

Designing API Resources

Introduction

Resources should be Nouns

Resources of an API

Revolves around
Business Entities

Needn't be based on
physical data

Should be nouns and
not verbs

Resources should be Nouns

Customer Resource:

customers

GetAllCustomers

GetCustomerById

Order Resource:

orders

GetOrders

GetOrderByName

STEP 4: Identify the Resources

Resources should be Collections

Resources should be Collections

Collection is a
separate resource from
the item

Collection as a Separate Resource

/customers

/customers/10

/orders

/orders/34

Resources should be Collections

Collection is a
separate resource from
the item

Each item in collection
to have unique URL

Collection Items

/customers

/customers/10

/customers/15

/customers/47

/orders

/orders/34

/orders/98

/orders/433

Resources should be Collections

Collection is a
separate resource from
the item

Each item in collection
to have unique URL

Use plural nouns for
URLs

Resources to be Plural

/customers

/customer

/Customers

Resources should be Collections

Collection is a
separate resource from
the item

Each item in collection
to have unique URL

Use plural nouns for
URLs

Use hyphens for
multiple words

Resources to be Plural

/customers

/customer

/Customers

/elite-customers

STEP 5: Have the Resources as Plural

STEP 6: Define the Resource Models

Use Unique Identifiers

The identifiers used in the API must be unique.

Unique Identifiers

College Resource:

- College ID
- ID
- College Name (unique)

Examples:

/colleges/12

/colleges/psgtech

STEP 7: Select the Identifier for Each Resource

Non-resource Data should be Query Parameters

Non-resource Data's

- Filter
 - Example: `/colleges?type=engineering`
- Sort
 - Example: `/colleges?sortBy=collegeName`
- Pagination
 - Example: `/colleges?page=10&size=20`

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Summary