

Chrome Browser Extensions

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Overview

- Browser extensions essentially allow you to run Javascript on top of the current page, or in the background of the browser itself
- We will focus on Chrome browser extensions, though the process of developing extensions for other browsers is similar.
- Currently available Chrome extensions can be found here:
 - <https://chrome.google.com/webstore/category/extensions>
- We will consider 3 types of extensions:
 - Those which automatically run on desired pages
 - Those which run when the extension icon is clicked
 - Those which have a pop-up that allows for user input before running on the page

The manifest file

```
1 ▼ {
2   "name": "Chrome Browser Extension Demo",
3   "description": "Demonstrates background and content scripts for a Chrome extension",
4   "version": "1.0",
5 ▼  "permissions": [    The extension has permission to
6     "activeTab"      access the currently active tab
7   ],
8
9   // These scripts automatically run when the url matches the specified patterns
10 ▼  "content_scripts": [
11 ▼    {
12       "matches": ["<all_urls>"],
13       "js": ["changeColor.js"]
14     }
15   ],
16
17   // Background scripts can be used to respond to events, such as clicking the icon
18 ▼  "background": {
19     "scripts": ["background.js"],
20     "persistent": false
21   },
22 ▼  "browser_action": {
23     "default_title": "Chrome Browser Extension Demo"
24   },
25   "manifest_version": 2    Manifest version must be 2 (required by Chrome browser)
26 }
```

References

- Content scripts:
 - https://developer.chrome.com/extensions/content_scripts
- Match patterns:
 - https://developer.chrome.com/extensions/match_patterns
- Permissions:
 - https://developer.chrome.com/apps/declare_permissions
- Google main page and tutorial:
 - <https://developer.chrome.com/extensions>
- To load / manage extensions, use the URL
 - `chrome://extensions/`