

Web Browsers & the Web

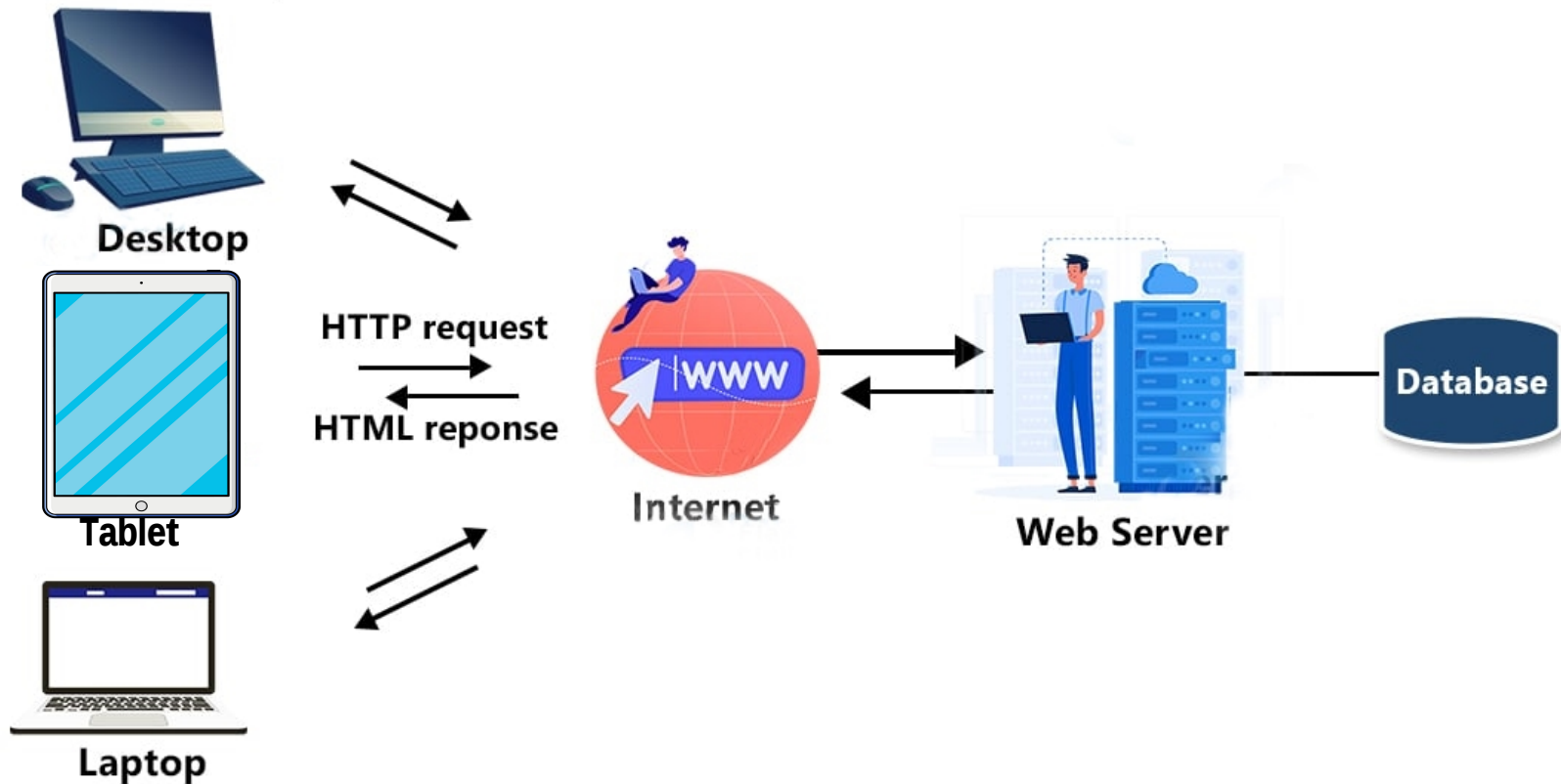
Hillingdon u3a
Computer Club
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World Wide Web / Internet

- WWW is a network to connect information to users
- It uses **Hypertext Transfer Protocol - HTTP**
- The Internet is the way web transfers information
- The user exchanges information with the web using devices on the Internet.
- The web needs an application called a Browser, to translate the HTTP into the pages of words and pictures you see on your device.
- Each of these pages has a unique Uniform Resource Locator (URL). The address line, like www.google.com.

World Wide Web / Internet

Client(Local Computer)



Browsers

- Examples of a Web browser are:
- Google Chrome  67%
- Edge  5%
- Firefox  3%
- Safari (Apple Users)  18%
- DuckDuckGo  .6% (USA 2%)
- Brave  .8%
- Opera  2%
- Aloha  ?
- Readdle  ?
- Vivaldi  ?

Browsers - a bit of history

- Tim Berner Lee created the Web Browser in 1990.
- Called 'World Wide Web' we now know it as Nexus.
- Erwise was the first graphical web browser.
- Mosaic from Netscape released in 1993, became the most popular browser of all time.
- Internet Explorer released in 1995
- Opera released in 1996
- Firefox from **Netscape's** Mozilla foundation released in 1998
- Safari from Apple released in 2003
- Chrome from Google released in 2008

Browsers - How they work

The Search

- You enter your search query into the search bar and the browser sends this via the internet to a Web Server that has a search engine such as Google.
- This Web Server has an index to over 2 billion websites and searches the index using your query.
- It then delivers a list of hits
- You select one and the browser sends a request to that web server which then delivers the page to your browser.



Browsers - How they work

The Results

- The site entry point is defined by the web server software.
- The server then sends this page (in HTML) to your browser
- The browser translates the HTML into the screen display you see.
- Then Hyperlinks e.g. [the link is here](#) are used to navigate the website and display other pages.

Browsers - Without Searching

As a Search Engine works together the Web Browser

- You can also use the Browser without using a search website
- Say you know you want to look at the BBC website -
You just enter the full URL (Uniform Resource Locator) into the address bar e.g. <https://www.bbc.co.uk>
- The browser looks this up returns the website

Browsers - Search Engine

Want a specific Search Engine

Most Browsers will default to:-

- Edge -> Bing
- Chrome -> Google
- Firefox -> Google
- Brave -> Brave Search
- DuckDuckGo -> DuckDuckGo

To change go into Settings (**it's** under Search in Firefox) and select the engine of your choice.

