

API Experience is Developer Experience

Lorna Mitchell, Redocly

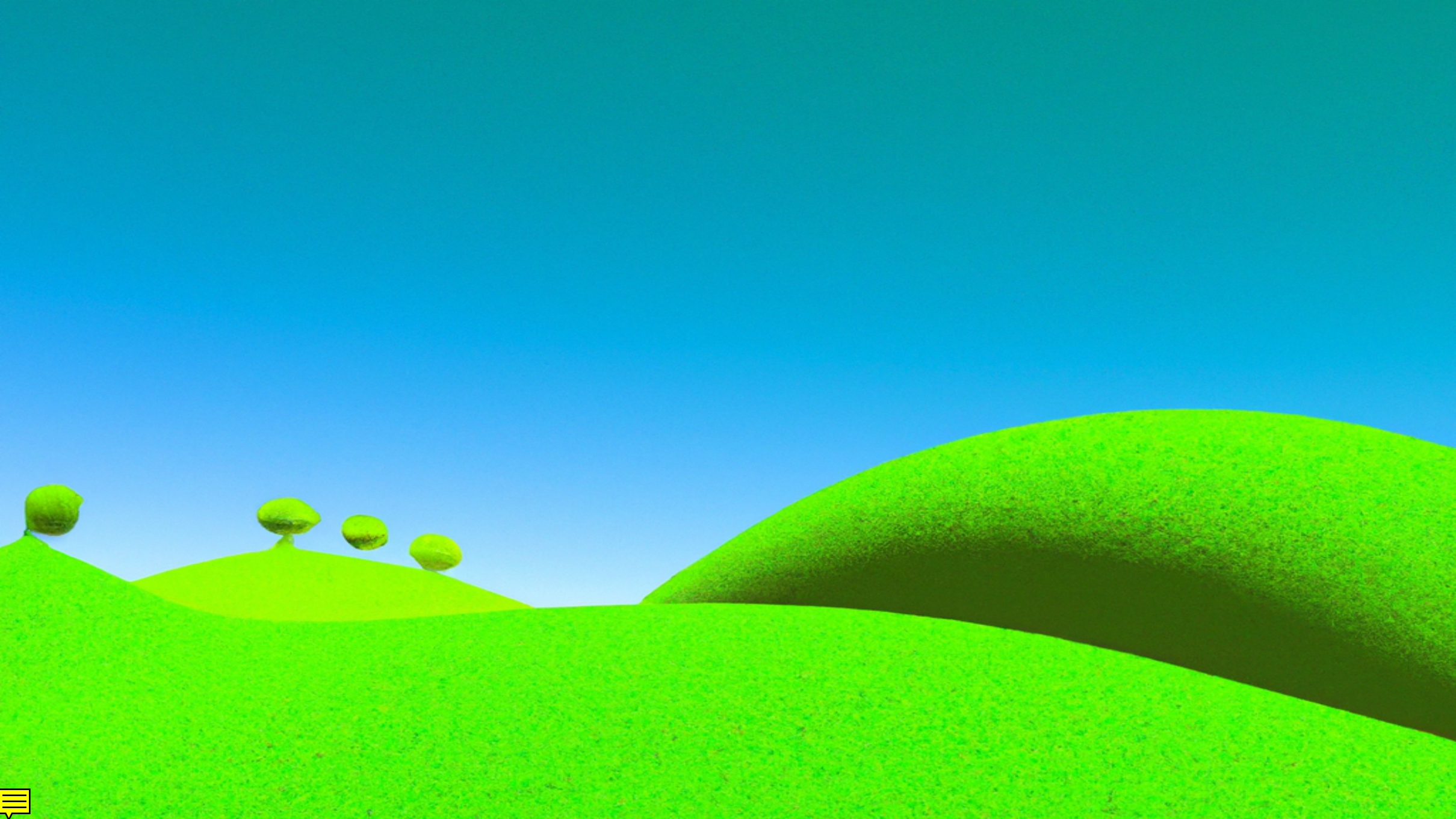
Postman State of the API report

Top concern: how well an API integrates with internal apps and systems.

