**Day 1 – Domain Names & IP Addresses**

**Warm-Up Activity**

1. ~~Go to the web page:~~ [~~https://centralops.net/co/~~](https://centralops.net/co/)
2. Go to the web page: <https://mxtoolbox.com/DNSLookup.aspx>
3. Select the “NsLookup” tool and search for the following domains:
   1. [www.peelschools.org](http://www.peelschools.org)
   2. some of your favorite / popular domains
4. ~~Try the “Traceroute” tool for the same domains~~
   1. ~~What is the purpose of this tool?~~
5. ~~Try the “Ping” tool for the same domains~~
   1. ~~What is the purpose of this tool?~~
6. ~~Try the “Whois” tool for~~ [~~www.peelschools.org~~](http://www.peelschools.org)
   1. ~~Who is the owner of this domain?~~
   2. ~~Who is the registrar of this domain?~~
   3. ~~When does the registration expire?~~

**Presentation Notes: Client-Server Model**

1. What is a client?
   1. Where does it run?

A client runs on your phone or on your PC

* 1. What does it do?

It provides the interface

* 1. List some examples of a client.

Web servers

Mail servers

File servers.

1. What is a server?
   1. Where does it run?

A server runs on hardware that is owned by the app company

* 1. What does it do?

A server sends and receives data between multiple clients using internet connections

* 1. List some examples of a server.

Spotify

Online games

MLB at Bat

1. Explain why you need both a client and a server to complete an internet application?

You need both a client and a server to complete an internet application because a Client is the app that runs and provides the interface and the Server sends and receives the data between the clients.

**Presentation Notes: Domain Names & IP Addresses**

1. What is a Domain Name?
   1. What is it used for?

A Domain Name is the ID for a service on the internet.

* 1. Is it for human or computer use?

It is for computers

* 1. Provide an example of a Domain Name.

Com, org, uk, ca

1. What is a IP Address?
   1. What does IP stand for?

IP stands for Internet Protocol

* 1. What is it used for?

Its used to route messages and data between comouters

* 1. Is it for human or computer use?

It is for computer use

* 1. Provide an example of an IP Address.

67.21.152.99

1. Who can register a domain name?

Domain names can be registered by individuals and companies.

1. Who controls domain names for countries (i.e. .CA, .UK, etc.)?

CIRA controls Canada

NOMINET controls the United Kingdom

Network Solutions control the United States

1. Who controls domain names like .COM, .ORG, etc.?

Government Agencies Control the Registration of Names for Countries

1. Who owns and controls IP Addresses?

They are owned by large internet companies and they rent them out to Domain Names for a fee

1. If you own a Domain Name does that mean you also own an IP Address?

Yes, if you have a domain name then you also have a IP address because domain names functions as a link to the IP address but the information still needs to come from somewhere so you wouldn’t get information about the person but you would find the IP address.

1. What services do *middleman* companies like GoDaddy.com provide?

Services like GoDaddy.com provides online marketing, web hosting, and email marketing and more but they mostly provide services business related or related to making a website.

1. What are some issues and features related to IPv4?

Some issues with the IPv4 is that it has limited speed and a limited number of connections.

1. What are some issues and features related to IPv6?

Some features that the IPv6 has is that it has higher speeds and unlimited number of connections.

1. What are some issues and features related to 5G Networks?

Some issues related to 5G is that some studies have shown that the cell phone and cell tower radiation causes memory loss, headaches, changes in vision and mood, sleep disorders, and leukemia. Some features related to 5G is that it has better coverage area and high data rate and low battery consumption. It also has availability of multiple data transfer rate.

**Day 2 – Internet Services (Software)**

Questions t.b.d.