

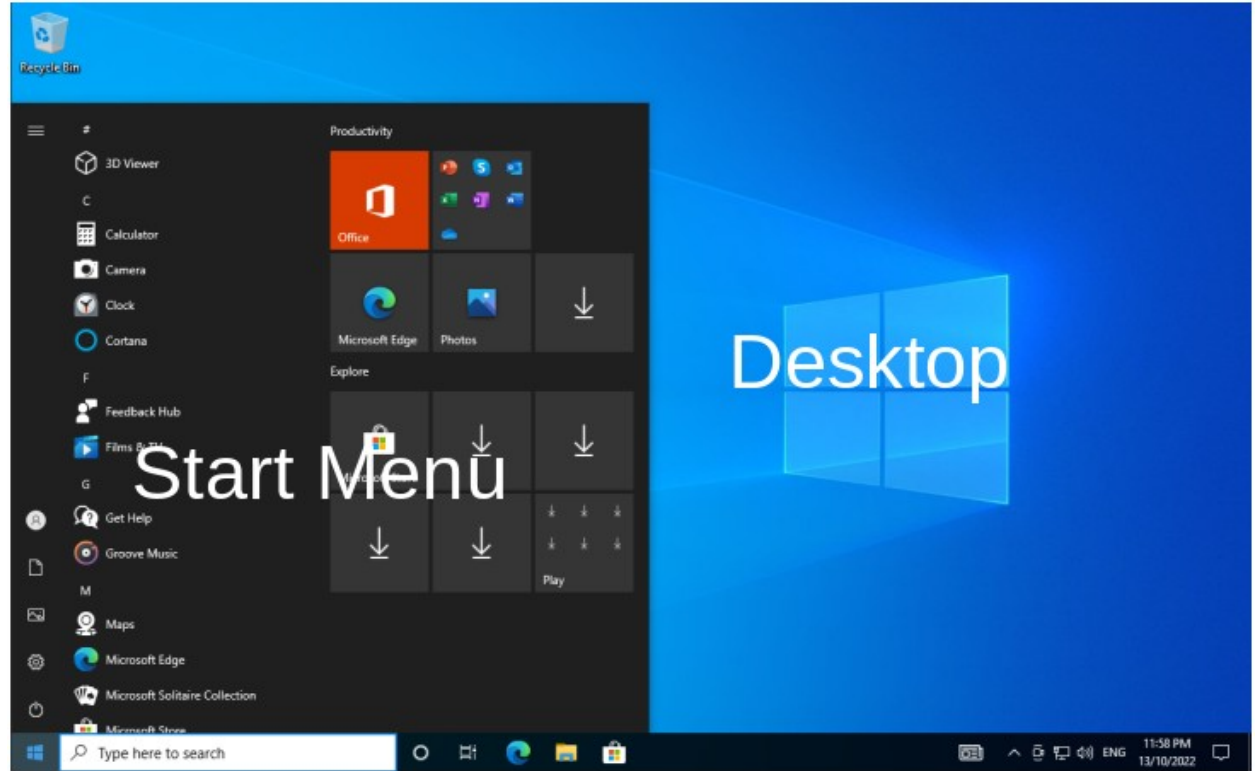
# Windows Fundamentals



# Windows Desktop



- Desktop
- Start Button
- Start Menu
- Task Bar



Start Button

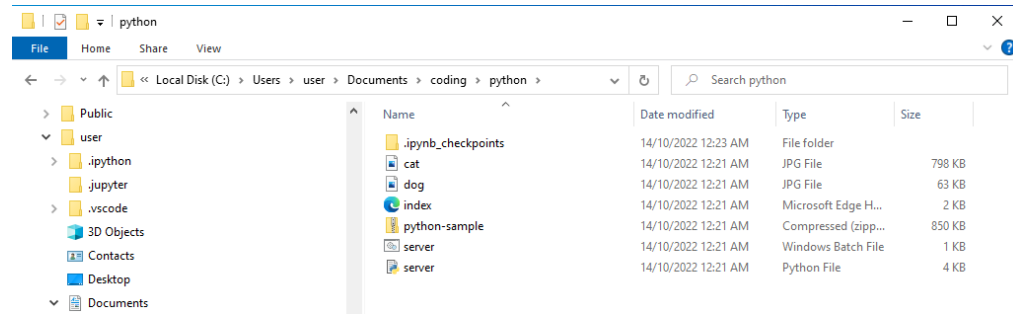
Task Bar

# Windows File Explorer

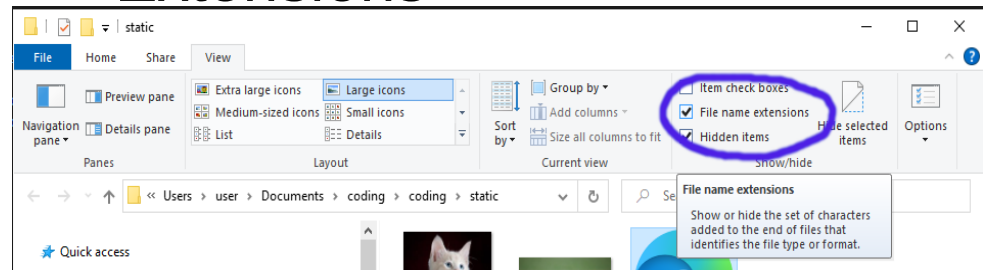


- What is a File?
  - A file is an image, a document, a text file, etc
  - A file also has some characters after a dot at the end, which is known as the