Task 7

In this task we will learn about the security aspects of web browser extensions and how they affect your device.

To do lets check out how many extensions I have installed by clicking the 3 vertical dots and selecting " My extensions and themes " like in fig1
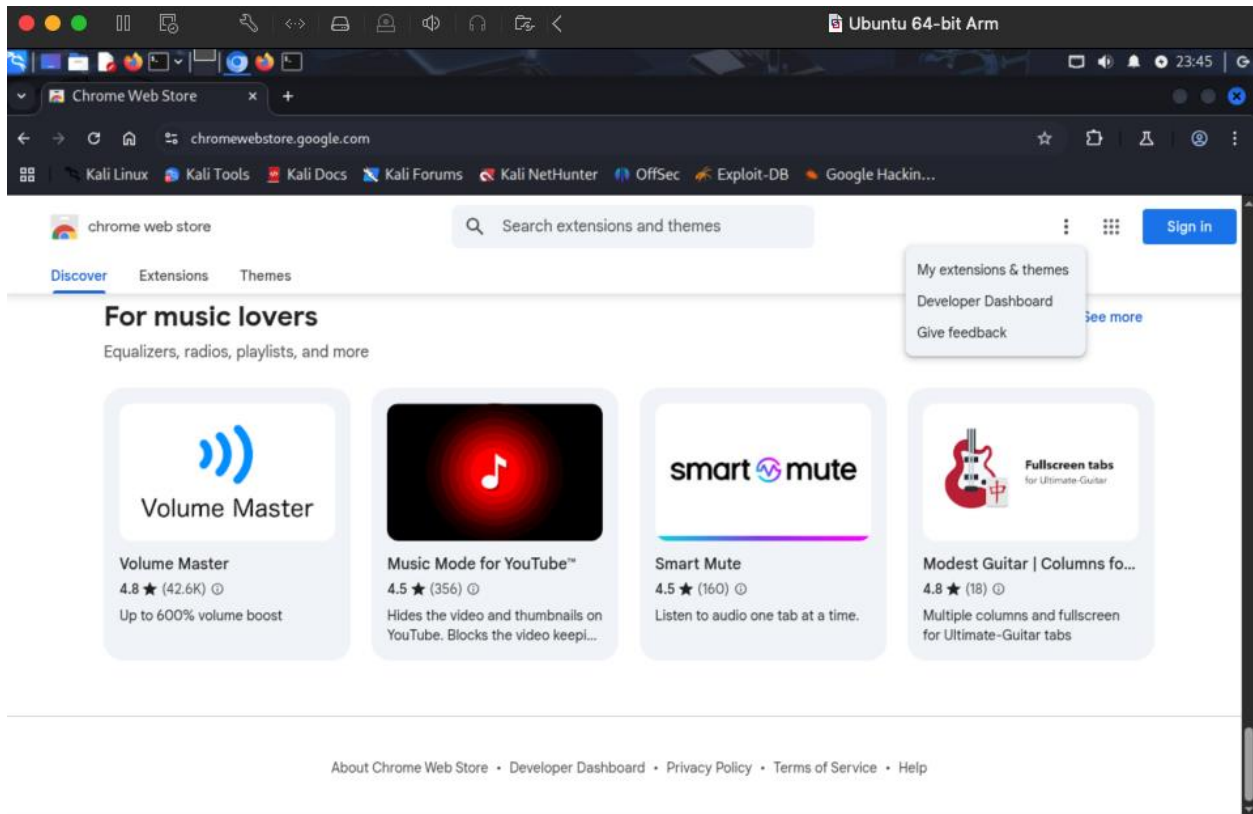

fig 1

Now that we can see which extensions we have try and find the one's that you don't you perhaps and get rid of it immediately, bacause extensions have a lot of access on your device, more than you think.

After that check for the permissions of each and every extension and see whether they are having more permissions than they need to for their task
for ex: a website beautifier extension having storage and write access permissions.

