Great APIs

Drawn from Designing Great Web APIs by James Higginbotham

great APIs

Design first API process

API modelling
- User interface wire frames to drive API Design
- Identify the participants
- Identify the activities
- Separate activities into steps
- Identify the resources and candidate APIs
- Validate the API Model

API Detailed Design

API Design Details
- HTTP is request/response
- Build resource ontology
- Define URLs through relationships
  - Independent
  - Dependent
  - Associative
- Validating design through documentation and prototyping

Great APIs

Treat APIs as product
- Internal innovation
- Marketing channel
- Business development
- Lead generation
- User acquisition
- Upsell opportunity
- Device and mobile support
- Increased customer retention

Take an outside in design approachch
- Org structure leaks
- Database org leaks

Write great documentation
- Fomat
- Completeness

Intuitive and consistent design
- Consistent naming
- Consistent resource URLs
- Consistent payload formats
- Beyond APIs - Supporting workflows

Design for security at the start
- Authentication
- Authorisation
- Data leakage
- Always use TLS
- Important to Design with security

Share great code examples

Provide helper libraries

great APIs

- Great APIs
  - Drawn from Designing Great Web APIs by James Higginbotham
  - Treat APIs as product
    - Internal innovation
    - Marketing channel
    - Business development
    - Lead generation
    - User acquisition
    - Upsell opportunity
    - Device and mobile support
    - Increased customer retention
  - Take an outside in design approachch
    - Org structure leaks
    - Database org leaks
  - Write great documentation
    - Fomat
    - Completeness
  - Intuitive and consistent design
    - Consistent naming
    - Consistent resource URLs
    - Consistent payload formats
    - Beyond APIs - Supporting workflows
  - Design for security at the start
    - Authentication
    - Authorisation
    - Data leakage
    - Always use TLS
    - Important to Design with security
  - Share great code examples
  - Provide helper libraries
- API Design Details
  - HTTP is request/response
  - Build resource ontology
  - Define URLs through relationships
    - Independent
    - Dependent
    - Associative
  - Validating design through documentation and prototyping
- Design first API process
  - User interface wire frames to drive API Design
  - API modelling
    - Identify the participants
    - Identify the activities
    - Separate activities into steps
    - Identify the resources and candidate APIs

- Validate the API Model
- API Detailed Design