The web service is a software component that it is accessible via standard web protocol (HTTP or HTTPS) and is designed to communicate with other programs rather than directly with users.

Formats

The web services can provide data using different formats, but the most commons are XML and JSON these standard text-based formats can be parsed easily with any function in any other programming language that can help with interoperability between software applications.

Protocols
The other most common protocol is REST is a design style for protocols, it was developed by Roy Fielding in his Ph.D. dissertation and formalized the approach behind HTTP/1.0, finding what worked well with it, and then using this more structured understanding of it to influence the design of HTTP/1.1. So, while it was after-the-fact in a lot of ways, REST is the design style behind HTTP.

During this program, we are going to focus on RESTful APIs:

A RESTful API is an application program interface (API) that uses HTTP requests to GET, PUT, POST and DELETE data.

API

An API is a specific set of commands and guidelines used for accessing data, while a web service is an actual service provided by an Internet-based source

Upcoming plan to build web service with private blockchain
Configure API web service with GET/POST endpoints
Build and deploy local web service with Node.js
Configure API endpoints with static mock data for testing
GET - Block by ID
POST - New Block

Migrate your private blockchain to your API web service
Configure API endpoints to interact with your private blockchain
GET - Block by ID
POST - New Block
Create a method to validate blockchain health

here's how a simplified client-server request and responding to a blockchain web service:

Client: Web front-end
Consume and interact with backend services
Endpoints
Get - Block by ID
Post - New blocks
Server: Backend RESTful service
Server client side requests
Endpoints
Get - Block by ID

Post - New block

Node.js Framework:

Express , Hapi , Sails

Created by Mohamed Abdel Nasser