Making Web Requests with HTTP

The Hypertext Transfer Protocol (HTTP) is the protocol used for transmitting hypertext over the World Wide Web. It is the foundation of any data exchange on the web and it is a protocol used for transmitting hypertext requests from clients (like a user's browser) to servers, which respond with the requested resources.

1.1 HTTP Requests

An HTTP request is made up of several components:

- **Method**: The HTTP method, like GET (retrieve data), POST (send data), PUT (update data), DELETE (remove data), etc.

- **URL**: The URL of the resource to retrieve, send data to, update or delete.

- **Headers**: Additional information about the request or response, like the content type of the body.

- **Body**: The body of the request, used when sending data in POST or PUT requests.

1.2 Using HTTP with Web-Based APIs

Software developers often use HTTP to interact with web-based APIs. An Application Programming Interface (API) is a set of rules that allows programs to talk to each other. The developer creates the API on the server and allows the client to talk to it.

When a developer makes a request to an API endpoint, they're asking the server to either send them some data or receive some data from them. The response from the server will often be in a format like JSON or XML, which the developer can then use in their own application.

For instance, a developer might make a GET request to '`https://api.example.com/users`' to retrieve a list of all users. The server would respond with a list of users in a format like JSON.

This is a draft chapter from the Kontinua Project. Please see our website (`https://kontinua.org/`) for more details.

Answers to Exercises

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