

How To Test Your Extension Guide

Chrome Starter Extension

Welcome to this guide and thank you for purchasing Chrome Extension Starter

So, you're building a new Chrome Extension and that's awesome!

Like any project, you will need to test it before publishing it on the Chrome Web Store.

Let's see how to test your project directly in your browser.

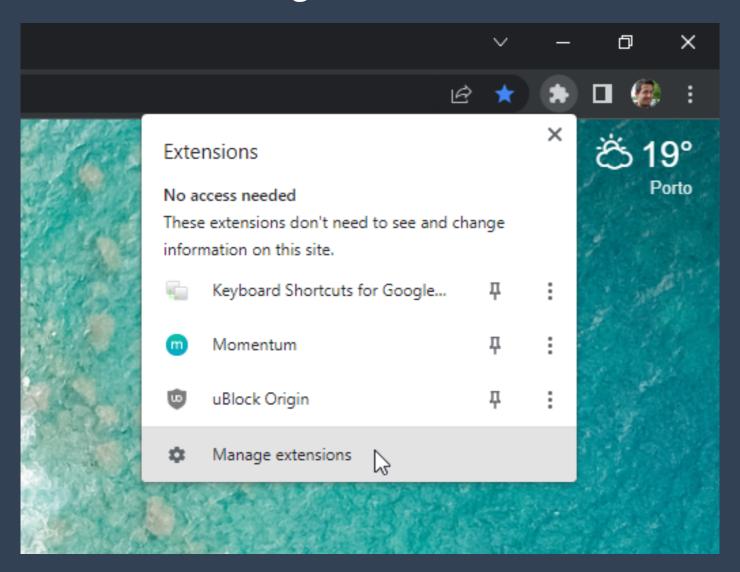
For this, we will use one of the projects of Chrome Extension Starter

Step 1: Open Chrome's Extensions page

When you're developing your Chrome Extension, you're not passing by the Chrome Web Store to install it. Instead, you have to use Google Chrome's extensions management page.

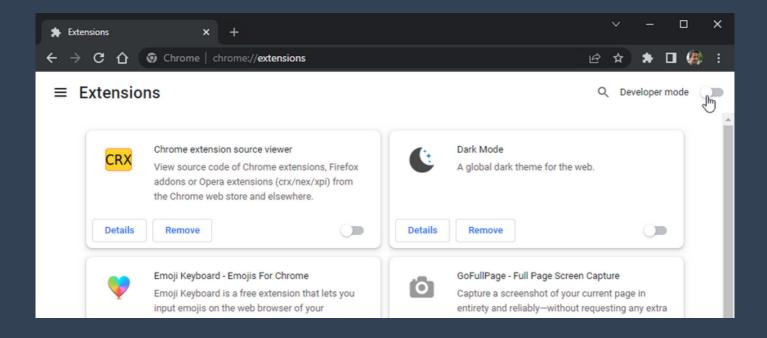
Click on the **puzzle** icon (the extension icon) in the top right corner.

Then click on "Manage extensions".

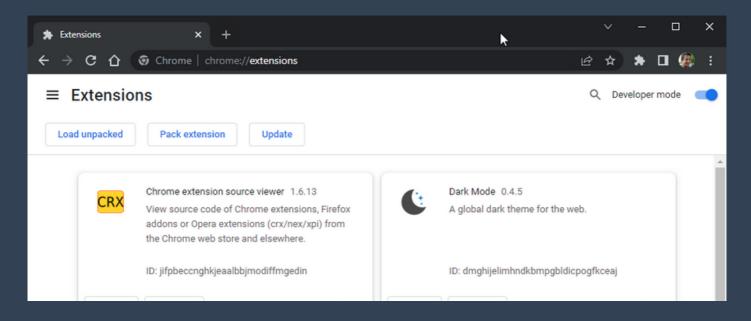


Step 2: Enable developer mode

You've probably seen this screen before. Now, you have to click on "**Developer mode**" on the top right corner.

