



Basic I.T Skills Training

Delivered by

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Humberjob
HUB



Lesson Two

1. Answers to questions from last week
2. Quick recap
3. File Types
4. Basic System Use / Web

Answers to (some*) questions from last week

1. What should I do when I cannot get a signal on my smart phone?
 - If this is a persistent problem, you should contact the telecoms provider for assistance. (And keep bugging them until they solve the issue!)
2. What is the difference between upload and download?
 - This can be thought of as giving and receiving. Downloading = receiving something. Uploading = giving something.

*Someone asked lots of questions about different topics which we'll cover over time, so I'll not answer those here.

Quick recap of last week

- Computers communicate with each other by requesting and sending information. The information gets to the right computer because of the computers unique MAC and IP address – much like people have names.
- Human's communicate and interact with computers using peripherals (such as mice and keyboards) and via the Graphical User Interface (GUI).
- If we get stuck when using a computer/device, we can walk through the problem step-by-step to figure out how to move forward.

Example

Computer A would like to send a message to Computer B. This has to travel via the internet. Why might the message not get to Computer B?



Computer A



"The Internet"

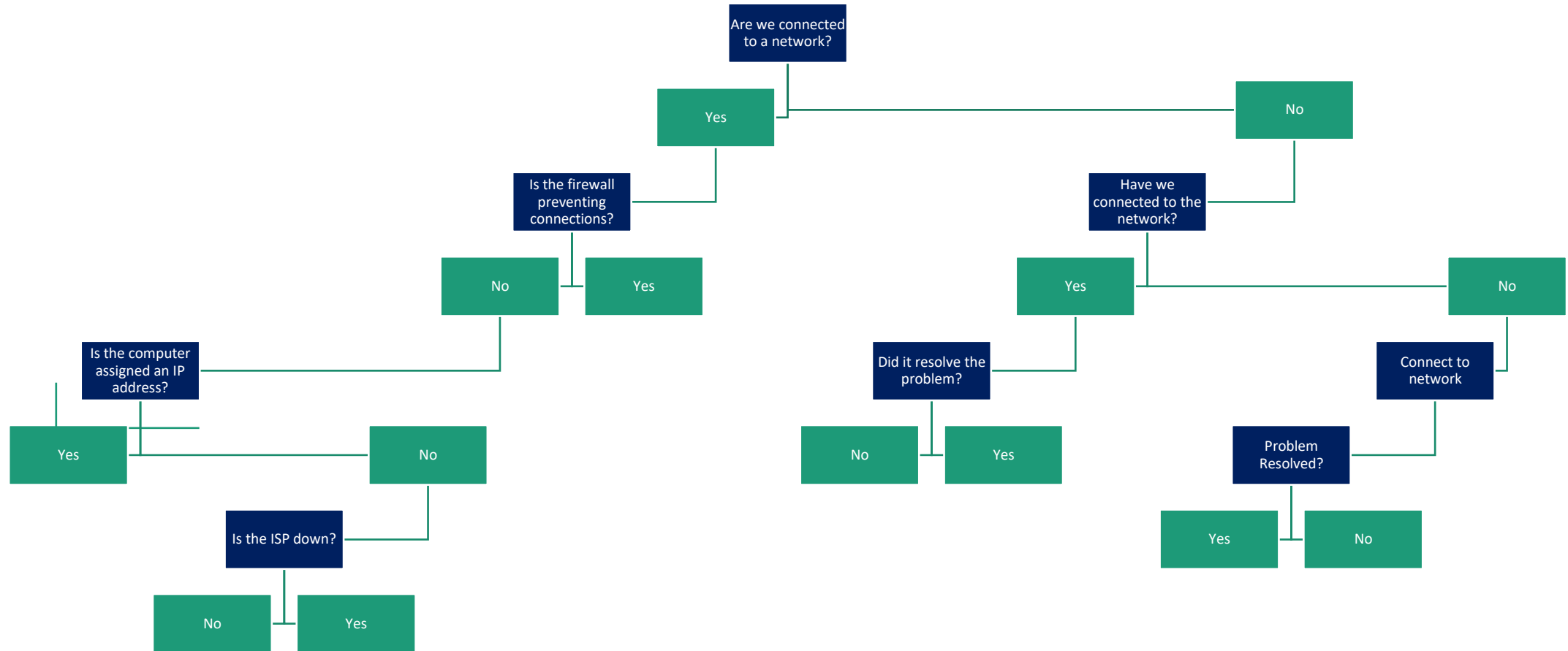


Computer B

"Hello Computer B,
My Human is sending your
human a message. The message
is: *"Hello! I'm a Nigerian prince!
Please send me all your money so
I can post you gold! \$\$\$\$"*



How do we work through the problem?