<https://www.postman.com/state-of-api/>

API project pre-requisites

- API styles and governance
- Versioning and deprecation policy
- Change review process
- Tools to support the lifecycle



Start with standards

OpenAPI descriptions

A standard way to describe an API

- JSON/YAML format
- Endpoints and verbs
- Parameters and schemas
- Reuse elements with \$ref
- Responses, including error responses

<https://openapis.org>

OpenAPI example

```
openapi 3.0.1
servers
  - url http://datasette.local
  - url https://datasette.io
info
  description Execute SQL queries against a Datasette database and return
    the results as JSON
  title Datasette API
  version v1
paths
  /content.json
    get
      description Accepts SQLite SQL query, returns JSON. Does not allow
        PRAGMA statements.
```

Credit: <https://github.com/APIs-guru/openapi-directory>

API style guides

Covering style, compliance and other requirements

Existing guidelines, can you pick one?

- <https://apistylebook.com/design/guidelines/>

Create your own:

- <https://nordicapis.com/11-tips>

Process and culture

Proposing API changes

- Useful and timely feedback mechanisms
- Consider user needs, and existing conventions
- Think (very hard) about how things are named

Design-first APIs

Automate for success

Get tooling into CI/CD setup:

- Use linting to check API fits standards
- Create documentation previews
- Spin up mock servers

Encourage stakeholders to try the changed API

API experience at scale

API catalog

Central registry/marketplace/inventory

- All APIs are registered here
- OpenAPI descriptions
- Establish documentation conventions
- Team contact information
- Standards/readiness

API catalog



Home

Browse APIs

API scorecard

My Apps

Search the docs

Lorna Mitchell



Filter...

Capability Group

All

API Stage

stable (90)

draft (34)

beta (13)

API Status

deprecated (15)

active (122)

API Catalog

This is a description of the API Catalog

APIs (137)

Operations - Account Recovery

The ability to identify, articulate, assess, aggregate, monitor, communicate, and control (acce...

draft active Silver ⚠️

View documentation

Operations - ACH Operations

Ability to request, initiate, authorize, validate, record, execute and settle an instance of a...

stable deprecated Silver ⚠️

View documentation

Operations - Collateral Allocation Management

Ability to establish, organize, analyze, administer, and report on all aspects of property or other...

stable active Silver ⚠️

View documentation

Operations - Collateral Asset Administration

Operations - Collections

Ability to establish, organize, analyze, administer, and report on

Operations - Contractor and Supplier Agreement

API lifecycle tools

tl;dr <https://openapi.tools/>

OpenAPI linters

```
temp/petstore.yaml: validated in 23ms  
Woohoo! Your OpenAPI definition is valid. 🎉  
You have 3 warnings.  
lornajane@localhost: ~ $
```

- Programmatically check API description
- Validate
- Style checks
- Ensure awesomeness

API documentation

Docs are more than API reference!

- Overview
- Quickstart
- Tutorials
- Concepts

API documentation

The screenshot shows a dark-themed API documentation page. At the top, there is a navigation bar with the 'acme inc.' logo, links for 'Home', 'Browse APIs', 'API scorecard', and 'My Apps', a search bar containing 'Search the docs', and a user profile for 'Lorna Mitchell' with a moon icon for dark mode. A left sidebar contains a breadcrumb 'Back to API Catalog' and a tree view with categories like 'Operations - Customer Case', 'Echo', 'User', and 'Tag'. The 'User' category is expanded to show 'Get user by user name' (highlighted in green), 'Updated user' (in pink), and 'Tag'. The main content area is titled 'Get user by user name' and includes a description: 'Some description of the operation. You can use `Markdown` here.' Below this is a 'Security' section showing 'OAuth2: main_auth or API Key: api_key'. A 'Request' section is expanded to show 'PATH PARAMETERS' with 'username' (string, required) and 'QUERY PARAMETERS' with 'pretty_print' (boolean) and 'with_email' (boolean). On the right, a modal window is open, showing 'Request' and 'Response' tabs. The 'Request' tab is active, displaying a 'Target server' dropdown set to 'https://www/api/v1 - Default', a 'tenant' field with 'www', and a 'Your tenant id' field. A 'Security' section in the modal shows a 'Security scheme' dropdown set to 'main_auth', a 'Client ID' field with 'Your OAuth2 app Client ID', and 'Scopes' with 'Select all' and 'Clear' buttons. At the bottom of the modal, there is a green 'GET' button and a red 'Send' button, with the endpoint '/users/{username}' displayed between them.

Transform OpenAPI

When your OpenAPI input isn't complete enough for all its outputs, enhance it.

Emerging tools:

- OpenAPI overlays specification
- Redocly decorators feature

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API Lifecycle DevX

Resources

- <https://lornajane.net>
- <https://redocly.com>
- <https://openapi.tools>
- <https://www.postman.com/state-of-api/>
- <https://apistylebook.com>
- <https://github.com/APIs-guru/openapi-directory>