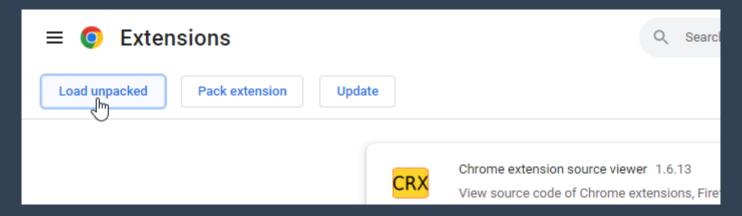


You will then see 3 new buttons appear: "Load unpacked", "Pack extension", "Update".

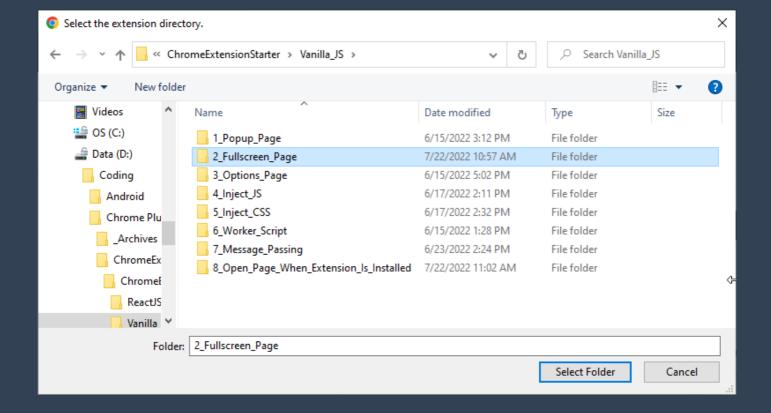


Step 3: Load your extension

To load your extension, click on the "**Load unpacked**" button

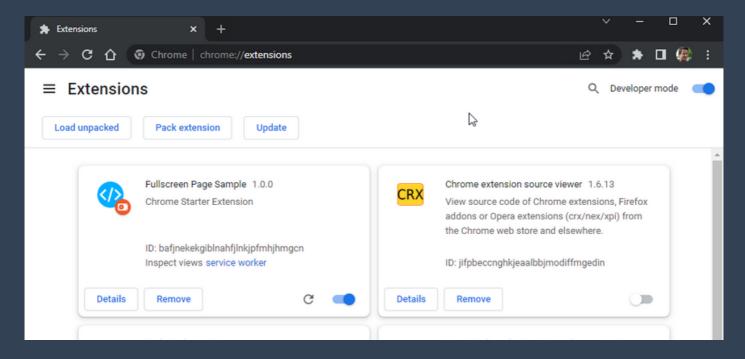


Next, you must select the root folder of your extension, meaning the folder containing the manifest file. In the example below, I selected the second extension example in the "Vanilla JS" folder, "2_Fullscreen_Page".



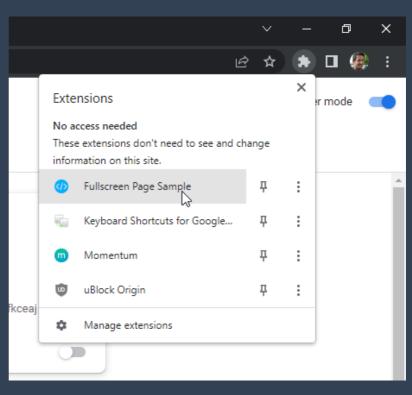
Step 4: Test your app

Congratulations! Your extension is now installed on your browser. You can see in the screenshot below, the first extension is "Fullscreen Page Sample" by "Chrome Extension Starter".

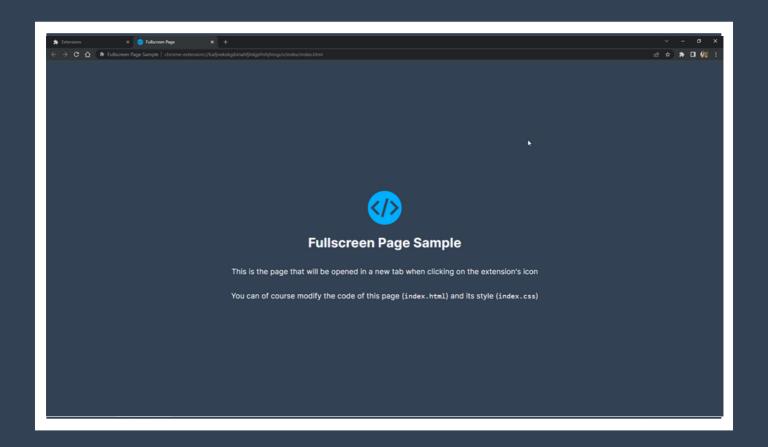


You can also see the extension in the extension bar.