Browsers - Search Engines

Google

- Most Popular (80% to 90% Share Of Market)
 - Easy To Use
 - Tracks User's Data
 - Shares Data
-
- Disable Tracking Through Your Google Account

Browsers - Search Engines

Microsoft Bing

- Default Search Engine with Microsoft EDGE
- About 9% Share Of Market
- Ease Of Use

Browsers - Search Engines

DuckDuckGo

- *Gaining Popularity*
- *Focus On Privacy*
- *Tracker Blocker*
- *Does Not Collect or Share Search Information*

Recommended by Hu3a Computer Club

Browsers - Search Engines

Brave Search

- Default In Brave Browser
- Fast
- Focus On Privacy
- No Ads

Browsers - Search Engines

Setting the Default Browser In Windows

- Why does Windows need a Default Browser ?
- Links in apps or emails might require a Browser to view
- Links in a Document - May Require A Browser

Set Default Browser – Windows 10 - Start with “Settings”

The image shows the Windows 10 Settings application. At the top, there is a search bar labeled "Find a setting". Below it, various settings categories are displayed as tiles: System (Display, sound, notifications, power), Devices (Bluetooth, printers, mouse), Phone (Link your Android, iPhone), Apps (Uninstall, defaults, optional features), Accounts (Your accounts, email, sync, work, family), Time & Language (Speech, region, date), Search (Find my files, permissions), Privacy (Location, camera, microphone), and Update & Security (Windows Update, recovery, backup). A yellow arrow points to the "Apps" tile. To the right, a vertical sidebar shows the "Apps" section expanded, with "Apps & features" selected. A yellow arrow points from the "Apps" tile in the main view to the "Apps & features" option in the sidebar. The "Apps & features" page is shown on the right, with a search bar labeled "Find a setting" and a list of app categories: Default apps, Offline maps, Apps for websites, Video playback, and Startup. The "Apps & features" section is highlighted. Below the list, there is a search bar labeled "Search this list" and a filter bar showing "Sort by: Name" and "Filter by: All drives". At the bottom, it says "136 apps found".

Find a setting

System
Display, sound, notifications, power

Devices
Bluetooth, printers, mouse

Phone
Link your Android, iPhone

Apps
Uninstall, defaults, optional features

Accounts
Your accounts, email, sync, work, family

Time & Language
Speech, region, date

Search
Find my files, permissions

Privacy
Location, camera, microphone

Update & Security
Windows Update, recovery, backup

Home

Find a setting

Apps

- Apps & features
- Default apps
- Offline maps
- Apps for websites
- Video playback
- Startup

Apps & features

Choose where to get apps

Installing apps only from Microsoft Store helps protect your device.

Anywhere

Apps & features

[Optional features](#)

[App execution aliases](#)

Search, sort, and filter by drive. If you would like to uninstall or move an app, select it from the list.

