What is REST API

REST (Representational State Transfer) API is an architectural style that defines a set of constraints to be used for creating networked applications. It relies on HTTP protocol and provides methods for HTTP verbs, such as GET, POST, PUT, DELETE, etc. The REST API relies on the concept of "resources", which are identified by URIs (Uniform Resource Identifiers) and can be accessed using standard HTTP methods. REST API's have several advantages, including: Statelessness: Each request from a client to a server must contain all the information needed to understand and process the request. The server cannot store any information about the client's state between requests. Client-Server: The client-server model separates the user interface concerns from the data storage concerns, resulting in systems that are more scalable and maintainable. Cacheable: The REST API can use the HTTP cache to cache server responses. This can improve the performance of the system by reducing the number of requests to the server. Layered System: The architecture of a REST API allows it to be composed of multiple layers, each of which is independent of the others. This enables greater flexibility in the system design and allows for the implementation of additional features, such as load balancing and security

## Types of API protocols

- REST API. REST (short for Representational State Transfer) is a web services API.
- SOAP API. SOAP (simple object access protocol) is a well-established protocol, similar to REST in that it's a type of Web API. ...
- RPC API. ...
- Event-driven APIs, aka asynchronous APIs.

In 2000, Roy Fielding and a group of developers decided to create a standard so that any server could talk to any other server. He defined REST and the architectural constraints explained above in his 2000 Ph. D. dissertation at the University of California, Irvine.