file extension. Windows Hides these by default but we want to see them!
- What is a Folder?
  - A folder is a collection of files
- What is a C:\ Drive?
  - The C drive is the 'hard drive' inside your computer. It stores all your files and folders

- File Explorer allows you to Navigate your C:\ drive.



- Enable View File Name Extensions

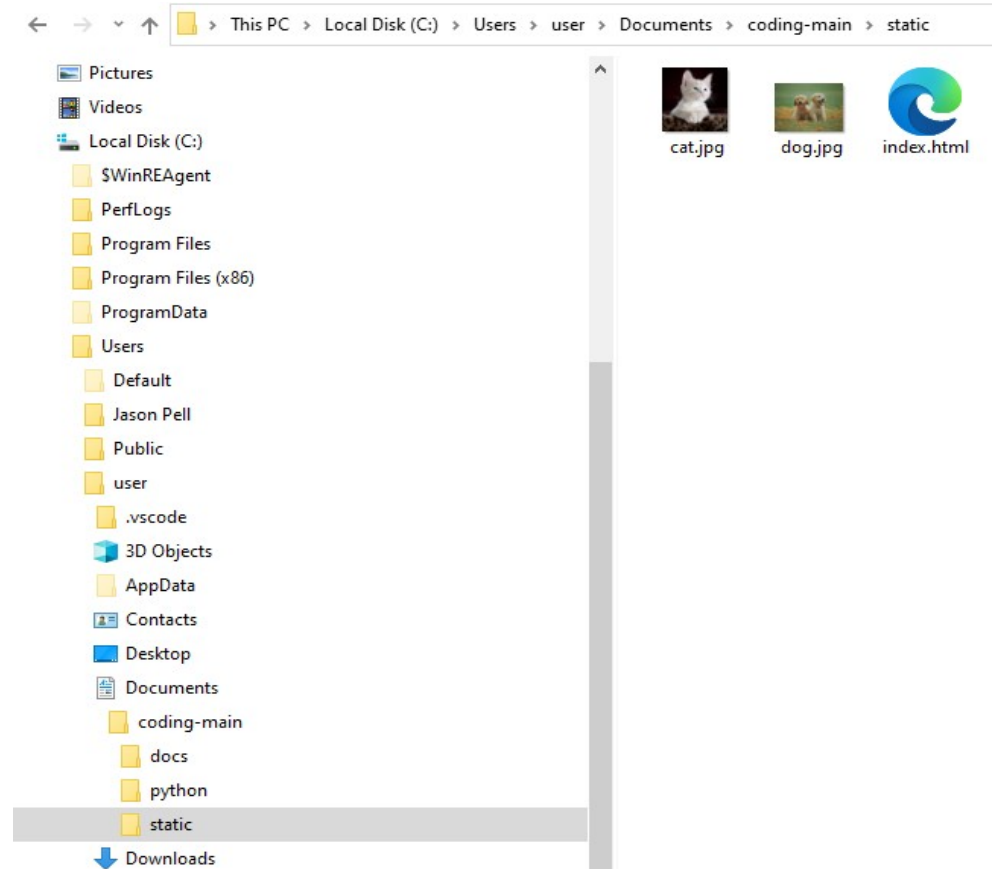
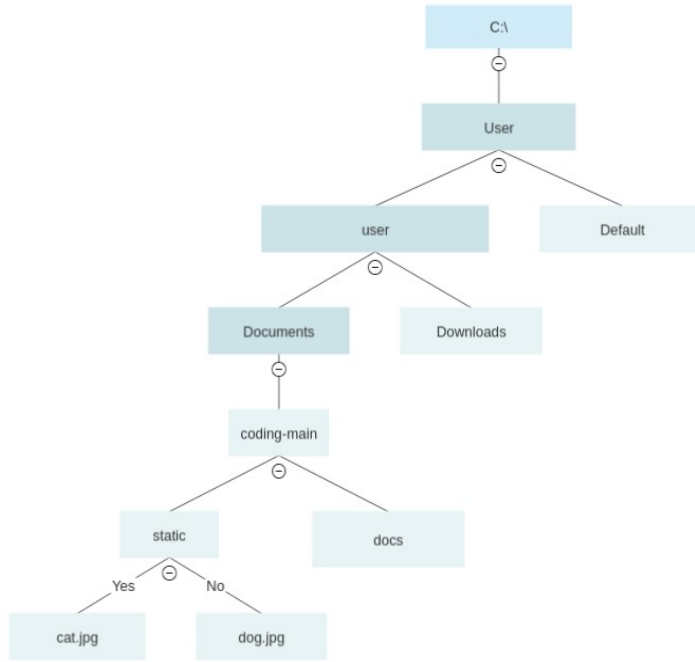


