ONE PAGE SUMMARY

IT & Software › API Development › REST API Design

Introduction to REST API Design

Master the essentials of REST API design for seamless integration.

DEFINITION

> REST API design is a method for creating web services that allow different applications to communicate over the internet. It uses standard HTTP methods and principles to ensure simplicity and scalability.

KEY CONCEPTS

Resources

In REST, resources are the key entities that clients interact with, identified by URLs.

HTTP Methods

REST APIs utilize standard HTTP methods like GET, POST, PUT, and DELETE to perform operations on resources.

Statelessness

Each API call is independent; the server does not store client context between requests.

JSON Format

Data is commonly exchanged in JSON format, which is easy for humans to read and machines to parse.

Versioning

APIs should be versioned to manage changes and maintain compatibility with existing clients.

EXAMPLES

→ GET /users retrieves a list of users.

→ POST /orders creates a new order.

→ DELETE /products/123 removes the product with ID 123.

MEMORY TIPS

★ Remember 'CRUD' for Create, Read, Update, Delete operations.

★ Think of REST as 'Representational State Transfer' to recall its purpose.

★ Use 'URL' to remember that resources are identified by unique links.

COMMON MISTAKES

✗ Neglecting to use proper HTTP status codes.

✗ Not following REST principles, leading to poor API design.

✗ Failing to document the API endpoints and usage.

QUICK RECAP

REST API design focuses on creating efficient web services using standard protocols. Key principles include statelessness, resource identification, and proper use of HTTP methods.