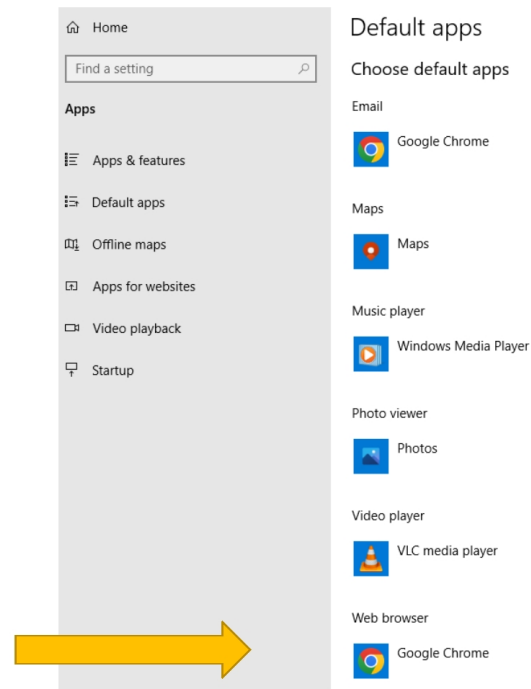
Search this list

Sort by: Name Filter by: All drives

136 apps found

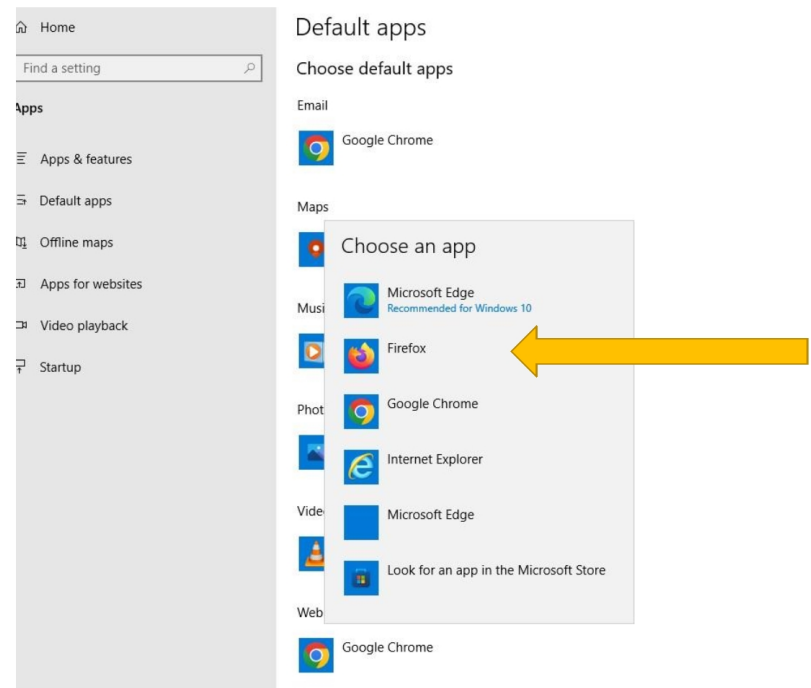
Set Default Browser In Windows 10

- Settings
 - Apps
 - Default Apps
 - Web Browser

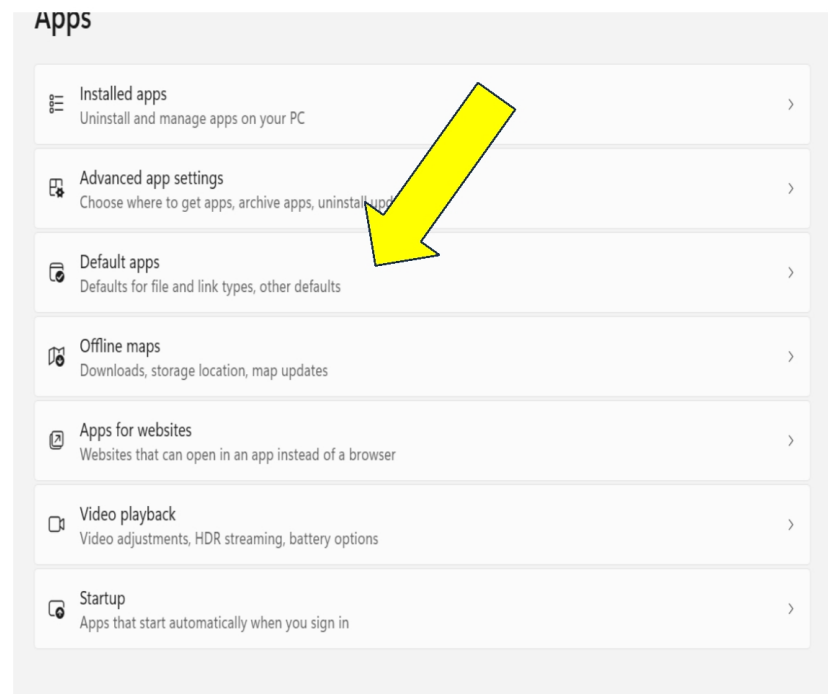
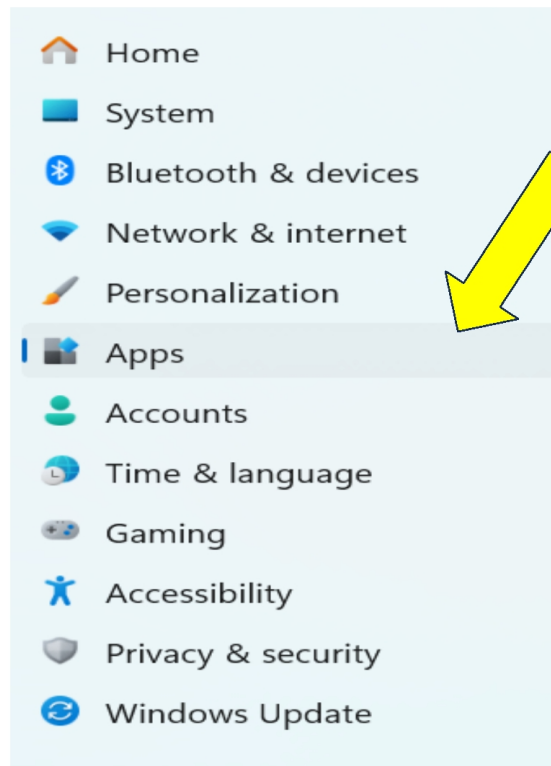


Set Default Browser – Windows 10

- Click on Web Browser
- Select Browser to Be Default
- If Desired Browser Not Listed
 - Download From the Internet
 - Install
 - Make Default When Prompted

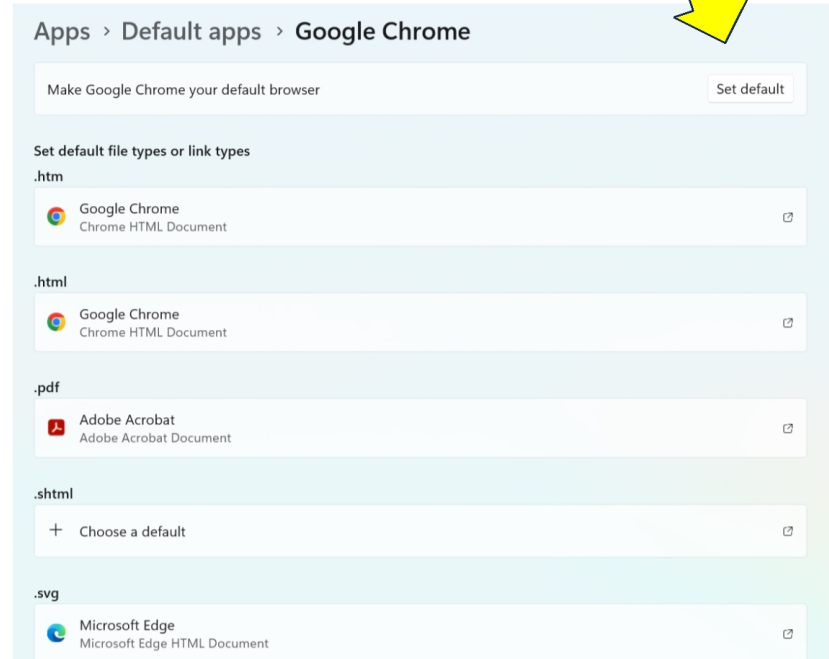
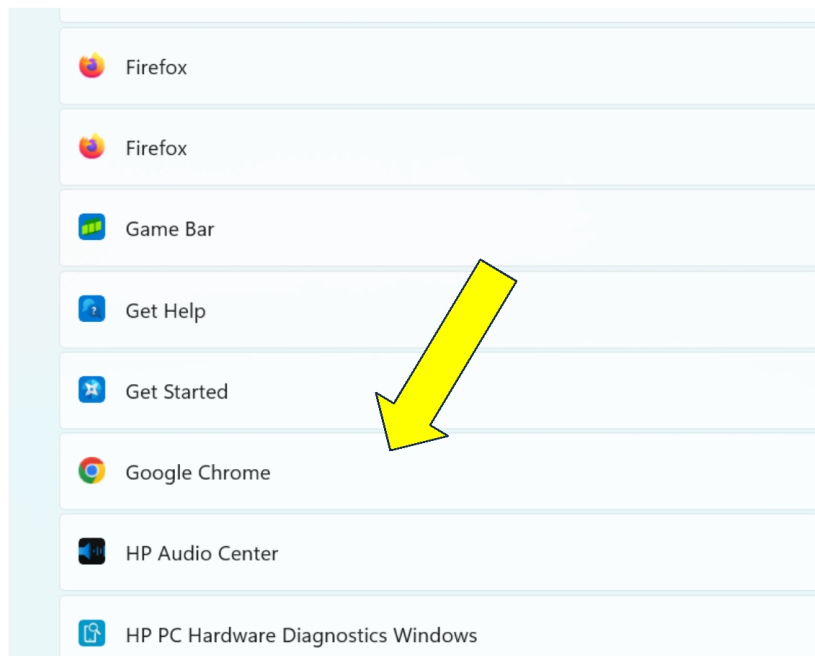


Set Default Browser – Windows 11 - Start with “Settings ---> Apps -----> Default Apps