# What is a Disk Drive



- Is a Folder, with Folders and Files inside it

Directory Tree



# Files



- There are many types of files including:
  - Text files – these are simple files that have characters you can read, like letters, numbers and symbols
  - ZIP Files – more on those next
  - Images – PNG, JPEG, etc
  - Documents – like word, excel documents. These are files only the related application can read and understand
- Examples of text files include:
  - HTML files – for the internet
  - Javascript
  - Python
- To edit text files we use a Text Editor like Notepad++ or Visual Studio Code.

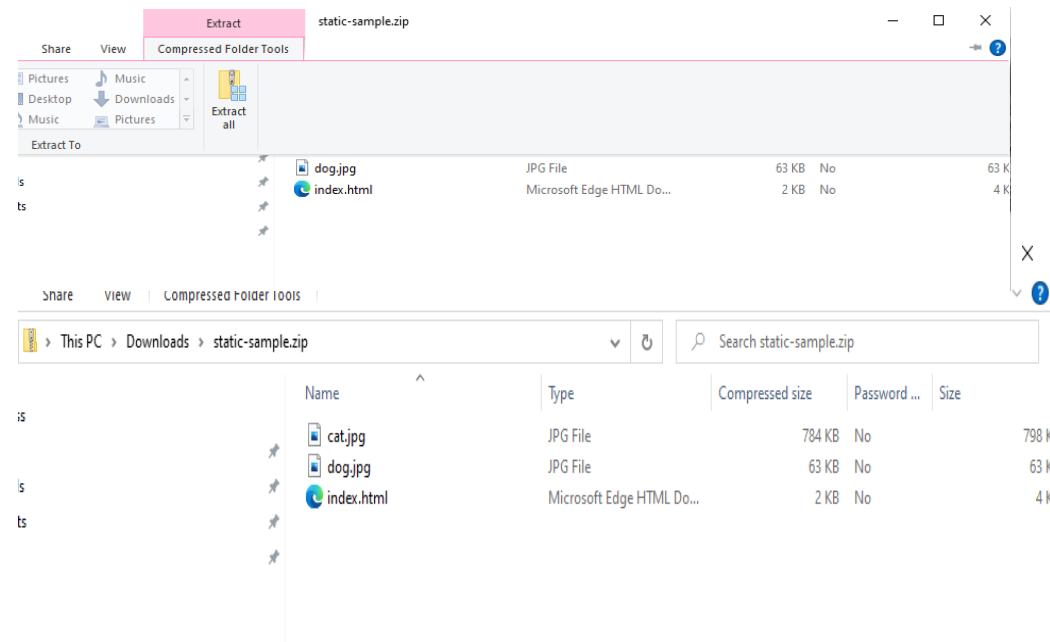
# Zip Files



Imagine a ZIP file is a box with books in it, you need to unpack that box to get the books out.

- A zip file is like that, you need to unpack it to get the files out.
- The static-sample.zip from last week is an example of a zip file.

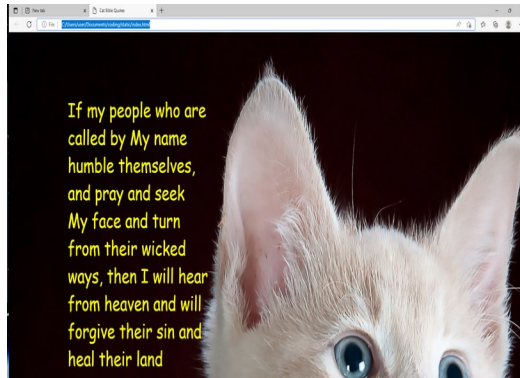
- Windows calls this Unpacking **Extract All**



# Web Browser



- A Web Browser is an application to browse the internet
- Popular browsers include:
  - Firefox
  - Chrome
  - Chromium
  - Edge
  - Safari



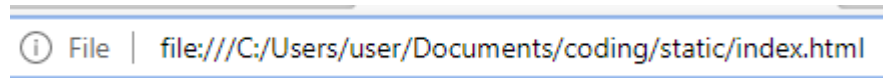
- All websites use a type of file called a HTML file
- In addition web sites are constructed using some additional files such as:
  - Images
  - JavaScript
  - CSS
- I won't go into these here today though!

