Web Extension

Chrome extensions enhance the browsing experience by adding features and functionality to the Chrome browser, providing things like:

- Productivity tools.
- Web page content enrichment.
- Information aggregation.



Web technologies

Extensions are written with the same web technologies used to create web applications:

- HTML is used as a content markup language.
- CSS is used for styling.
- JavaScript is used for scripting and logic.
- Web platform APIs let you use virtually any feature available to a standard web page.

Before moving forward, we recommend that you become familiar with these technologies.

Chrome extension APIs

Extensions can use all the JavaScript APIs that the browser provides. What makes extensions more powerful than a web app is their access to Chrome APIs. The following are just a few examples of what extensions can do:

- Change the functionality or behavior of a website.
- Allow users to collect and organize information across websites.
- Add features to Chrome DevTools.

Extension files

Extensions contain different files, depending on the functionality provided. The following are some of the most frequently used files

The manifest	The service worker	Content scripts	The popup and other pages
The extension's manifest is the only required file that must have a specific file name: manifest.json . It also has to be located in the extension's root directory. The manifest records important metadata, defines resources, declares permissions, and identifies which files to run in the background and on the page.	The extension service worker handles and listens for browser events. There are many types of events, such as navigating to a new page, removing a bookmark, or closing a tab. It can use all the Chrome APIs, but it cannot interact directly with the content of web pages; that's the job of content scripts.	Content scripts execute Javascript in the context of a web page. They can also read and modify the DOM of the pages they're injected into. Content Scripts can only use a subset of the Chrome APIs but can indirectly access the rest by exchanging messages with the extension service worker.	An extension can include various HTML files, such as a popup, an options page, and other HTML pages. All these pages have access to Chrome APIs.



VS Code

We can edit and run extortion on any platform like VS Code

Hello World Extension Source Code 📰

Build And Publish A VS Code Extension In 20 Minutes



APIs

Google Search API ChatGPT API

RapidAPI: RapidAPI is a marketplace for APIs, including many AI-powered APIs. RapidAPI offers a free tier for students and programmers, which includes 1000 API calls per month.

We need to search about those Open Source AI and it's API

- TensorFlow: TensorFlow is an open source machine learning library that provides a number of APIs, including the TensorFlow Serving API.
- PyTorch: PyTorch is an open source machine learning library that provides a number of APIs, including the PyTorch TorchServe API.
- scikit-learn: scikit-learn is an open source machine learning library that provides a number of APIs, including the scikit-learn model serving API.

