Explain the role of web architecture in website communications

In order to access the internet, you would need both hardware and software to be able to access it. The main piece of hardware you will need is a computer. A computer will allow you to connect to another piece of hardware which is the modem, allowing users to get a connection to the internet. The modem is a box which can be connected to a computer by an Ethernet cable to provide internet, and can have a built-in wireless router so that internet connection is available around the house. By having a modem means that you would have paid for internet access from a broadband provider such as virgin or EE which would be your internet service provider. Without having an ISP you will not be able to access the internet, and so customers are to buy and subscribe to ISPs in order to gain internet usage.

So after the modem is connected through the Ethernet cables to the computer, in order to set up the connection successfully, for example on a windows computer, you would have to open up the “network and sharing centre” and select which network you have and enter the security key needed to gain access. Once done you should be connected to the internet.

After setting up the connection between the computer and the modem, in order for internet access to be available to you, internet browsers are needed. There are many types of browsers users can use such as Internet Explorer, Google Chrome or Mozilla Firefox. Using web browsers gives users the access to the World Wide Web. The World Wide Web consists of large amounts of web servers, which hosts websites, and billions of wen pages containing text, graphics, sound files, videos and animations. In order to use the internet, and in order for communication over the internet, a protocol is needed, for example the most common protocol used is HTTP. Without the use of a protocol transmitting data between two systems can not be done, so it is important for protocols to be used when accessing the internet.

If you want to be able to access websites, for example [www.Twitter.com](http://www.Twitter.com), for this website to be available to you, it must be hosted on a web server. This allows the connection between your computer system and the website. So for example, if you are trying to access twitter and it isn’t hosted on a web server, you won’t be receiving any content of that website, making it impossible to use the website. So in order to access it, it must be hosted on a web server, and you must type in the domain name correctly.

Nowadays, as technology has advanced web 2.0 is now used. New uses for the web have been established allowing internet users to have better interaction, be available to more content, contribute and share information. With web 2.0, as it allows computer users to be more interactive with the internet, being able to share their opinions online, they are able to do so by accessing and writing blogs on such websites like Weebly or Blogspot, being provided with tools to design their pages and allow other user comments. Web 2.0 now comes with the use of Wikis, the most common being Wikipedia, an encyclopaedia website with articles and information which users can contribute to and even create.

As web 2.0 is becoming more popular, so is the use of social networking. Facebook and Twitter have users register to create their own online profiles for other users to find and access, being able to pass messages to one another, each having their own news feed of whichever person they follow or befriend. Sites like these are now becoming so popular attracting more and more users daily. On these websites, if you have previously visited those types of pages, the websites’ information will be stored in your browsers’ cache. For example, when you load those sites, the header, background and logo’s will all be there downloaded, ready to view at any time, the only thing that the cache isn’t able to load up perfectly is the news feed, because it changes every time you load up Twitter or Facebook.

Another use of web 2.0 is the use of online applications, being able to use applications online instead of purchasing or installing them. So for example, kids using the internet are able to play computer games online now that they are becoming more popular than games that are to be installed, and also another example would be that older users can use online applications such as being able to view online documents even if they do not already have Microsoft Word installed onto their computer system.

Lastly, the most recent advance in technology is the use of cloud computing. Cloud computing allows users to save programs, files and images along with other data to be stored not onto their computer system, but onto the “cloud”, meaning that users will be able to access their cloud once connected to the internet.

Overall web 2.0 is an improvement in web functionality, making the use of internet more and more reliable to users and even faster.