Click on it to open it and test your app.



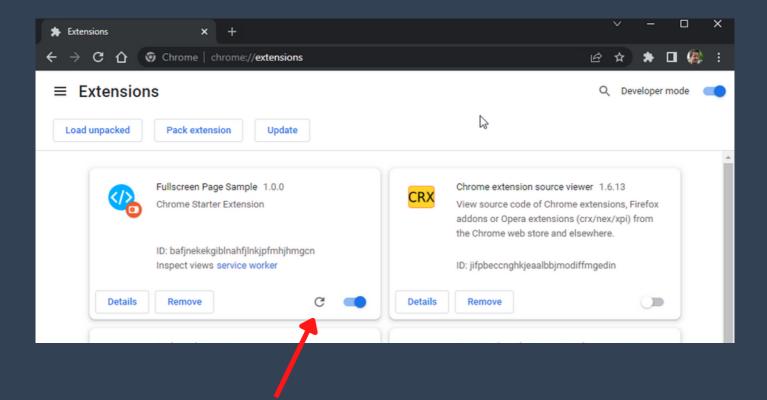
You extension is now running live in your browser! You can start testing it, and modify it.



Most of the time, after you modify the code, you just have to hit the refresh button of Chrome (or hit the "**F5**" key on your keyboard) to refresh your extension.

But sometimes, you might want to reload the service worker for example, or just make sure your extension is properly refreshed.

For this, you can use the small "refresh" button in the Chrome extensions page, next to your extension.



The refresh button

Go to the next page to know how to handle errors.

Step 5: Handle Install Errors

If your package has a problem like a missing file, an error in the manifest file or something else, Chrome will tell you about it when you try to load or refresh your extension.

```
Failed to load extension
FileD:\Coding\Chrome
   Plugin\ChromeExtensionStarter\ChromeExtensionStarter\Vanilla_JS\2_Fullscreen
               Manifest is not valid JSON. Line: 17, column: 5, Trailing comma
               not allowed.
  1 {
        "name": "Fullscreen Page Sample",
        "description": "Chrome Starter Extension",
         "version": "1.0.0",
        "manifest_version": 3,
        "action": {
             "default_icon": {
                "16": "icons/icon16.png",
                 "32": "icons/icon32.png",
                 "48": "icons/icon48.png",
 10
                 "128": "icons/icon128.png"
             "default_title": "Fullscreen Page Sample"
         "background": {
             "service_worker": "service-worker.js",
 16
 18
        "icons": {
            "16": "icons/icon16.png",
             "32": "icons/icon32.png",
            "48": "icons/icon48.png",
             "128": "icons/icon128.png"
                            Could not load manifest
                                                          Cancel
```

Here for example, I have an extra comma in the manifest file.

Step 6: Handle Runtime Errors

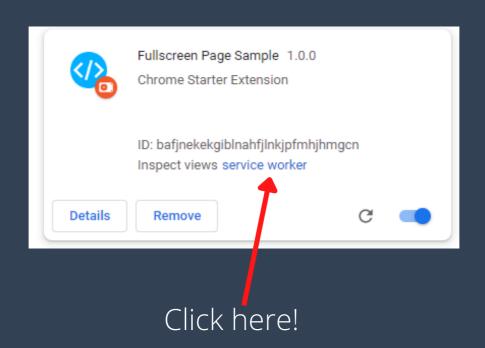
When you're testing your Chrome Extension, you might encounter errors and bugs.

The easy way to debug is to open the Chrome Dev Tools (hit the "**F12**" key on the keyboard) and see in the console if there is an error.

