

# Browsers



# Contents

- Slides 4 – 5 Discussion
- Slide 6 What is a Browser ?
- Slide 7 How many Browsers are there?
- Slides 8 – 14 Each Browser
- Slide 15 Browser Security & Privacy

# More Contents

- Slide 16 Utility of Browsers
- Slide 17 Portability of Browsers
- Slide 18 Link to get your Browser
- Slide 19 The Happy Ending

# Discussion

- The first thing you should know if you are a computer user, what browser am I using or going to use?
- The second thing is, what does a browser do ?
- You are not stuck with the default browser that came with your operating system.
- If you want you can look at a [website from mozilla](#) talking about browsers.

# More Discussion

- I read an piece on Browsers a while ago and the main point of the conversation was “Don’t use a Web Browser from a company that is big in Advertising.
- The reason is fairly obvious. The independent Web Browsers are not so attached to the \$\$ as some.

# What is a Browser ?

- A web browser takes you anywhere on the internet. It retrieves information from other parts of the web and displays it on your desktop or mobile device. The information is transferred using the Hypertext Transfer Protocol, which defines how text, images and video are transmitted on the web. This information needs to be shared and displayed in a consistent format so that people using any browser, anywhere in the world can see the information.

# How many different Browsers are there ?

Year	Web browsers
1990	WorldWideWeb (Nexus)
1991	Line Mode Browser
1992	Erwise, MacWWW (Samba), MidasWWW, ViolaWWW
1993	AMosaic 1.0, Arena, Cello, <sup>[2]</sup> Lynx 2.0, Mosaic
1994	Agora (Argo), IBM WebExplorer, iBrowse, MacWeb, Minuet, Netscape Navigator, SlipKnot 1.0
1995	Grail, Internet Explorer 1, Internet Explorer 2, Netscape Navigator 2.0, OmniWeb, UdiWWW, <sup>[3]</sup>
1996	Amaya 0.9, <sup>[4]</sup> Arachne 1.0, AWeb, Cyberdog, Internet Explorer 3.0, Netscape Navigator 3.0, Opera 2.0, PowerBrowser 1.5, <sup>[5]</sup> Voyager
1997	Amaya 1.0, <sup>[4]</sup> Internet Explorer 4.0, Netscape Navigator 4.0, Netscape Communicator 4.0, Opera 3.0 <sup>[6]</sup>
1998	iCab, Mozilla
1999	Amaya 2.0, <sup>[4]</sup> Mozilla M3, Internet Explorer 5.0
2000	Amaya 3.0 <sup>[4]</sup> , Amaya 4.0, <sup>[4]</sup> K-Meleon 0.2, Konqueror, Netscape 6, Opera 4, <sup>[7]</sup> Opera 5, <sup>[8]</sup>
2001	Amaya 5.0, <sup>[4]</sup> Internet Explorer 6, Galeon 1.0, Opera 6, <sup>[9]</sup>
2002	Amaya 6.0, <sup>[4]</sup> Amaya 7.0, <sup>[4]</sup> Phoenix 0.1, Netscape 7, Mozilla 1.0, Links 2.0
2003	Amaya 8.0, <sup>[4]</sup> Epiphany 1.0, Opera 7, <sup>[10]</sup> Apple Safari 1.0,
2004	Firefox 1.0, Netscape Browser, OmniWeb 5.0
2005	Amaya 9.0, <sup>[4]</sup> AOL Explorer 1.0, Epiphany 1.8, Maxthon 1.0, Netscape Browser 8.0, Opera 8, <sup>[11]</sup> Apple Safari 2.0, Shiira 1.0
2006	Avant 11, Camino 1.0, Galeon 2.0, iCab 3, K-Meleon 1.0, Mozilla Firefox 2.0, Internet Explorer 7, Opera 9, <sup>[12]</sup> SeaMonkey 1.0
2007	Konkeror, Flock 1.0, Apple Safari 3.0, Netscape Navigator 9, NetSurf 1.0
2008	Google Chrome 1, Maxthon 2.0, Mozilla Firefox 3, Opera 9.5, <sup>[13]</sup> Apple Safari 3.1, Konqueror 4, Amaya 10.0 <sup>[4]</sup> , Flock 2, Amaya 11.0 <sup>[4]</sup>
2009	Google Chrome 2-3, Mozilla Firefox 3.5, Internet Explorer 8, Opera 10, <sup>[14]</sup> Apple Safari 4, SeaMonkey 2, Camino 2, surf, Pale Moon 3.0 <sup>[15]</sup>
2010	Google Chrome 4-8, Mozilla Firefox 3.6, Opera 10.50, <sup>[16]</sup> Opera 11, Apple Safari 5, K-Meleon 1.5.4, xxterm
2011	Google Chrome 9-16, Mozilla Firefox 4-9, Internet Explorer 9, Opera 11.50, Apple Safari 5.1, Maxthon 3.0, SeaMonkey 2.1-2.6
2012	Google Chrome 17-23, Mozilla Firefox 10-17, Internet Explorer 10, Opera 12, Apple Safari 6, Maxthon 4.0, SeaMonkey 2.7-2.14
2013	Google Chrome 24-31, Mozilla Firefox 18-26, Internet Explorer 11, Opera 15-18, Pale Moon 15.4-24.2.2 <sup>[17]</sup> , Apple Safari 7, SeaMonkey 2.15-2.23
2014	Google Chrome 32-39, Mozilla Firefox 27-34, Opera 19-26, Pale Moon 24.3.0-25.1.0 <sup>[17]</sup> , Apple Safari 8, SeaMonkey 2.24-2.30
2015	Google Chrome 40-47, Microsoft Edge, Mozilla Firefox 35-43, Opera 27-34, Pale Moon 25.2.0-25.8.1 <sup>[17]</sup> , Vivaldi
2016	Google Chrome 48-55, Mozilla Firefox 44-50, Microsoft Edge 14, Opera 35-42, Apple Safari 9-10, SeaMonkey 2.24-2.30
2017	Google Chrome 56-60, Microsoft Edge 15, Mozilla Firefox 51-55.0.2, Opera 43-45, Opera Neon, Safari 10-11
2018	Chrome 64-71, Firefox 58-64, Microsoft Edge 42-44, Opera 50-57, Safari 11-12, Vivaldi 1.14-2.2
2019	Chrome 72-79, Firefox 65-71, Microsoft Edge, Opera 58-65, Safari 12-13, SeaMonkey, Vivaldi 2.2-2.10, Yandex.browser
2020	Chrome 80-87, Firefox 72-84, Microsoft Edge, Opera 66-73, Safari 13-14, SeaMonkey, Vivaldi 2.10-3.5, Yandex.browser

