

Chapter 1 – Web Research

World Wide Web Consortium (W3C)

In October 1994, Tim Berners-Lee started the World Wide Web Consortium after many companies urged him for a consistent architecture due to rapid pace of investment of websites, browsers, and devices.

At this time, only organizations can become members of W3C. There are no individual memberships available. Membership fees range from \$953 to \$77,000 annual depending on annual revenue and which country the organization resides in.

W3C offers an API (<https://github.com/w3c/w3c-api/>) that allows users to interact with W3C's data; such as Specifications, Groups, Organizations, and Users. The API is read-only hence why it only allows the "GET" method (<https://api.w3.org/doc>). The callback will return success (200), unauthorized (403), or not found (404) responses. The successful responses provide JSON formatted data in key/value pairs.

Internet Society

The Internet Society was founded in January 1992 with the mission to "support and promote the development of the Internet as a global technical infrastructure, a resource to enrich people's lives, and a force for good in society."

The closest chapter is the US San Francisco Bay Area Chapter located in San Francisco, California. Current and past projects involve increased access to the internet for rural and Native American tribes in San Diego County and increasing broadband internet to rural/urban locations throughout the state. See more about their projects here: <https://www.sfbayisoc.org/projects-overview/>

Individual and organization members are available. As an individual member, you'll have access to courses, events, and view how your contributions impact others. All skill types are welcomed and if you are interested in helping the Internet Society meet their mission, it's recommended to join.

HTTP/2

The Internet Engineering Task Force (IETF) developed the plans for HTTP/2 in 2012 and were published on May 2015.

These three methods were introduced with an intent to decrease latency and quicker loading of web pages in browsers:

1. Multiple Concurrent Requests – HTTP/2 will allow multiple concurrent requests (over HTTP/1.1's parallel requests).
2. Header Size Reductions – The algorithm and compression of the header request allows for faster loading (as compared to HTTP/1.1's plain text request).
3. Server Sending Resources Before Requests – HTTP/2 allows the server to push resources to the client even before the client requests it. This reduces the round trip of calls and data transfer. Examples of where the server can be proactive are with sending HTML, CSS, JavaScript, and images.