

Types of Files and File Extensions

Throughout this course, you will be working with many different file types, and you'll need to be able to differentiate between these file types. Here are some common file extensions you may come across in this course.

Data and Database File Extensions

A data file could be any file, here are the most common data files that relate to data that are used for a database, errors, information, importing, and exporting. Some of these files are opened with a Text Editor or code editor, like VS Code, Atom, and Sublime, or with the application where they are created:

- .csv - Comma separated value file
- .dat - Data file
- .db or .dbf - Database file
- .json - JavaScript Object Notation file
- .log - Log file
- .mdb - Microsoft Access database file
- .sav - Save file (e.g., game save file)
- .sql - SQL database file
- .tar - Linux / Unix tarball file archive
- .tsv - Tab separated file
- .xml - XML file

Executable File Extensions

Executable files are files that can also be run by themselves or with the aid of an interpreter, like Windows command prompt or Mac Terminal. Some can be opened with a code editor.

- .apk - Android package file
- .bat - Batch file
- .bin - Binary file
- .cgi or .pl - Perl script file
- .exe - Windows executable file
- .gadget - Windows gadget
- .jar - Java Archive file
- .py - Python file
- .wsf - Windows Script File

Image File Format Extensions

There are many different image types and image file extensions. Here is a list of the most common image file extensions. Files with these extensions can be opened with the software that created it: Adobe Photoshop, the Preview application, drawing software, or your browser.

- .ai - Adobe Illustrator file
- .bmp - Bitmap image
- .gif - GIF image for a short animation file.
- .jpeg or .jpg - JPEG image
- .png - PNG image usually associated with screenshots from the computer.

- .ps - PostScript file
- .psd - PSD image
- .svg - Scalable Vector Graphics file
- .tif or .tiff - TIFF image

Internet Related File Extensions

The Internet is the most used resource on the computer and because web servers supply the files, there are many different file extensions utilized. Here is a list of the most common file extensions on the web. Many of these can be opened with a Text Editor or code editor.

- .asp and .aspx - Active Server Page file
- .cfm - ColdFusion Markup file
- .css - Cascading Style Sheet file
- .htm and .html - HTML file
- .js - JavaScript file
- .json - JavaScript Object Notation file
- .jsp - Java Server Page file
- .php - PHP file
- .py - Python file
- .rss - RSS file
- .xhtml - XHTML file

Programming File Extensions

Many file extensions are used for programs before they are compiled, as well as programming scripts. Below is a list of the most common file extensions associated with programming. Many of these can be opened with a Text Editor or code editor.

Note: Many of the Internet related file extensions could also be included with these file extensions mentioned below.

- .c - C and C++ source code file
- .class - Java class file
- .cpp - C++ source code file
- .cs - Visual C# source code file
- .ipynb - Jupyter Notebook Python executable file.
- .java - Java Source code file
- .js - JavaScript file
- .r - RStudio file
- .sh - Bash shell script
- .swift - Swift source code file
- .py - Python file
- .vb - Visual Basic file

Spreadsheet File Format Extensions

Below are the most common file extensions that are used to save spreadsheet files to a computer. These files can be opened with MS Excel. The .tsv file can be opened with a Text Editor.

- .xls - Microsoft Excel file
- .xlsx - Microsoft Excel Open XML spreadsheet file
- .csv - Comma separated value file
- .tsv - Tab separated file

Word Processor and Text File Format Extensions

Creating text files and using a word processor is one of the most common tasks on a computer. Below are the most common file extensions used with text files and documents. These files can be opened with MS Word, Acrobat Reader, a Text Editor, or your browser in some cases.

- .doc and .docx - Microsoft Word file
- .md - GitHub Markdown file used on
- .odt - OpenOffice Writer document file
- .pdf - PDF file
- .rtf - Rich Text Format
- .tex - A LaTeX document file
- .txt - Plain text file
- .wks and .wps- Microsoft Works file
- .wpd - WordPerfect document

Compressed File Extensions

When downloading a large file or multiple files, the files are compressed to save disk space for easier and faster transmission over the Internet. Here are some of these common file extensions you may encounter. Most computer users are familiar with the .zip compressed files, but there are other types of compressed files. Some of these files can be opened by double clicking them, but you may need additional software.

- .7z - 7-Zip compressed file
- .arj - ARJ compressed file
- .deb - Debian software package file
- .pkg - Package file
- .rpm - Red Hat Package Manager
- .tar.gz - Tarball compressed file
- .z - Z compressed file
- .zip - Zip compressed file