

≡ Hide menu

Introduction to the Professional Certificate

How the web works

Core internet technologies

- Video:** Introduction to Internet Protocols
4 min
- Video:** Introduction to HTTP
7 min
- Reading:** HTTP examples
10 min
- Video:** Intro to HTML, CSS and Javascript
4 min
- Reading:** Other Internet Protocols
10 min
- Video:** Webpages, Websites and Web Apps
2 min
- Practice Assignment:** Knowledge Check - The Web and the Internet
21 min
- Video:** Developer tools
3 min
- Reading:** Exercise: Examine a web page
10 min
- Practice Quiz:** Self -review: Examine a Page
5 min
- Reading:** Exercise: Edit a website using a browser developer tools
10 min
- Video:** Frameworks and libraries
5 min
- Video:** APIs and services
4 min
- Video:** What is a an IDE?
3 min
- Reading:** Setting up your local development environment
10 min
- Reading:** Visual Studio Code on Coursera
10 min
- Practice Assignment:** Knowledge Check - Core Internet Technologies
12 min
- Video:** Module Summary - Get started with Web

HTTP examples

This reading explores the contents of HTTP requests and responses in more depth.

Request Line

Every HTTP request begins with the request line.

This consists of the HTTP method, the requested resource and the HTTP protocol version.

GET /home.html HTTP/1.1

In this example, **GET** is the HTTP method, **/home.html** is the resource requested and HTTP 1.1 is the protocol

HTTP Methods

HTTP methods indicate the action that the client wishes to perform on the web server resource.

Common HTTP methods are:

HTTP Method	Description
GET	The client requests a resource on the web server.
POST	The client submits data to a resource on the web server.
PUT	The client replaces a resource on the web server.
DELETE	The client deletes a resource on the web server.
PATCH	The client partially updates a resource on the web server.

HTTP Request Headers

After the request line, the HTTP headers are followed by a line break.

There are various possibilities when including an HTTP header in the HTTP request. A header is a case-insensitive name followed by a **:** and then followed by a value.

Common headers are:

```
1 Host: example.com
2 User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10.9; rv:50.0) Gecko/20100101 Firefox/50.0
3 Accept: */*
4 Accept-Language: en
5 Content-type: text/json
```

- The **Host** header specifies the host of the server and indicates where the resource is requested from.
- The **User-Agent** header informs the web server of the application that is making the request. It often includes the operating system (Windows, Mac, Linux), version and application vendor.
- The **Accept** header informs the web server what type of content the client will accept as the response.
- The **Accept-Language** header indicates the language and optionally the locale that the client prefers.
- The **Content-type** header indicates the type of content being transmitted in the request body.

HTTP Request Body

HTTP requests can optionally include a request body. A request body is often included when using the HTTP POST and PUT methods to transmit data.

```
1 POST /users HTTP/1.1
```