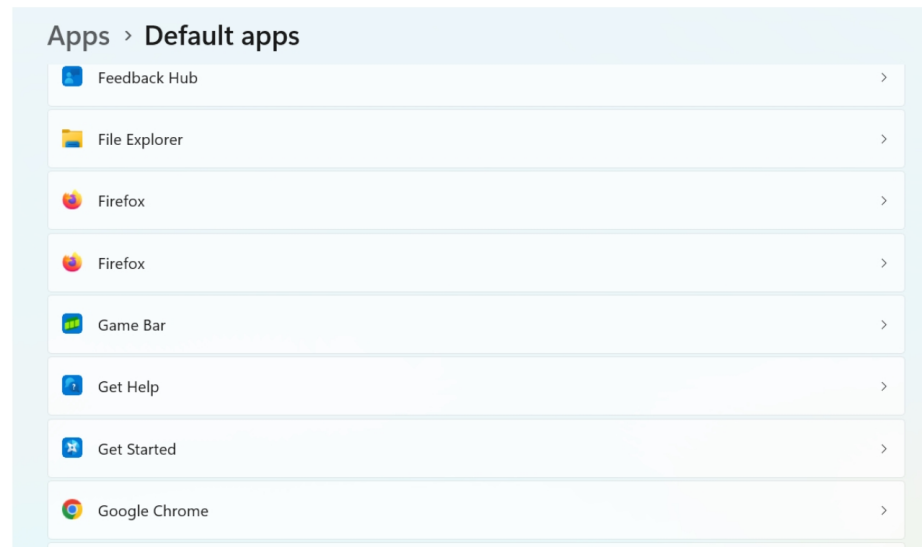
Select Browser From List

-> Select -> Set As Default

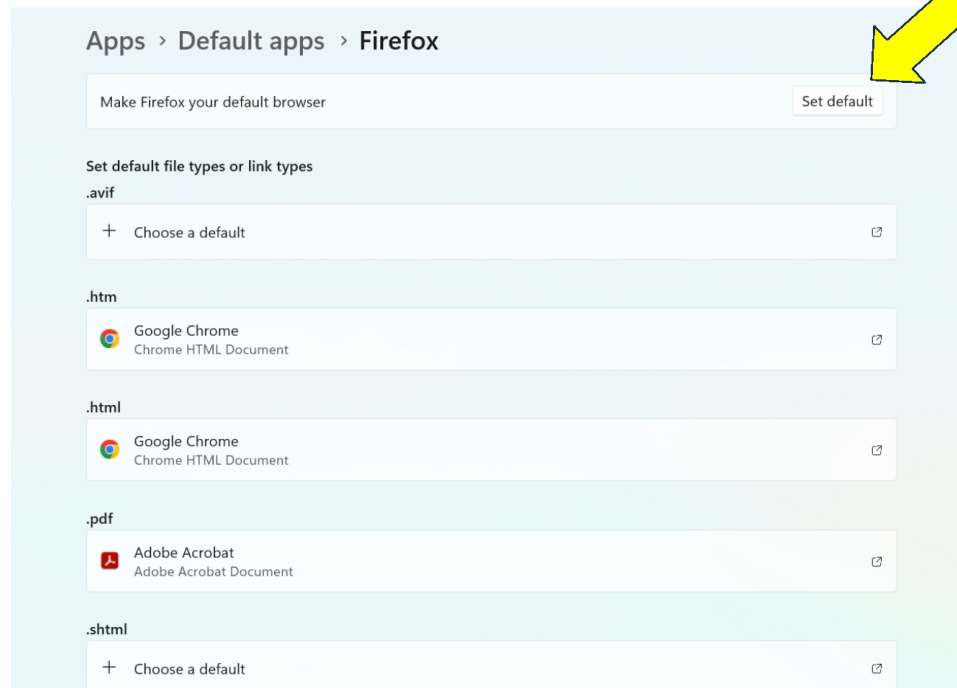


For Different Browsers

Scroll Down For Desired Browser



Set Selected Search Browser As Default

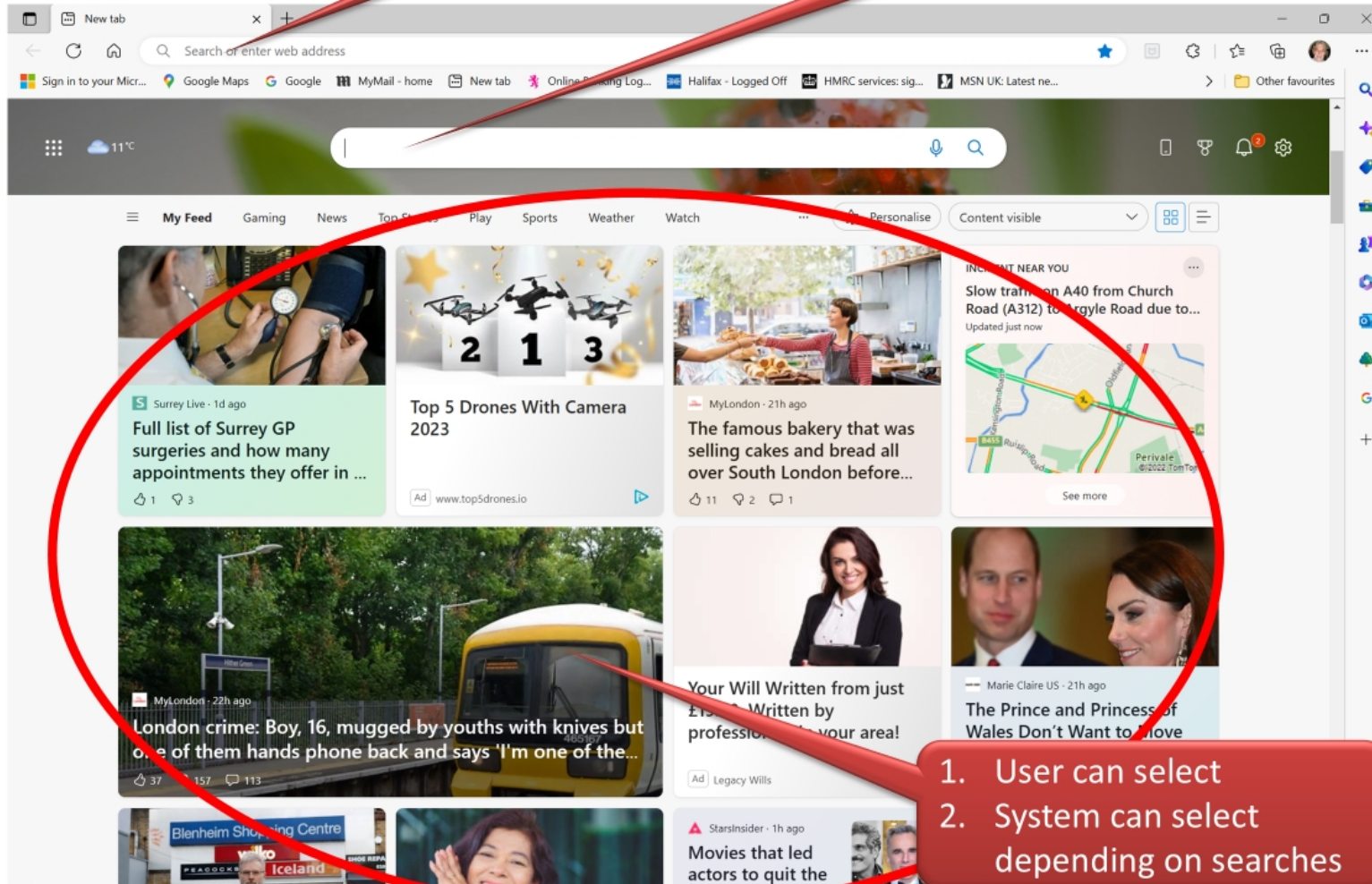


Browsers

Example of a Browser (Microsoft Edge)