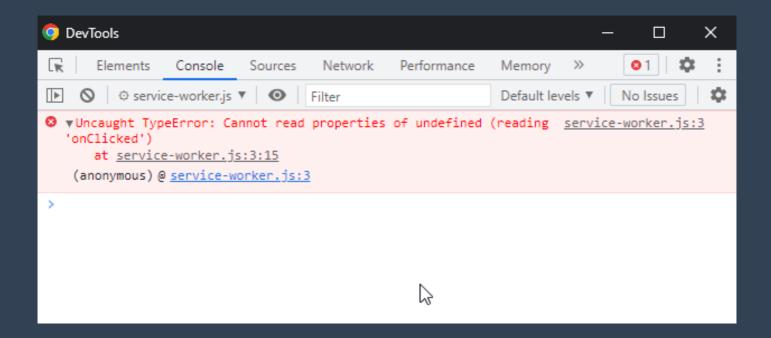
This is fine and all for content scripts.

But what about service background errors or network errors?

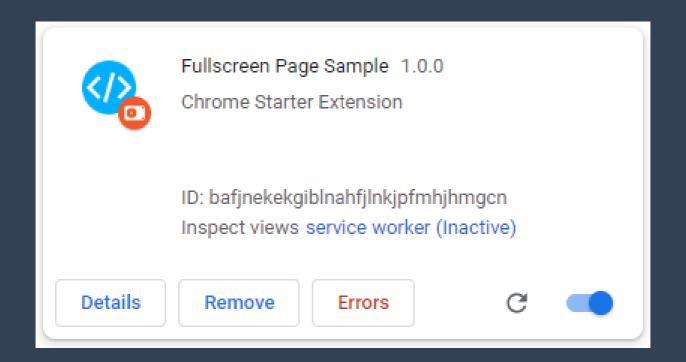
For this, you can inspect the service worker in the extensions page.



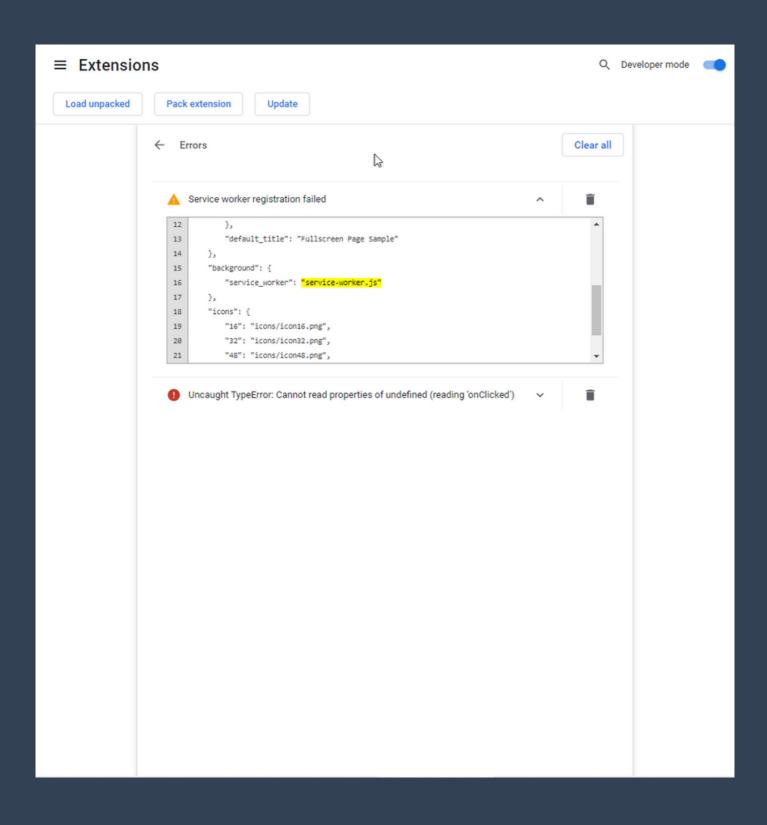
This will open the Chrome Dev Tools in a popup window, and display all the data related to the service worker.



You can also click on the "**Error**" button when it appears on the extensions page.



You will then see a list of all the errors that happened during this and past sessions (since you've installed the extension, or since you've clicked on the "Clear all" button).



That's it!

You're now ready to install and test all the examples in the Chrome Extension Starter package.

And of course, test your own extension!