Discussion 9.1 Web API’s

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Web Application Programming Interfaces or APIs according to MDN Docs “are constructs made available in programming languages to allow developers to create complex functionality more easily.” (*Introduction to Web APIs - Learn Web Development | MDN*, 2023) It will also give you easier code to use instead (*Introduction to Web APIs - Learn Web Development | MDN*, 2023). MDN Docs also suggests that it is easier to use JavaScript or Python that are high level languages over using low level code like C++ which you could write APIs in either. (*Introduction to Web APIs - Learn Web Development | MDN*, 2023)

There are many types of tools for APIs that you can use. JavaScript is the language that is already inside web browsers and it lets you create web pages or applications. (*Introduction to Web APIs - Learn Web Development | MDN*, 2023). There are also Browser APIs that is also build inside the browers which “sits on top of the JavaScript language and allows you to implement functionality more easily. (*Introduction to Web APIs - Learn Web Development | MDN*, 2023)There are also Third party APIs that are built inside Twitter or Facebook that make it so you can insert your posts onto a web page.

Web Application Programming Interfaces will let you be able create websites and make them look good among many other great things. Here is an image of the list MDN Docs provides of the web APIs that are available.

A screenshot of a computer screen

Description automatically generated with medium confidence

(*Web APIs | MDN*, 2023)

Web API’s are essentially used for creating the documents that make up the web pages. MDN States “The most obvious example is the DOM (Document Object Model) API.” (*Introduction to Web APIs - Learn Web Development | MDN*, 2023)This has been used on pretty much all of our assignments. They are also used to fetch the data you want from servers.

One way of testing a Web API is using a tool that automatically tests for capability called Leverage automation. (Katalon, n.d.) There are other tools called API testing which is used without the GUI (Katalon, n.d.) There is Simple Object Access Protocol and Representational State Transfer.

REST or Representation State Transfer is a way for testing web APIs. It is a guide and once these conditions are met it can be considered RESTful (*What Is REST*, 2022). There are four things it must achieve, the ID of resources, Manipulation of resources through representations, self described messages and hypermedia as the engine of application state (*What Is REST*, 2022) It appears to be a standardization or methods and testing requirements.

References:

Katalon. (n.d.). *10 API Testing Tips for Beginners (SOAP & REST) | Complete Guide*. katalon.com. Retrieved February 27, 2023, from https://katalon.com/resources-center/blog/api-testing-tips

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*What is REST*. (2022, April 7). REST API Tutorial. Retrieved February 27, 2023, from https://restfulapi.net/