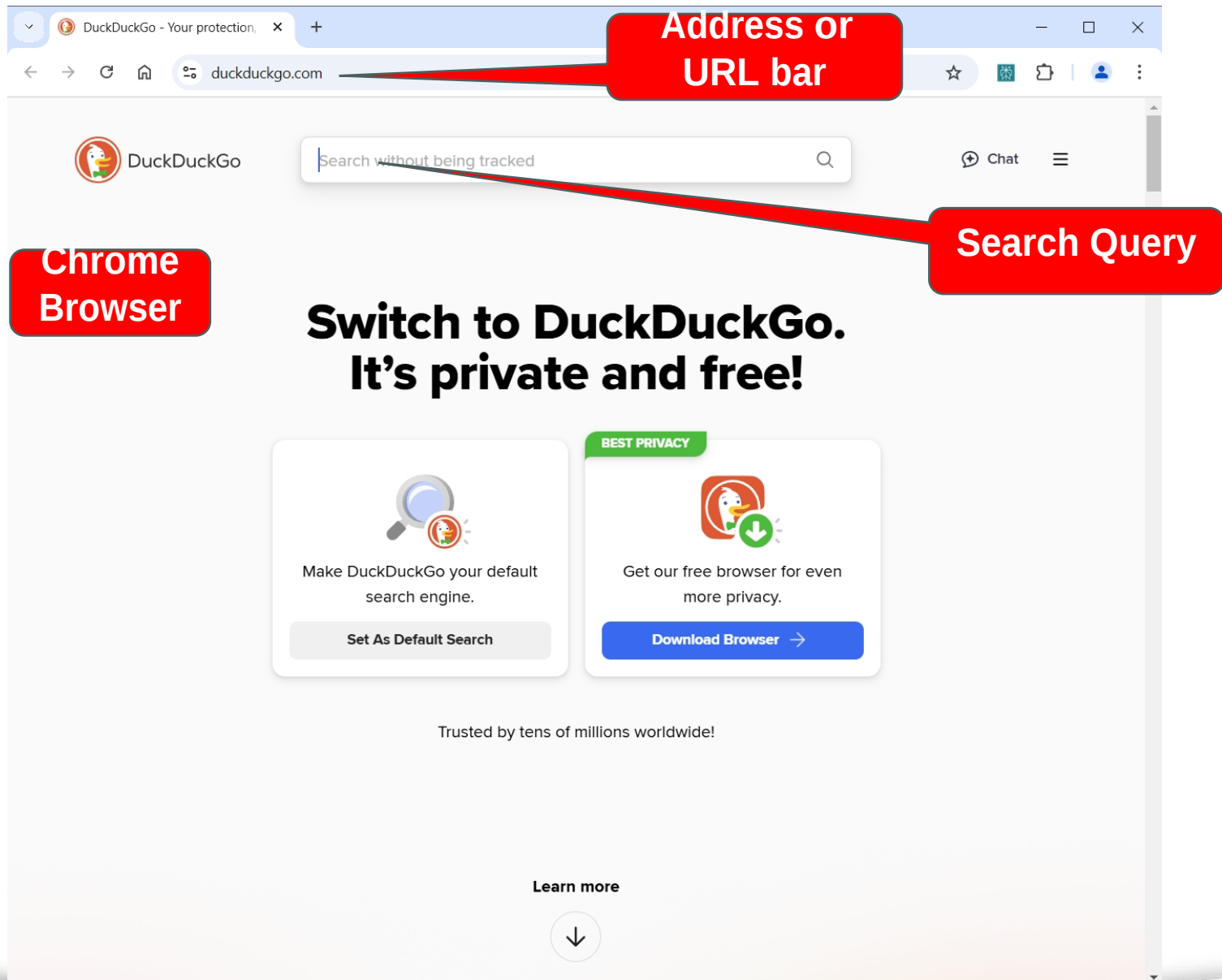
Enter Web Address

Enter Search Data

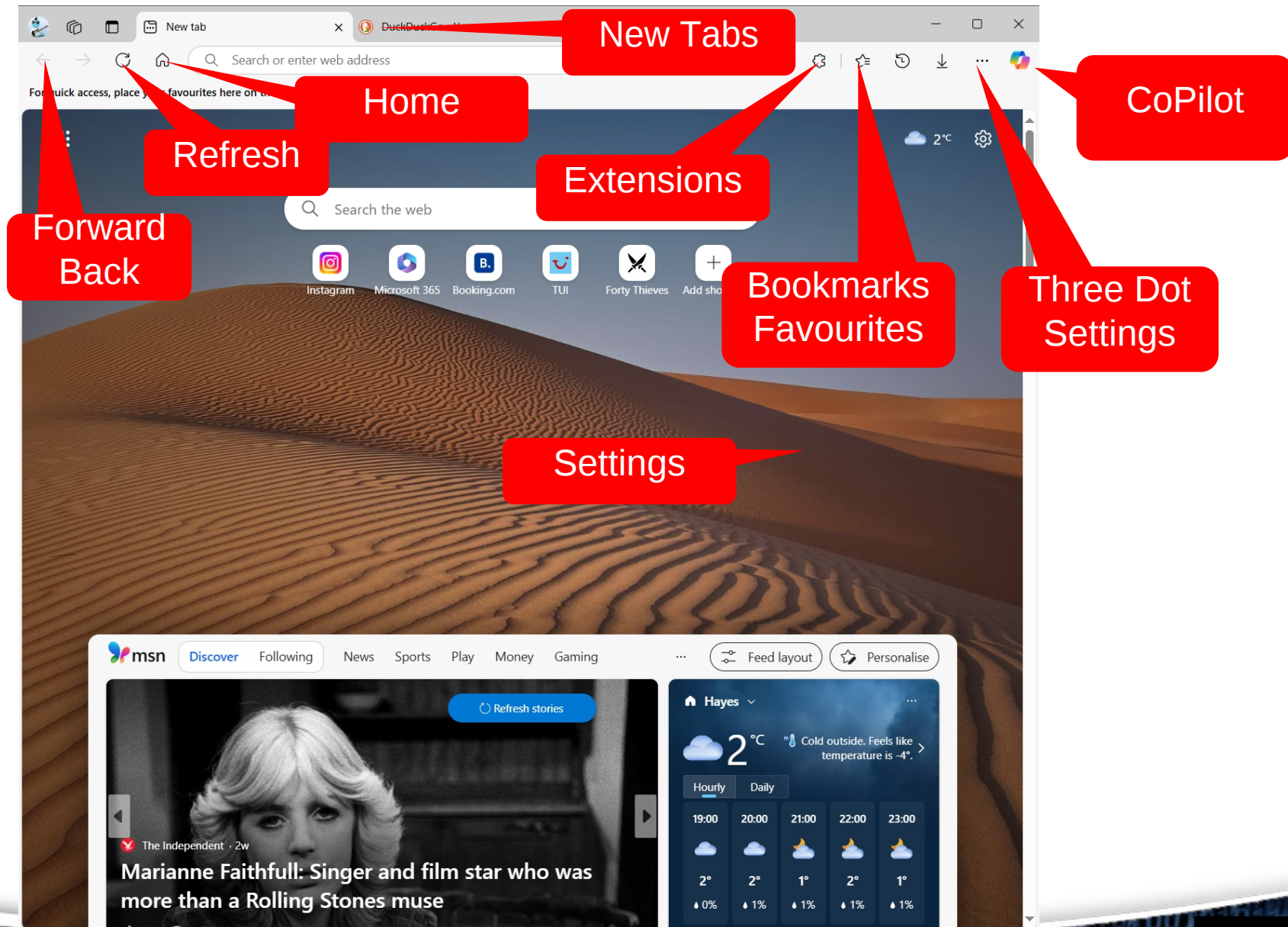


1. User can select
2. System can select depending on searches

Browsers



Browser Features



Browser

Which Browser To Use?

- Windows 10 & 11 have EDGE pre-loaded (It's ok)
- Want a different One - Over 70+ Available
- Pick One! - All Browsers Operate similarly
- Know How To Use One ... You Can Use Another

Browser

Why Not Change Browsers?

- Get experience with another browser. **It's** good to know how to use at least 2 browsers (even 3).
- Security - Privacy - Tracking
- Test Speed
- Browser Pressure
- Fault Finding

Browser Choice

DuckDuckGo

Pro's

- Massive library of extensions.
- Available on all major operating systems.
- Full support for Windows Hello authentication.

Con's

- Frustrating update process.
- Scrolling isn't smooth.
- Limited direct support.

Browser Choice

Firefox

Pro's

- Strong security and privacy.
- Quickly erase all app data.
- Simple settings screen.

Con's

- Limited cloud sync features.
- Lack of history can be inconvenient.

Browser Choice

Aloha

Pro's

- Optional integrated VPN functionality.
- Built-in support for VR videos.
- Uses less traffic than other browsers.

Con's

- In-browser ads.
- Limited VPN features.
- Lockable tabs and windows.

Browser Choice

Chrome

Pro's

- Loads Google services quickly.
- Massive library of browser extensions.
- Available on a variety of devices.

Con's

- Incognito mode doesn't completely hide your activity.
- Browser updates have a history of raising privacy concerns.
- Some extensions collect data.

Browser Choice

Edge

Pro's

- Built-in Copilot integration.
- Bookmarks and browsing history sync between devices.
- Windows Timeline support.

Con's

- Browser can freeze on ad-heavy pages.
- Slow to load embedded videos.
- Needs a powerful computer to open many tabs.

Browser Choice

