

## REpresentational State Transfer (REST)

- REST is an architectural design constraint that enables efficient communication between systems over HTTP.
- It is “representational” because resources are identified and manipulated through their representations, typically via a Uniform Resource Identifier (URI).
- A REST API typically involves:
  - Resource (URI)
  - HTTP method (GET, POST, PUT, DELETE)
  - Representational format (JSON or XML)

## How REST API Works

- Client sends a request to a specific URI, using an HTTP method.
- The request is sent to the server.
- The server processes the request and returns a response.
- The response contains the representation of the resource (in JSON/XML).

## RESTful API

- An API is RESTful if it follows REST principles:
  - Resource identification via URI
  - Stateless communication
  - Actions are represented via HTTP methods (not in the URI path)