## [***Development environment setup for blockchain development***](https://github.com/Itchy-Fingerz/netsol-blockchain/tree/main/Development environment setup for blockchain development)

## 1. Install Ganache

This guide will use the desktop version of Ganache. Ganache will provide a personal blockchain to be used for local development and testing of smart contracts.

1. In Ubuntu, open a browser and navigate to <https://github.com/trufflesuite/ganache/releases>
2. Download the latest Linux release which will be the \*.AppImage file.

For example ganache-1.3.0-x86\_64.AppImage.

1. Once the download is complete, open a new terminal and change into the directory with the \*.AppImage file.
2. Use chmod to make the file executable:

chmod a+x ganache-1.3.0-x86\_64.AppImage

1. Now run the file

./ganache-1.3.0-x86\_64.AppImage

1. You will be prompted if you want to integrate the application into your system. For convenience, click Yes. This will allow you to launch Ganache later from Ubuntu Application menu.

# 2. Install Node.js

NodeJS v16.13.2 or later

You can install node js from this link

<https://www.digitalocean.com/community/tutorials/how-to-install-node-js-on-ubuntu-20-04>

## 3. Install **Truffle**

npm install -g truffle

## 4. Install **Metamask extension on chrome or firefox. (To connect with web3)**

## 5. Install **VS-Code**

You can install Visual studio code from this link

<https://linuxize.com/post/how-to-install-visual-studio-code-on-ubuntu-20-04/>

## **6. Installation of hardhat**

You can follow this link to set up the hardhat environment ,if the project is to be build using Hardhat:

https://hardhat.org/tutorial/creating-a-new-hardhat-project.html