# File Paths and File URLs



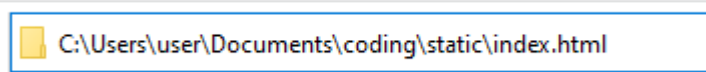
- File Explorer and Browsers have different ways of referencing local files and folders.
- A browser uses a File URL
- File Explorer uses a File path

- A File URL looks a lot like a File Path, except the slashes are different!
- The File URL:



File | file:///C:/Users/user/Documents/coding/static/index.html

- The File Path:



C:\Users\user\Documents\coding\static\index.html



# Browser URLs



- Browsers use URLs for the internet too
- They look a bit different to File URLs though.
- There are few important parts to a URL:
  - The Domain Name
  - The Path
  - Query Parameters

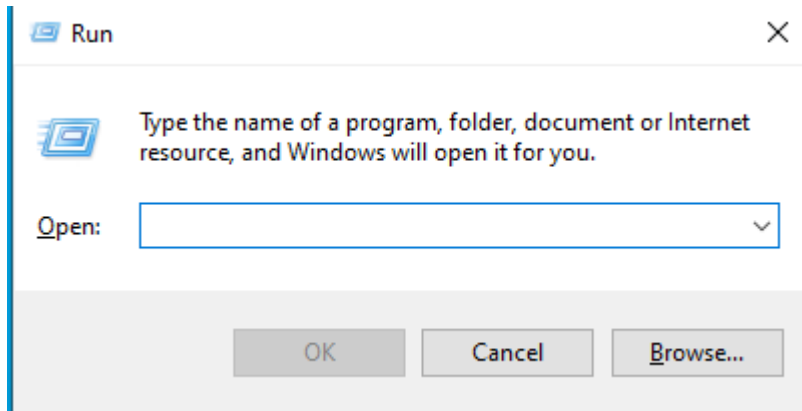
<https://gbc.pellcorp.com/installers/?type=vege&name=carrot>

- The important parts are:
  - **gbc.pellcorp.com** is the domain name
  - **/installers** is the path
  - **type=vege&name=carrot** is the query string, and its everything past the ? Of the URL.
- Urls can have ports too:
  - <http://localhost:8080/quote?type=vege&name=carrot>
  - **localhost** is the domain
  - **8080** is the port
  - **/quote** is the path

# Windows Run Command



- Remember the Windows Key?
- Windows Key and the R key give you a Run Command window
- You can use it to run applications if you know their name.
- Lets start Notepad using the Run Command.
- Type 'notepad' into the Run window and hit the Enter / Return key to start notepad



# Windows Terminal



- The CMD terminal is where you can run applications by typing their name
- Use the Run Command window, type 'cmd' and hit enter.
- With Terminal you can navigate your C:\ drive just like with File Explorer
- Some common commands include:
  - dir – to display folder contents (give it a try, type 'dir' by itself)
  - cd <folder name> to change to a different folder
  - type <filename> - to display what is inside a file

```
Command Prompt
C:\Users\user>dir
Volume in drive C has no label.
Volume Serial Number is 2B05-35ED

Directory of C:\Users\user

14/10/2022  02:23 AM  <DIR>          .
14/10/2022  02:23 AM  <DIR>          ..
14/10/2022  02:23 AM  <DIR>          .vscode
13/10/2022  11:55 PM  <DIR>          3D Objects
13/10/2022  11:55 PM  <DIR>          Contacts
14/10/2022  02:21 AM  <DIR>          Desktop
14/10/2022  02:53 AM  <DIR>          Documents
14/10/2022  01:47 AM  <DIR>          Downloads
13/10/2022  11:55 PM  <DIR>          Favorites
13/10/2022  11:55 PM  <DIR>          Links
13/10/2022  11:55 PM  <DIR>          Music
13/10/2022  11:56 PM  <DIR>          OneDrive
13/10/2022  11:55 PM  <DIR>          Pictures
13/10/2022  11:55 PM  <DIR>          Saved Games
13/10/2022  11:55 PM  <DIR>          Searches
14/10/2022  12:05 AM  <DIR>          Videos
               0 File(s)          0 bytes
              16 Dir(s) 22,318,632,960 bytes free

C:\Users\user>
```

# Windows Terminal Cont.



- Exercises
  - change to `c:\windows`
  - Display a list of the files in the `c:\windows` folder
  - List all files in `c:\windows` that have a .exe extension (this might be tricky for some of you, google might help)
  - Display the contents of the win.ini file
  - Change to your home folder
  - Display a list of all files in your home folder