

<b>Learning Target:</b>	I will be able state 4 things I learned about the network architecture of the WWW
<b>Success Criteria:</b>	I will answer all questions shaded in blue and take the quiz at the end.

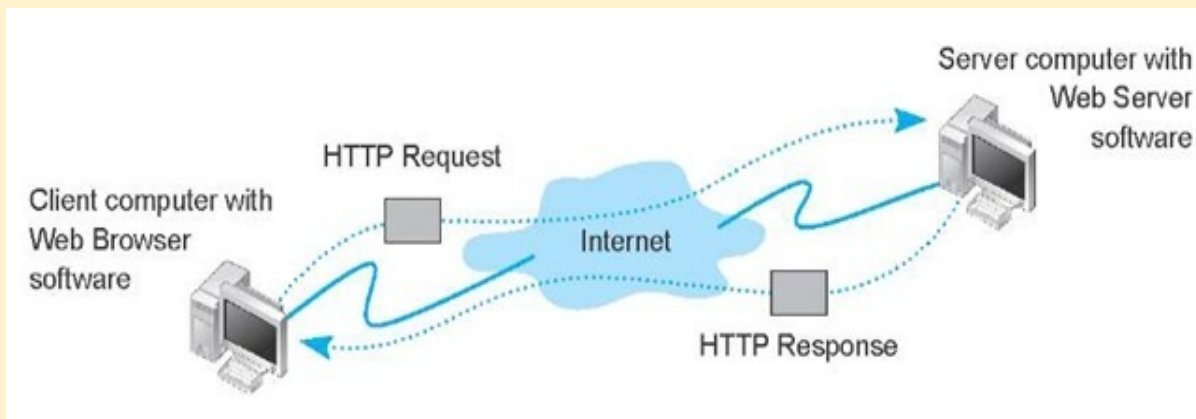
## ASSIGNMENT

### #1 - Client/Server Architecture of the WWW

To use the web, you must use a computer that is connected to the Internet and you must use a browser. When you request a web page:

- you are the “**client**” computer requesting the web page
- the network finds the “**server**” computer that hosts the web page and returns it to you

The diagram below shows communication design of this client/server architecture:



Watch this video on **How the Internet Works** to help you answer questions in this assignment: [https://www.youtube.com/watch?v=7\\_LPdttKXPc](https://www.youtube.com/watch?v=7_LPdttKXPc) (5 min.)

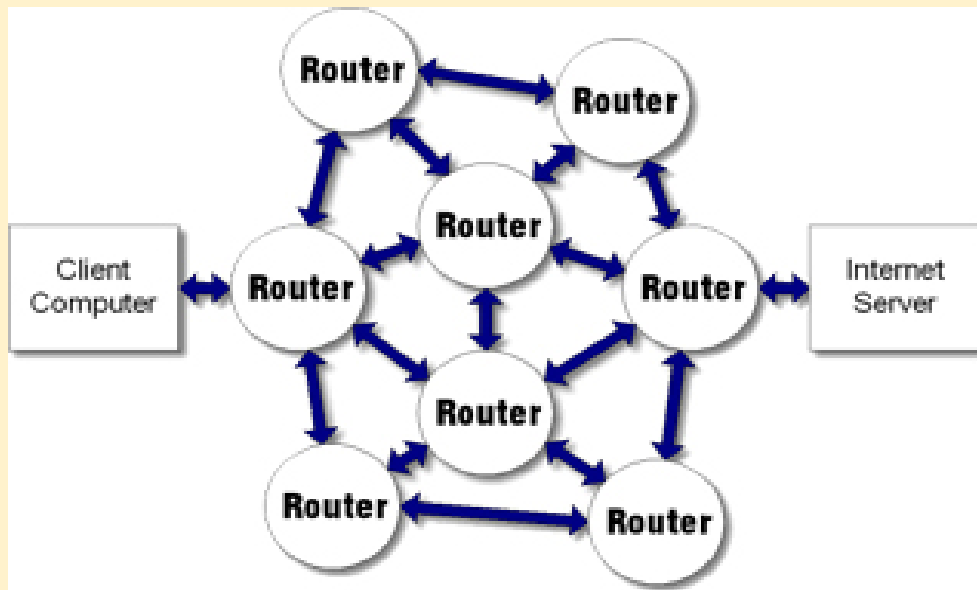
**The Internet has a client / server architecture.**

The user's computer that requests a web page is called the: \_\_\_\_\_

The computer that hosts the web page is called the \_\_\_\_\_

### #2 - Routers on the WWW

On the WWW, a request for a web page gets examined by numerous devices called “routers” that direct the request to the correct destination. The destination is the IP address of the server hosting the web page requested. Then the reverse happens and the requested web page arrives at the user's computer screen in **nanoseconds**! See the diagram below:



### Routers and Data Packets

Each router on the network examines a **data packet** to determine where the information should be sent on the network. It gets your web page and sends it back to your computer in nanoseconds!!! Even if you are in NY and the web page requested is being hosted on a server in Australia!

- Watch this next video on **How does the Internet work?:**  
[https://www.youtube.com/watch?v=ZonvMhT5c\\_Q](https://www.youtube.com/watch?v=ZonvMhT5c_Q) (3:40 min.)

### How is a web page request transferred over the Internet?

Data is transferred from one computer on the Internet to another in the form of a data

packet.

### #3 - Computer Network Protocols

**A Protocol**, in computer science, a set of rules or procedures for transmitting data between electronic devices, such as **computers**. In order for **computers** to exchange information, there must be a preexisting agreement as to how the information will be structured and how each side will send and receive it.

**A mail protocol:** to successfully send a letter in the mail, the mailing label must contain: The recipient's name, street address, city, state and zip code.

The Internet sends data in a **HyperText Transmission Protocol (HTTP)** format over the Internet. That just means it arranges the data in a certain way so the routers know how to read it.

#### **#4 - Network addresses**

Just like we have a unique house address, every computer on a network like the WWW has a unique address. This address is called an   address.

#### **#5 - What devices examine the data packets?**

A web page request gets sent over the Internet and is examined by multiple devices called  , which route the request to the appropriate destination.

#### **#6 - QUIZ**

1. [Click Here to watch the video](#) on How the Internet Works
2. Review the information in this document
3. Click on link to take the: [Architecture of the WWW QUIZ](#)

**TURN IN**