







Browser Extensions



Discussion Topics

- Defining a web browser extension?
- Difference between Extensions and Plug-ins
- How a browser extension works (and how to make one)
- How to install or remove extensions
- Are browser extensions safe?
- Which Browser Extensions Should You Use?

Plug-Ins vs Extensions

Plug-In and Extensions are similar and often confused. A plug-in manages data embedded in a web page. An extension changes the browsers operation.

Extensions are usually source code Plug-ins are always executable files (object code)

An extension could have a plug-in embedded.

Plug-In Examples

Third party software that "plugs in" to a browser to read libraries embedded in the web page. Many are pre-installed in browsers.

Some examples are:

- PDF Readers
- Video/Media Players
- Gaming Services
- Printing Services

The main difference is that plug-ins don't change the core functionality of the browser.

Browser extensions extend the functionality of your web browser by:

- 1. Adding additional features to the browser
- 2. Modifying web pages
- 3. Integrate with services

Extensions are sometimes called add-ons.

There Are 3 Types of Extensions

1. Browser Action

- a. Stays in the Browser Tool Bar
- b. Accessible at all times
- 2. Page Action
 - a. Stays in the Browser Tool Bar: grayed out
 - b. Is accessible only on certain pages.
- Neither Browser or Page Action
 a. Runs in the background

Some Examples of Extensions

- Toolbars
- Themes
- Bookmark Managers
- Ad Blockers
- Tab Managers
- Dictionaries
- And many more

So How Do Extensions Work? (and how to create one)

- 1. Create your Manifest file
- 2. Create your Browser Action file
- 3. Create your Pop-Up file
- 4. Create a CSS file
- 5. Add your Icons
- 6. Test your Extension Code

```
"name": "Color Changer",
 "author": "Microsoft Edge Extension Developer",
 "version": "1.0",
 "description": "Change the color of the body on
docs.microsoft.com",
 "permissions": [
  "*://docs.microsoft.com/*",
  "tabs"
 ],
 "browser action": {
  "default icon": {
   "20": "images/color-changer20.png",
   "40": "images/color-changer40.png"
  },
  "default title": "Color Changer",
  "default popup": "popup.html"
```

Obviously We Won't Be Doing This!



How to Install/Remove Extensions

- Varies by browser
- I'm going to demonstrate how in Firefox and Chrome
- The actions are similar in almost all browsers
- If you have problems do an Internet Search for your browsers name and the words "manage extensions"

Firefox

Click Settings and select Extensions & Themes 1) Click Extensions

- Search for the Extension you want to add.
 Note: clicking extension links on websites should bring you to this page
- 3) Search Find more add-ons to find extensions
- 4) Clicking the Slider Button on installed

extensions will enable or disable them

5) Clicking on the menu (...) on installed extensions lets you remove them

Chrome

Click the Chrome menu and select Settings 1) Click Extensions

2) Search for the Extension you want to add. Note: clicking extension links on websites should bring you to this page 3) Open Hamburger Menu & Select Open Chrome Web Store to find new extensions 4) Clicking the Slider Button on installed extensions will enable or disable them 5) Click on the Remove button on installed extensions lets you remove them

Are Extensions Safe to Use?

Browser extensions are like any other piece of software.

Malicious extensions could do bad things and good extensions could have bugs. Modern browsers alert you to what features an extension wants to access.

Pay attention: don't blindly click yes.

If the extension is not from a well know publisher, research it on the Internet before installing

Which Extensions Should You Use?

I don't know. Why not ask me what kind of car you should drive? I can tell you some extensions I use on all of my browsers.

- Joplin Web Clipper
- Ublock Origin
- Privacy Badger
- Some kind of Tab Manager

Future Topics

In July, I'll be doing a four part series About Android. I'll be Zooming from the Windows Lab. Sign up on the Club Website to guarantee a seat in the classroom.

In August, I'm planning to start a new Workshop.



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