# API Experience is Developer Experience

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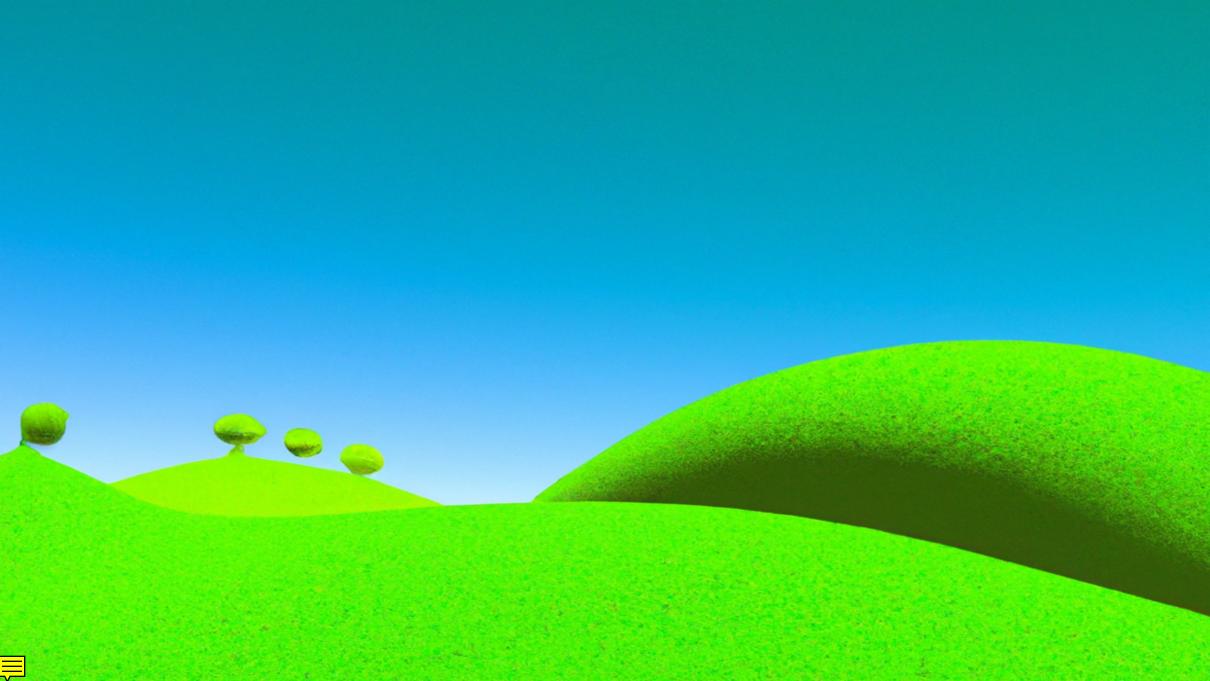
#### Postman State of the API report 2023

Top decision factor: 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

### Design API governance

Start with an existing ruleset

### Designing rulesets

- Level 0: Is the document valid?
- Level 1: Does it meet basic (compliance) standards?
- Level 2: Is it consistent with the rest of the API?
- Level 3: Is it a joy to work with?

### Process matters

# Proposing API changes

Use a source control workflow

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

#### Automate for success

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

#### **API Council**

Bring key API contributors together for every review:

- Would you want to use this API?
- Is the naming sensible and intuitive?
- Is the change consistent with the existing API?

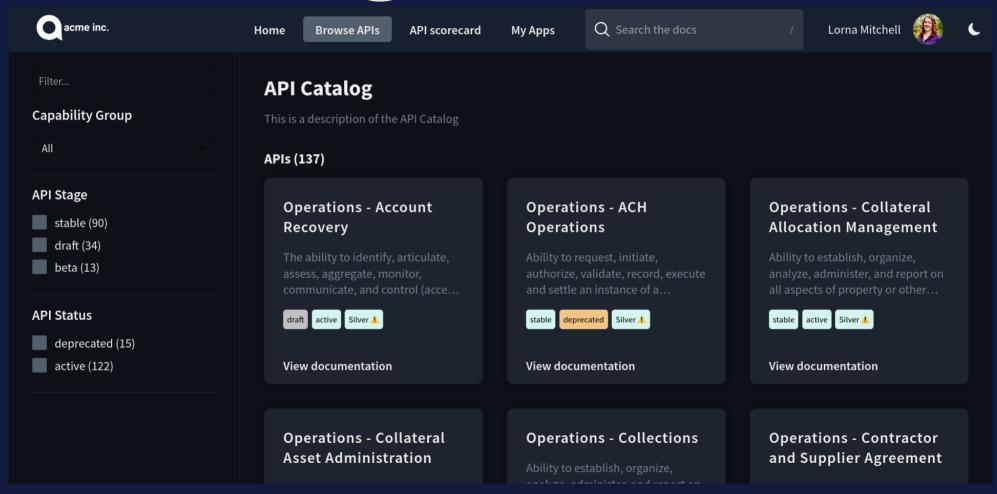
### API experience at scale

### API catalog

Central registry/marketplace/inventory

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

# API catalog



### API lifecycle tools

tl;dr https://openapi.tools/

### API lifecycle tools

- Linting, standard rulesets or make your own
- Documentation, build a preview of proposed changes
- Mock servers, try before you build
- Extensions, improve an existing description
- SDKs, improve developer onboarding

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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://github.com/APIs-guru/openapi-directory