

2023-04-26-be-mountain

Week 13 Research

Cody Schliebe

Web APIs

A web API (application programming interface) is a set of functions that allow programmers to acquire and use features or data from an application using the HTTP protocol.¹ This can function to extend a web browser to include functionality not inherent to the browser. For example, Twitter has an API that allows web developers to include tweets from a Twitter user on their page, displayed with the same appearance and formatting as if you were viewing it on Twitter.²

REST

REST, or REpresentational State Transfer, is a style of architecture that makes it easy for computer systems on the web to communicate by providing standards between those systems. When a system is REST-compliant, it's called a *RESTful* system. They are characterized by being stateless and by separating the concerns of the client and server. Stateless means that the server doesn't care what state the client is in, and vice versa. Separation of client and server means that work can be done on both sides—code can be changed on the client side and code can be changed on the server side, but as long as the message that passes between them remains in the correct format, it doesn't matter. Clients send requests to the servers using HTTP verbs to retrieve (GET) or modify (PUT) data, and the server sends an appropriate response letting the client know if the request was successful or not. When you use Google to search for something, Google doesn't care if you're using Firefox, Netscape, or a browser that you made yourself, and your browser doesn't care if Google has reworked how results are displayed or the method used to filter those results.³

1 <https://geeksforgeeks.org/what-is-web-api-and-why-we-use-it/>

2

https://w3schools.com/js/js_api_intro.asp#:~:text=What%20is%20Web%20API%3F,functionality%20of%20a%20web%20server.

3 <https://codecademy.com/article/what-is-rest>

