands-on exercises.



Course Outline – Day One

Understanding APIs

- What is an API?
- API History and Evolution
- The Business of APIs

Principles of Modern Web APIs

- HTTP Primer
- What is REST?
- SOAP vs. REST

Thinking in Resources

- What is a Resource?
- Elements of a Resource
- Introducing Hypermedia

Course Outline – Day Two

Hands-on REST

- Tools for Interacting With APIs + Exercise
- Patterns for Third-Party API Integration
- Third-Party API Selection Criteria

Securing Your API

- Securing Data In Motion and At Rest
- Understanding OAuth

What Makes a Great API?

- Developer Experience: The New Standard
- 7 Key Traits of a Great API
- Evaluating APIs for Developer Experience

Modeling APIs

- What is API Modeling?
- 5 Steps of API Modeling
- Modeling Example and API Modeling Exercise

From Modeling to API Design

- Building Your Resource Taxonomy
- Finding Relationships, Composition, and Lifecycles
- Validating Design Through Documentation and Prototyping

Documenting Your API

- Using Swagger to Document Your API Definition
- Swagger Documentation Exercise
- Establishing Your Developer Portal

Testing Your API

- API Testing Strategies
- Tools For Testing APIs

Case Studies

“Project FinTech”

We recently completed a training program for over 1400 product team members in the financial industry to accelerate their top-down API strategy and API design best practices across multiple development centers. Our training program included customizations to meet their specific needs and culture. We completed the training 67% faster than their previous program and provided an API delivery process that is able to reduce delivery time of new APIs by nearly 50% when fully implemented.

“Project EDU”

A client in the digital education industry had received over 100 inquiries for a partner API over 3 months but were failing to deliver, resulting in lost revenue opportunity and the increased risk of losing customers. We partnered with their development team to coach them on the steps to productize their API effort and improve security. API design efforts were reduced by 300% over their previous process, and an API management layer was added for increased security of customer PII data.

“Project ETP”

A recent training engagement involved coaching recent graduates unfamiliar with web API design and implementation. We guided them from no previous experience to a fully designed and documented mobile API in 3 days. The design was reviewed with high praise for being a “complete and well thought out design” from their chief architect. We followed-up with extended collaboration and coaching sessions with product delivery teams, resulting in identifying new product revenue opportunities with the students.



To schedule your workshop, email: training@launchany.com or call: (512) 537-8493