Internet Video

- Meant to show this video last week. It's a quick introduction to how computers communicate / networks.
- <https://youtu.be/PbRKp-ZvNhU>



File Types

When working with computers, it is inevitable that you will either need to create, open, modify, save, receive or send files. In doing so, it helps immensely if you know which formats are best for your goal.

Lets explore!

Pictures

- Most common picture/photo file types are:

Name of File Type	Extension	Web Safe?
Bitmap	.bmp	Yes
Graphical Interchange Format File	.gif	Yes
JPEG Image	.jpeg (or .jpg or .jpe)	Yes
Portable Network Graphic	.png	Yes
Scalable Vector Graphics	.svg	Yes
Portable Document Format	.pdf	Yes – but must open the PDF as a separate file.
Commercial Extensions		
Adobe Photoshop	.psd	No
Adobe Illustrator Artwork	.ai	No
Adobe InDesign	.indd	No

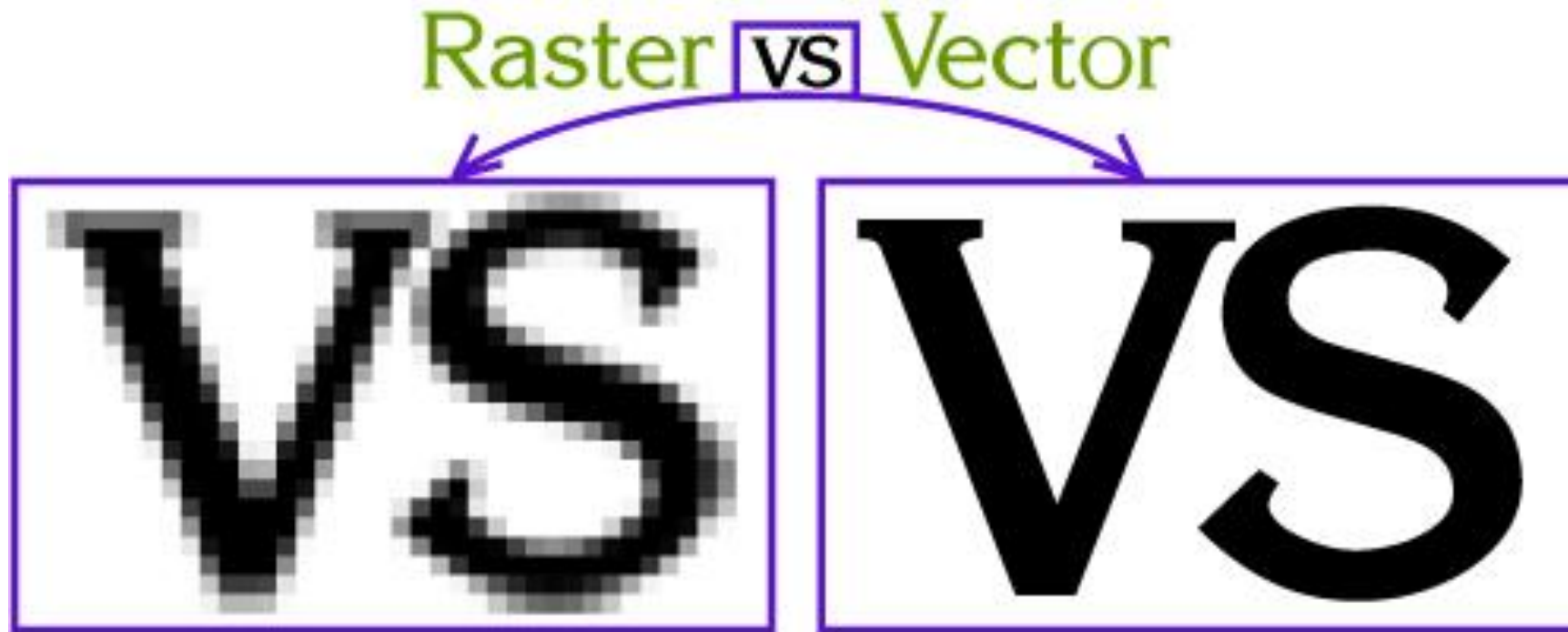
Pictures

- Two different types of image file types –
 - Vector Image Files
 - Raster Image Files

