REST API

1. What`s the REST?（Zhen Zhang）

The whole name called **Re**presentational **S**tate **T**ransfer, and people usually call it ReSt.

Distribution in the resource identified by the URI(Uniform Resource Identifier), and the client application URI to obtain a representation of a resource. These features make these applications has changed status. Get more and more URI representation, the client API will change state.

It is a way for Web application design and development. Also, it`s a design style not a stander. HTTP URL XML are standers or protocol.

Important: resource is not a data in REST, it`s data and expression.

Other way to explain: Zhen`s first book and Zhen`s selling book. The data might has same call “Zhen” and “Book”, but the expression it`s different.

1. Where we use it? (ying ming)

Stateless, client-server. In many cases, HTTP protocol will be used. Client server and http, we always see and use in many places.

REST is more easy and simple to develop between XML-RPC and SOAP.

http is Hypertext Transfer Protocol, and HTTP is the foundation of data communication for the World Wide Web. As we learn from those sentences that mean it`s kind like a documentation, if we wanna use the web to develop or loading we should have http Protocol. For example, world wide web it`s an airport, and guests are data or information, and http it`s the Custom.

Amazon.com `s books source and yahoo`s web server both use REST.

1. URI（Zhen Zhang）

Roy Fielding believes, "Well-designed Web application performance for a series of Web pages, the State of the virtual machine can be viewed as a Web page, users select the link led to a page to the user and side shows to the people, which represents the State of the transition.”

Manipulation of resources including access, create, modify, and delete resources, which corresponds to HTTP protocol provides GET, POST, PUT, and DELETE methods.

GET is get

POST is update

PUT is create

DELETE is delete.

It`s kind like URL. And the easy way to get point that operate resource representation to operate resource.

For example

the array resource like http://learn.com/ resource/.

The single like http://learn.com/ resource/userID123/123.

1. What`s good and bad with REST API? (ying ming)

The main advantage is that you do not need to make their own rules-but rely on a defined, almost perfect run in the global scope, and rules that can be understood by most people.

Example with amazon products. They have thousands and thousands items. If they don’t have URI, how people can remember that.

Also it kind like a URL, so Server response more efficient.

Each URL represents a resource, and the entire system is made up of the resource

Bad way it`s all the user needs is an abstract as a resource, sometime it`s hard to do that.

Reference

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