To view the installed extensions in more detail simply type " chrome://extensions/ " in your browser like in fig2
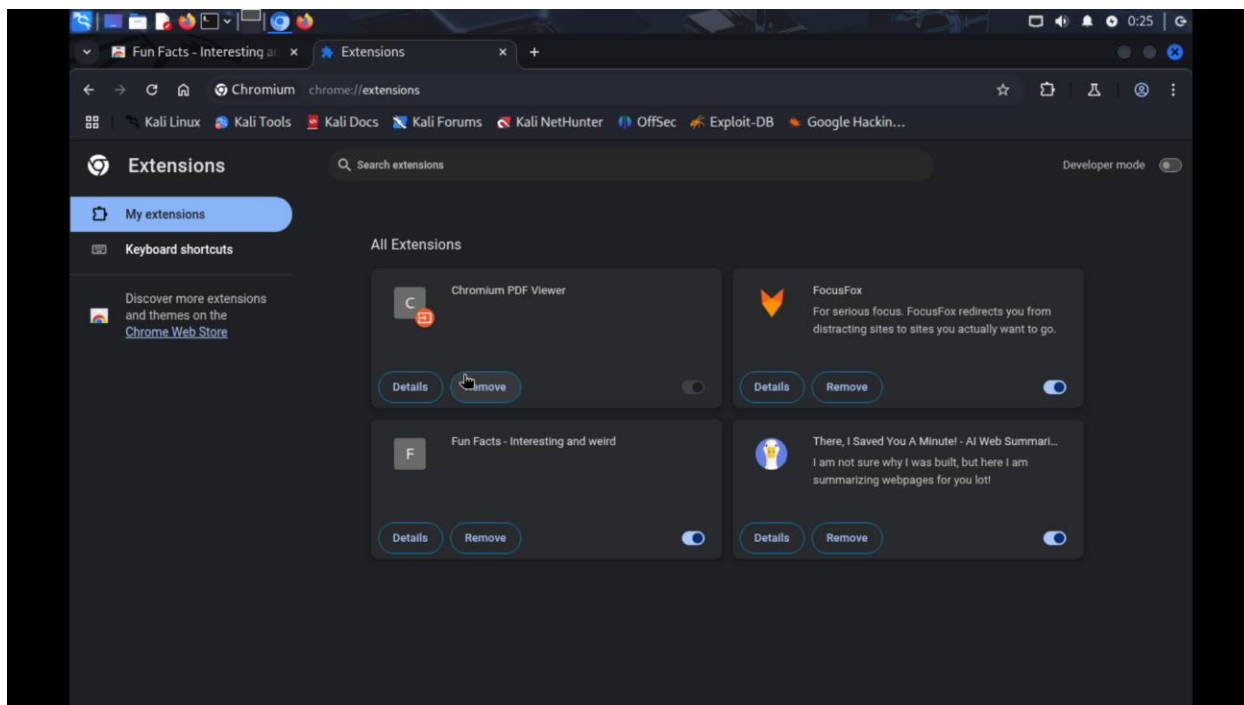
Fig2