VECTOR	RASTER
FORMED BY VARIOUS SHAPES	COMPRISED OF PIXELS
SCALABLE	LOSES QUALITY WHEN SCALED
CAN CONVERT TO RASTER	CAN'T CONVERT TO VECTOR
SVG, CGM, EPS, XML	BMP, JPG, GIF, PNG

Source:<https://medium.com/vectr-labs/what-are-vector-graphics-a4e01867a54b>

Pictures



Videos

- Most common video file types are:

Name of File Type	Extension
Audio Video Interleave File	.avi
MPEG-4 Video	.mp4
MPEG Video	.mpg
WebM Video	.webm
Commercial Extensions	
iTunes Video File	.m4v
Apple Quicktime Movie	.mov
Windows Media Video	.wmv

Audio

- Most common audio file types are:

Name of File Type	Extension
MP3 Audio File	.mp3
MPEG-4 Audio	.mp4
Free Lossless Audio Codec File	.flac
Wave Form Audio File	.wav
WebM Audio File	.weba

Text

- Most common text file types are:

Name of File Type	Extension	Info
Microsoft Word Document (Legacy)	.doc	Microsoft extension, up until 2007
Microsoft Word Document	.docx	Microsoft extension, more open format. Took over from .doc
Open Document Master Document	.odm / .odt	Open source format containing one or multiple documents.
Google Docs	.gdoc	Google Extension for their alternative of Microsoft word.
Microsoft Word Macro-enabled Document	.docm	Macros are a series of inputs/commands a user has grouped together to easily complete repetitive tasks.
Rich Text Format File	.rtf	Can include bolding, italicization, custom fonts, and custom colours.

Text

- Most common text file types are:

Name of File Type	Extension	Info
Readme File	.readme	Contains important information about software or project.
Email message	.eml	Holds all information about an email message – sender, subject, recipients, date etc.
Plain Text File	.txt	No frills text document

More file types

- Full list at <https://fileinfo.com/filetypes/common>
- Worth investigating executables, data files (excel, project, power point, CSV etc).
- For next time: What's the difference between a CSV and Excel file?