There are many browsers and more than you can see on this image.

There are 7 major players and then many more that you might find if you start looking.

I will be talking about the 7 in this presentation.

# Google Chrome



- The Google Chrome Browser is probably the most used on the internet today.
- You might ask yourself “Why”? The answer is probably that they pay to put their browser on your computer.
- Google is big into Advertising.



# Firefox



- This is the Web Browser of my choice.
- It works on most of my devices and platforms.
- Data sharing between devices is easy with a Firefox account and Sync.
- [Mozilla](#) is an independent origination that creates a number of tools for the internet.

# Opera



- Opera is another Web Browser not tightly associated with advertising.
- It's base is in Oslo and they take security to the Nth degree.
- I use Opera as my second browser when doing my programming and it is available on most of my devices.

# Apple Safari



- The default browser that is supplied by Apple for their operating systems.

Both Microsoft and Apple supply a default browser with their operating systems.



# Microsoft Internet Explorer



- This Web Browser is no longer updated and is old. It has been replaced with the next Web Browser from Microsoft.
- I do not use IE. In the old days most malware was written to attack IE. I suggest you use one of the above Web Browsers or Microsoft's Edge.

# Microsoft Edge



- This is the new default Web Browser from Microsoft. I don't use this Web Browser either. I don't like default browsers as they are tied to the operating system and the company does advertising.

# Brave










- I have not used Brave Web Browser much but I can tell you that it is based on the Google Chrome engine and does do some advertising.

# Browser Security & Privacy

## Security and Privacy

Which browser is best at keeping things confidential?








Some information on these browsers and how they provide you a safe experience on the net.

Security and Privacy							
Private Browsing mode	✓	✓	✓	✓	✓	✓	✓
Blocks third-party tracking cookies by default	✓	—	✓	✓	✓	✓	✓
Blocks cryptomining scripts	✓	—	✓	—	✓	✓	—
Blocks social trackers	✓	—	✓	✓	—	✓	—

# Utility

## Utility

What has your browser done for you lately?

Utility							
Autoplay blocking	✓	—	✓	—	—	✓	—
Tab browsing	✓	✓	✓	✓	✓	✓	✓
Bookmark manager	✓	✓	✓	✓	✓	✓	✓
Automatically fills out forms	✓	✓	✓	✓	✓	✓	✓
Search engine options	✓	✓	✓	✓	✓	✓	✓
Text to speech	✓	—	✓	✓	—	—	✓
Reader mode	✓	✓	✓	✓	—	✓	✓
Spell checking	✓	✓	✓	✓	✓	✓	✓
Web extensions/Add-ons	✓	✓	✓	✓	✓	✓	✓
In-browser screenshot tool	✓	—	✓	—	✓	—	—

One of the main reasons I chose Firefox along time ago was it worked on most of my devices.








This chart shows the Utility of the 7 main Web Browsers.



# Portability

## Portability

How well does your browser work across your devices?

Portability							
OS availability	✓	✓	✓	—	✓	✓	—
Mobile OS availability	✓	✓	✓	—	✓	✓	—
Syncs with mobile	✓	✓	✓	✓	✓	✓	—
Password management	✓	✓	✓	✓	✓	✓	✓
Primary password	✓	—	✓	—	✓	—	—

When you have more than one device or operating system and you want to go from device to device and see the same information and bookmarks then I choose Firefox.

# Where to get your new Browser

- Google Chrome
- Mozilla Firefox
- Opera
- Safari (only for apple devices and is their default)
- Microsoft Edge

# Happy Ending



I hope you enjoyed this presentation and have figured out what and which Web Browser you use or want to use.

If you have questions or suggestions on or about this presentation please [contact us](#).