Now chromium PDF viewer is a predownloaded extention that cannot be edited, changed or removed so let's just open "fun facts" extension: fig3
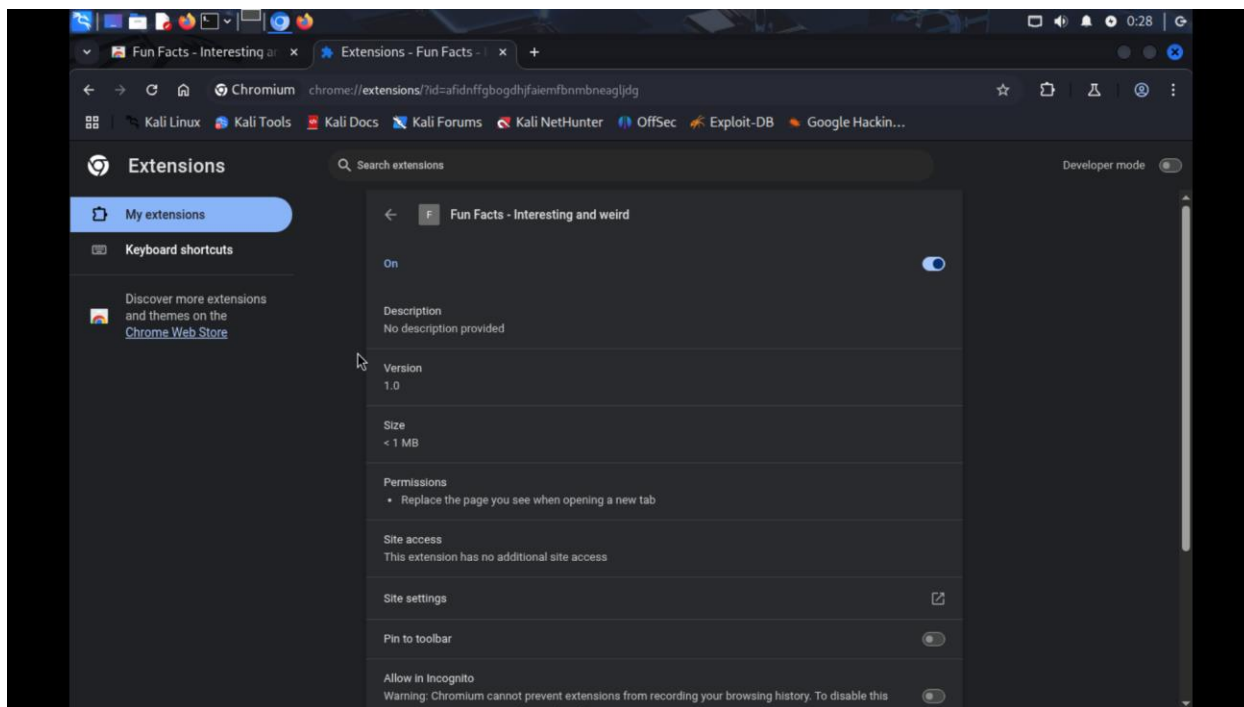

Fig3

Now as you can see in fig 3 the page has the permission to replace the whole web page to something else maybe like a false login page which is not editable so it is not trust worthy.

Second is that it has not been updated since 2023 which means no updates for 2 whole years which means it could have potential security concerns.

Reviewing this its best to remove the extension entirely since it's not useful anyways
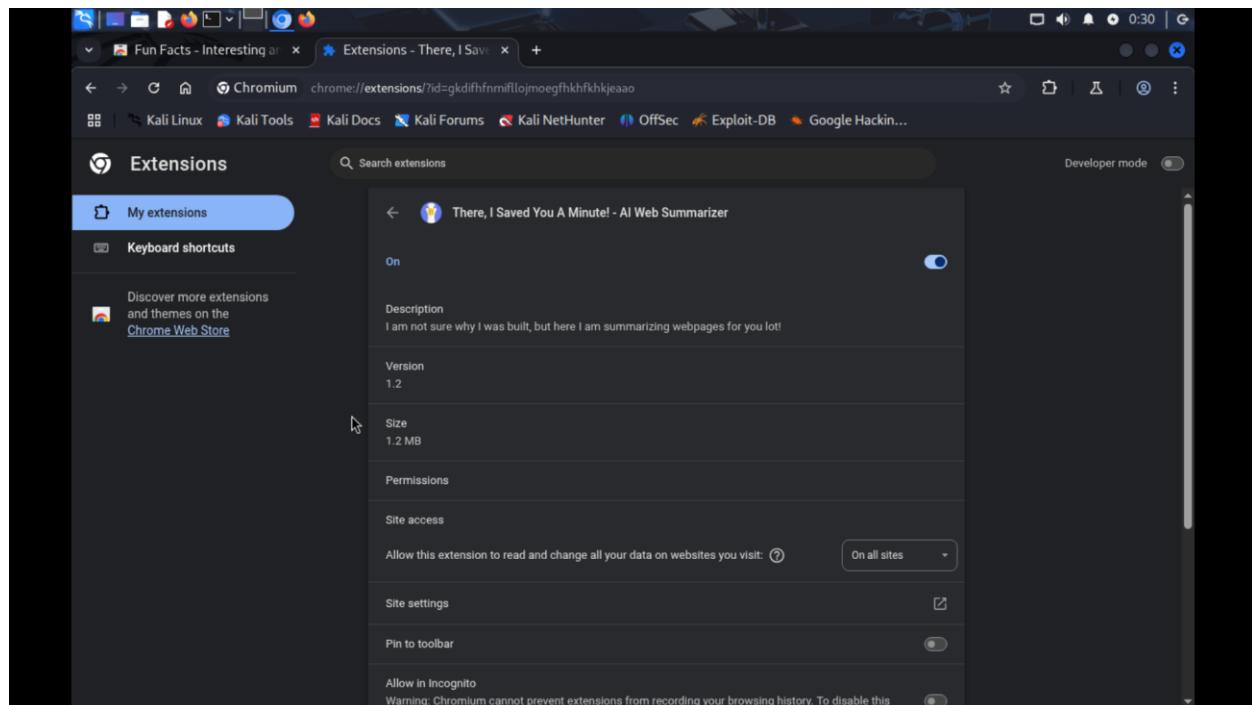
Next lets review another extension: fig4