Exercise

Refer to Lesson 2 – File Types Exercise



Tea break

After the break: Basic System Use



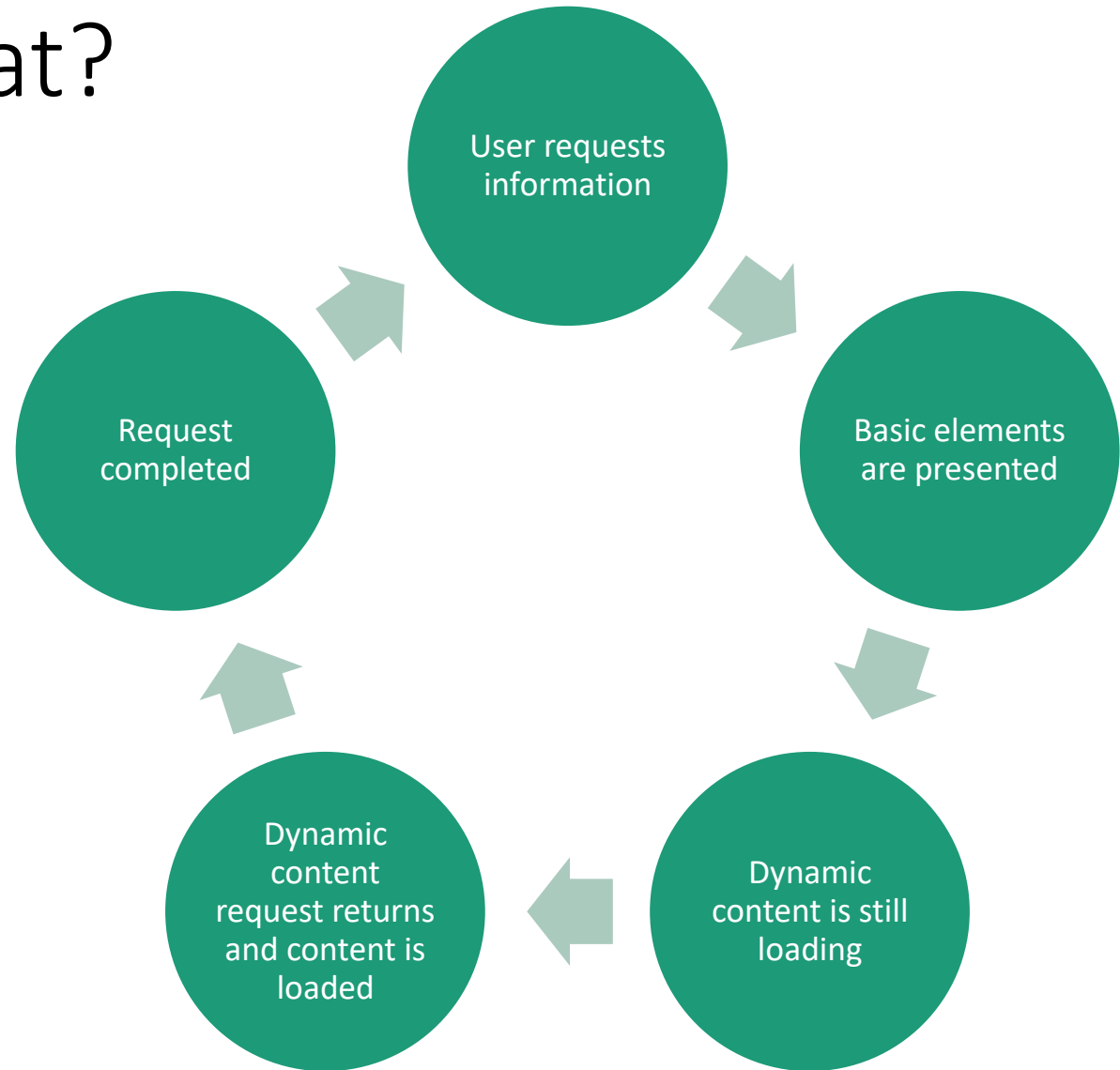
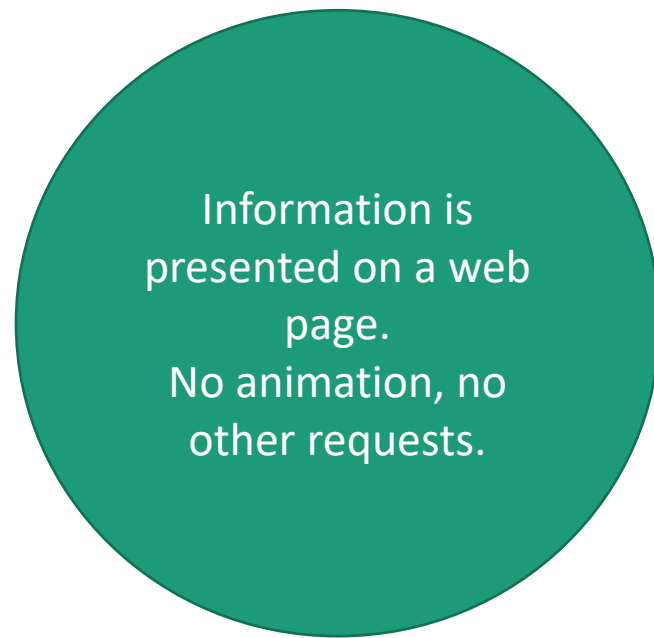
Internet? What's that?

- <https://youtu.be/Dxcc6ycZ73M>

Internet? What's that?

- A global system of inter-connected computers, sometimes called Servers, sharing information.
- Some rules are applied to what information can be accessed, for example, if you are not authorised to access information, you may require an account or certain privileges. Or it might be that your country restricts access to certain material (or at least tries too).
- Information can be shared statically or dynamically – lets look.

Internet? What's that?



Internet? What's that?

- Where might that happen?
 - Search results – Gathering all the results, maybe indexing new results.
 - User account creation – Populating the database and continuing the sign up process.
 - Getting media content – e.g. streaming or gaming.
 - Online payments – Conducting security checks, validation and taking the payment.
 - Updated content (e.g. comments, photos, news)
 - Sending an email (web interface)

Exercise

Refer to Lesson 2 – Basic Systems Exercise



Feedback/Questions?

If you're unsure about anything we have covered today, we (hopefully) have some time to go over things again or have a brief 1-1.

Feel free to ask questions and continue going over the exercises.

If you have a question in between classes, feel free to email me at **edward.richmond@parentull.org**