Brave

Pro's

- Robust privacy and security features.
- Alternative way to support online creators.
- Beginner-friendly introduction to cryptocurrencies.

Con's

- Affects websites' revenue models.
- Inconvenient update methods.
- Limited extensions.

Browser Choice

Safari

Pro's

- Built-in support for Apple Pay and Touch ID.
- Pre-installed on Macs, iPads, and iPhones.
- Syncs bookmarks and browsing history.

Con's

- Unavailable for modern Windows computers.
- No app on Android smartphones and tablets.
- Limited customization.

Browser Choice

Opera

Pro's

- Includes a VPN.
- Extensive library of add-ons.
- Custom wallpapers.
- The Opera portable browser is a unique idea.

Con's

- Can load slowly.
- Many extra features feel redundant.

Browser Choice

Readdle

Pro's

- Allows files usually blocked on Apple iOS.
- Manages local and cloud files.
- Supports PDF and ZIP files.

Con's

- UI can be confusing.
- Some functionality requires upgrade.
- Can run slow on older iPhone and iPad models.

Browser Choice

Vavaldi

Pro's

- Add any website to the toolbar.
- Numerous customization options.
- Supports Google Chrome extensions.

Con's

- Not always user-friendly.
- Inconsistent window sizes when selecting links.

Browser Extensions

A browser extension is a small software application that adds capacity, functionality or features to a web browser. **It's** also called a plug-in or an add-on

Browser Extensions

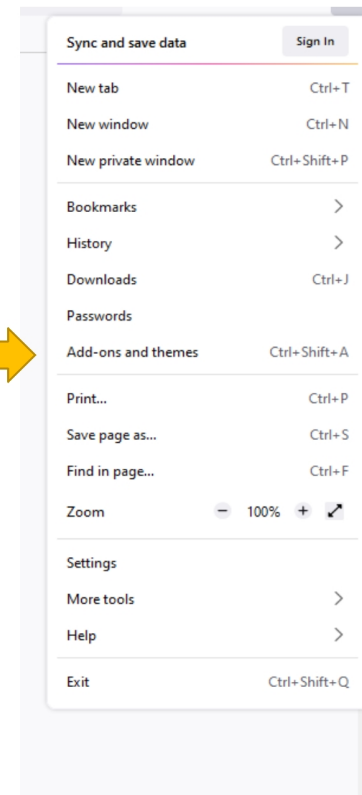
Extensions/Add Ons to have a look at:

- 1) Web of Trust Trust Rating Of A Website
- 2) uBlock Origin Ad Blocker (No Coin Alternative)
- 3) Ghostery Ad Blocker and Tracker
- 4) NoMiner Blocks Coin Miners From Your Computer
- 5) DuckDuckGo Privacy Essentials..... Tracker Blocker & Hidden Tracker
- 6) Malwarebytes Browser GuardAd Blocker & Suspect Websites Blocker
- 7) Disable HTML5 Autoplay Disables Audio & Video Autoplay Till You OK