Fig4

Now this is an extension I use regularly so let's see whether it has any security concerns or not,

This extension is really dangerous as the permission it has really brings up big privacy and security concerns, the permission it should have should be something like ask before seeing/changing data on the web page but it has full access over you web page even on all sites so it should be removed instantly or the permission should be changed to "on click"

The next extension is "focus fox" and it has pretty much the same permissions and access so same as the last one remove instantly if not important or change the permission to "on click" :fig5
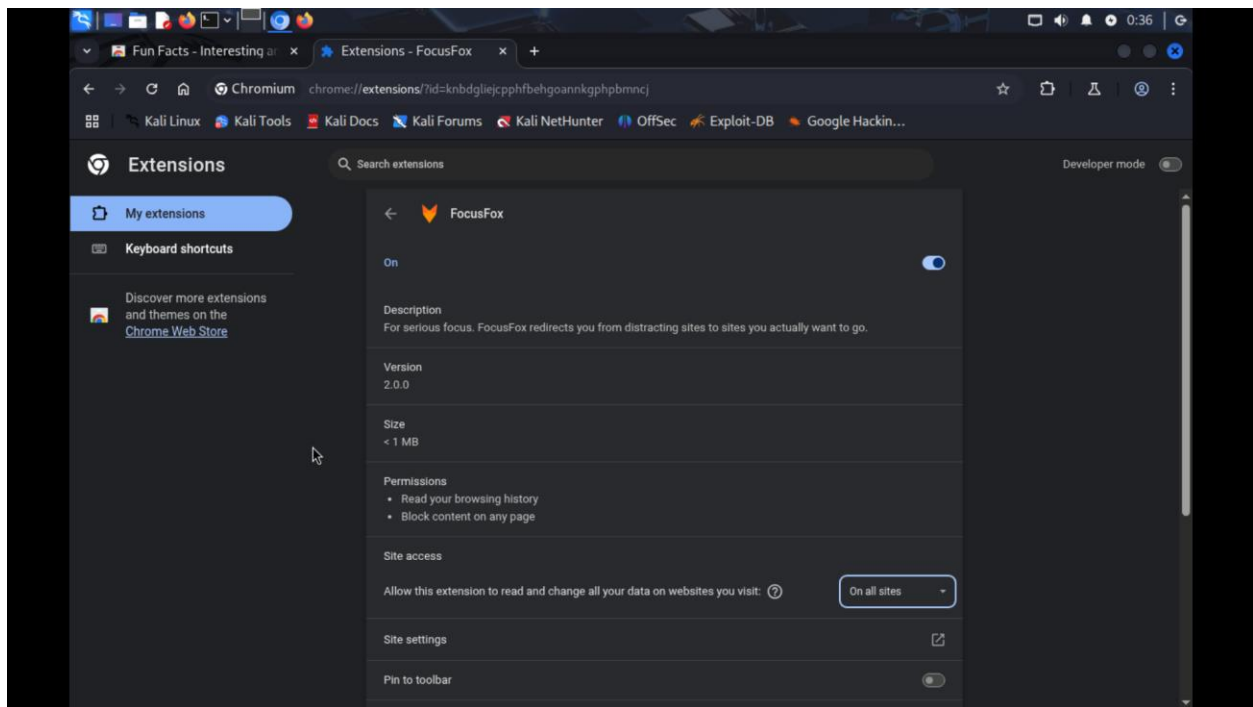
Fig5

Now lets remove the "fun facts" extension by clicking the "remove from chrome" button and change the permissions of the other 2 extensions to "on click". Now for the changes to be effectable let's restart the browser which will probably run a lot smoother now.
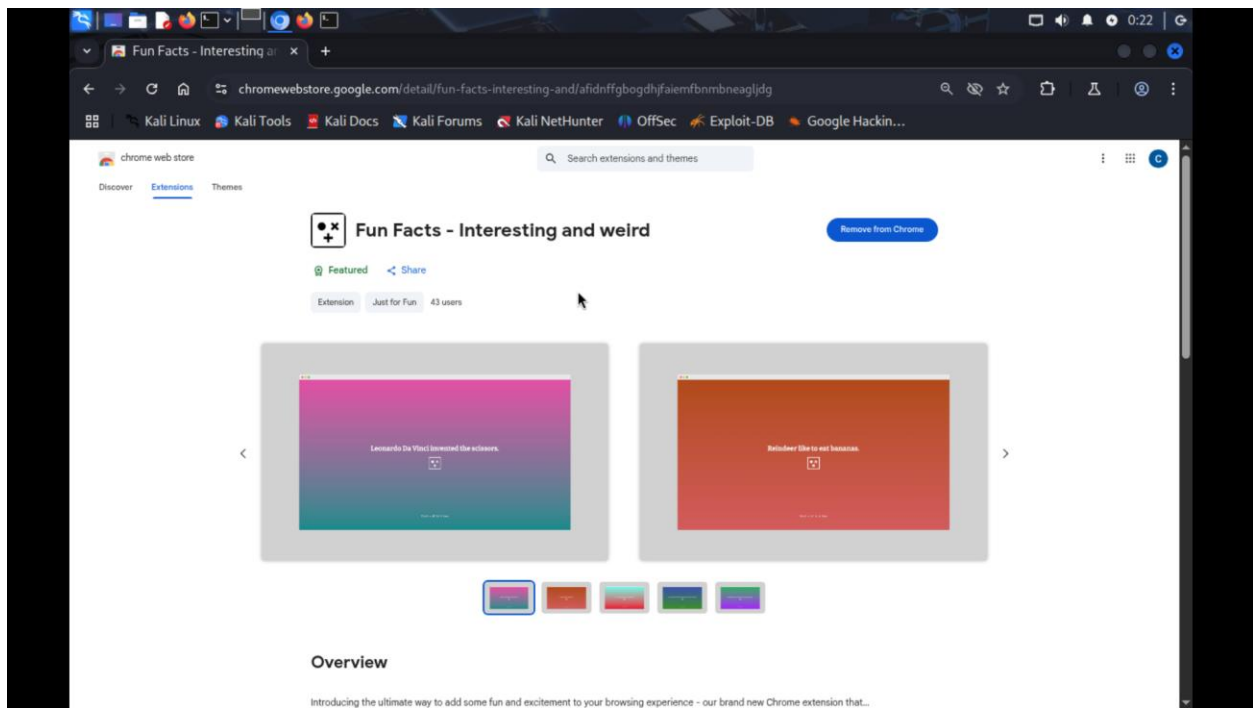

fig 6

Now let's see how malicious browser extensions can harm users:

Malicious browser extension can be very dangerous as they can often operate with more privileges that they actually need to. There are many ways the extension can harm user like:

- Data theft: stealing user's data
- Session hijacking: hijacking your browser session to impersonate the user
- Phishing: asking you unnecessary things to get information out of you
- AD injection: active directory injection
- Click fraud: they make you click on something that is not needed

All in all it is really important for the user to not download suspicious looking extensions with low reviews and users, and also to keep checking for what the permissions are for newly added extensions.