Browser Extensions

Adding Extensions in Firefox

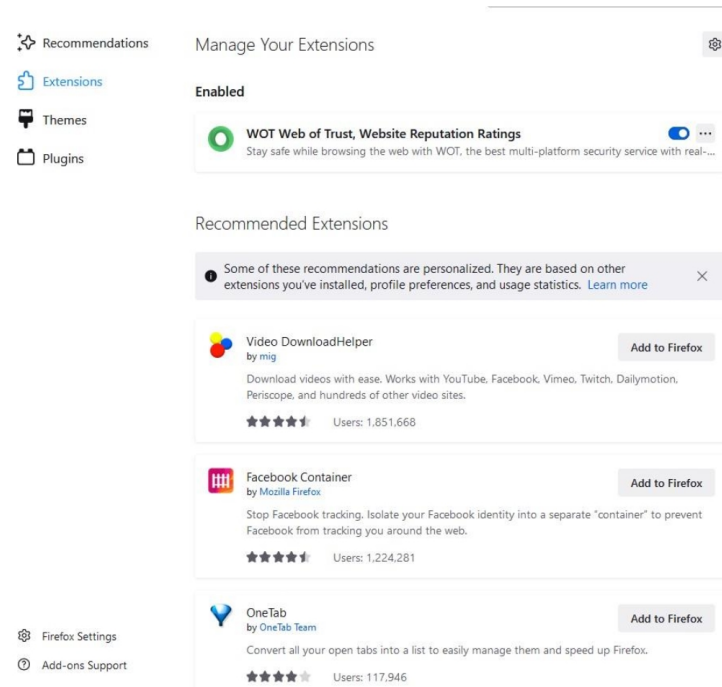
- Start With Menu
- Click on Add Ons & Themes



Browser Extensions

Extensions in Firefox

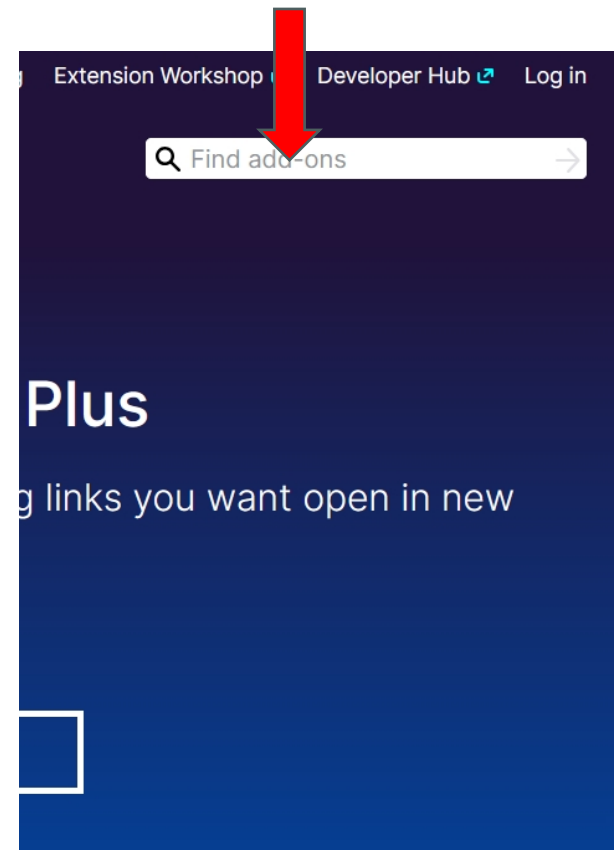
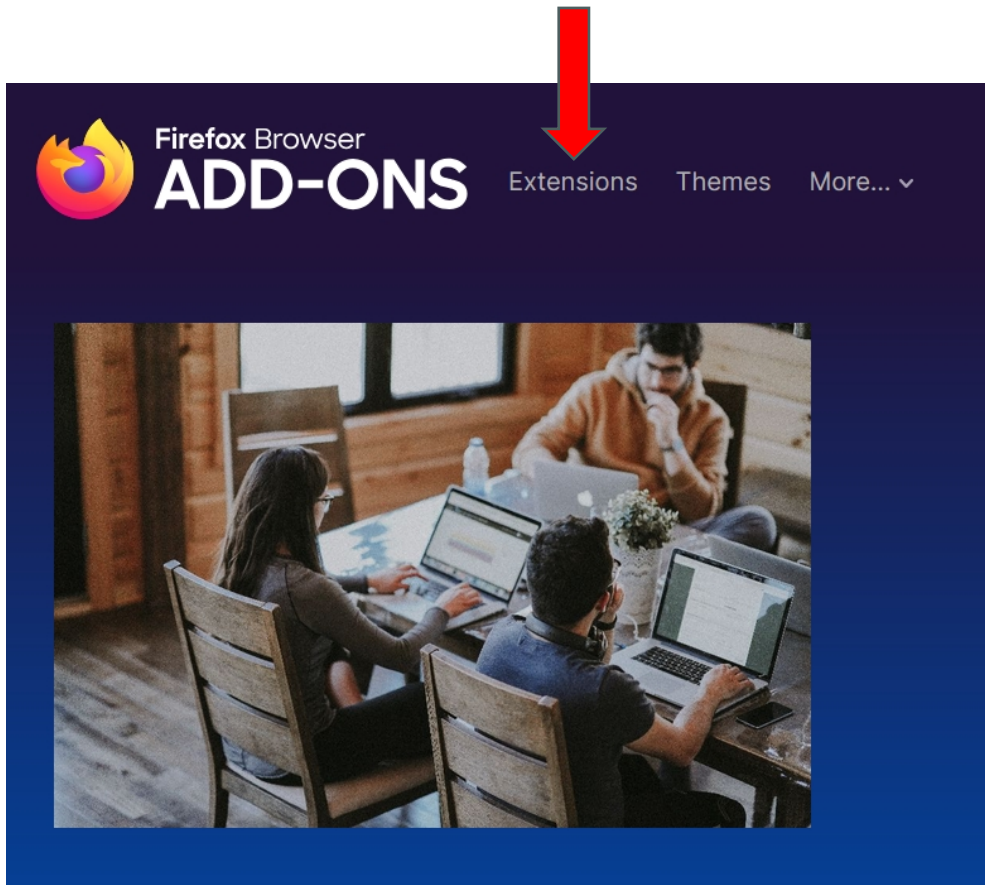
- Opens Library Of Extensions
- Select Add On / Extension
- Scroll Down for More



Browser Extensions

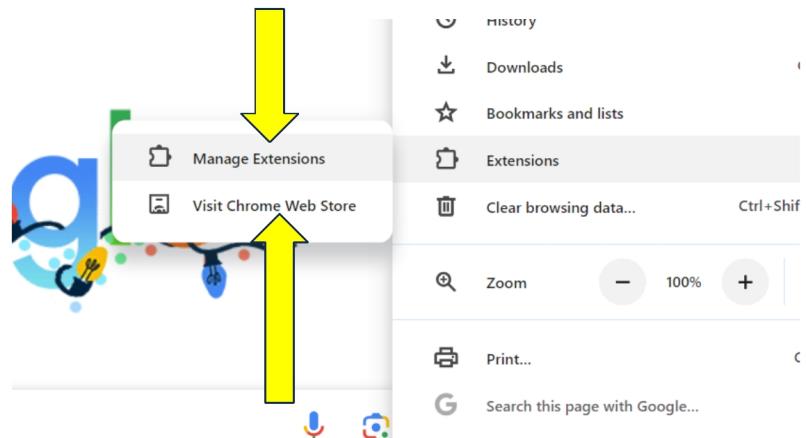
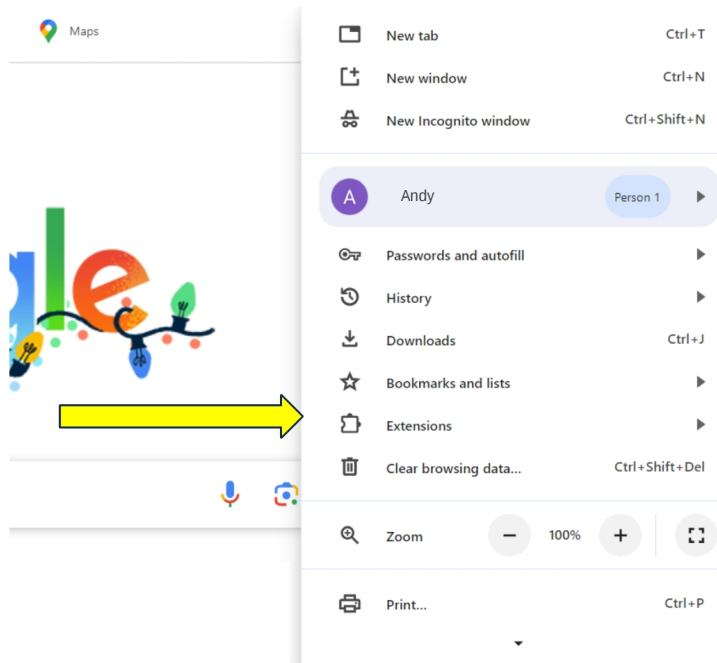
Click on Extensions or

Search for one



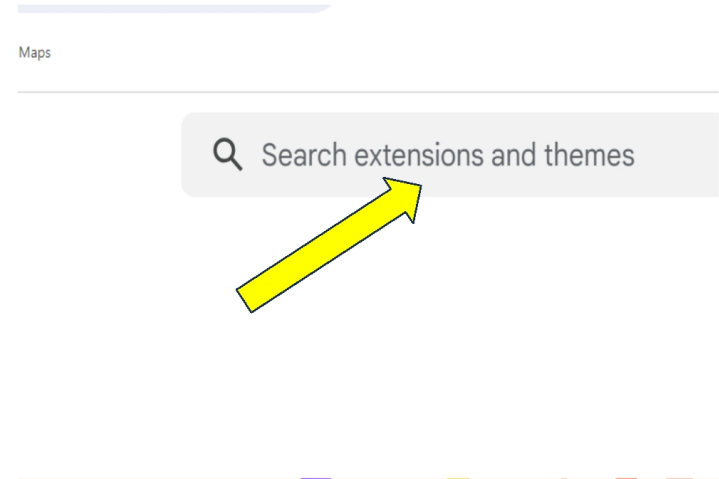
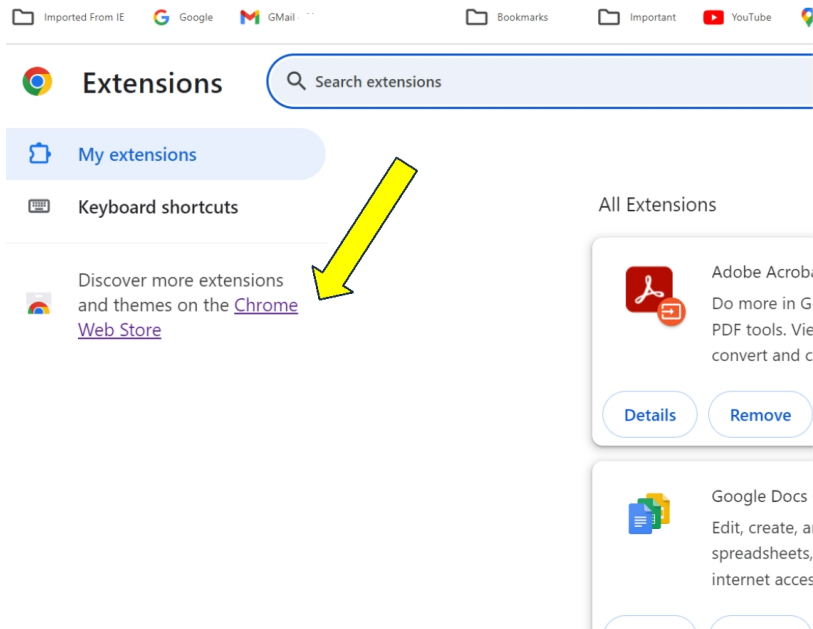
Browser Extensions

Chrome Extensions



Browser Extensions

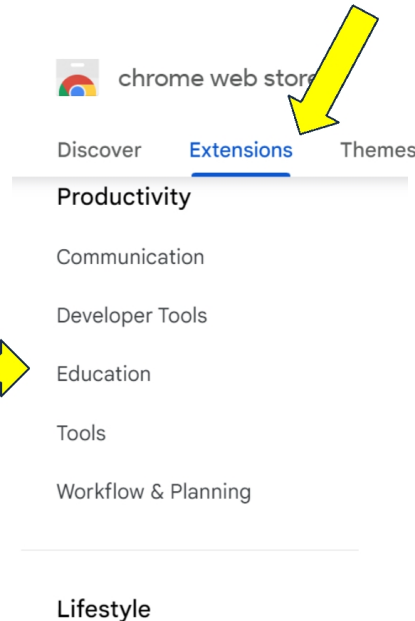
Chrome Extensions



Browser Extensions

Chrome Extensions – Pre-Selected Options

- Offer Extension By Category
 - Select Category
 - Then Extension
-
- Example “Education”
-
- Scroll Down For More Categories



Browser Tips

- Back button moves you to the previous page and forward button to next page.
- A new page can open in the same tab or in a new one (tab settings).
- To save a web page - Click File > Save As and a saved box will appear that you can save in any folder of your PC.
- To save images and links - right-click on what you want to save > choose to save picture as > name the folder and save.
- To save a favorite - click on the star on the search on right-left > save the bookmark. Save as many you want and open from the bookmark list.
- To change the order - Click the Favourites menu > Organize Favourites. You can also delete the one you no longer need.
- A Stop button stops loading & a Refresh button to reload the page.
- A Home Button taking users to selected homepage (change in settings).
- The URL is the address of the website which users can enter in the search bar to access them.

Browsers

The End