# Dependencies Required

Install the following dependencies on your pc-

|  |  |  |
| --- | --- | --- |
| **Topic** | **Description** | **Command/Link** |
| **IDE** | Visual Studio Code | <https://code.visualstudio.com/download> |
| Tools | Ganache | <https://www.trufflesuite.com/ganache> |
| Node.js(NPM) | <https://nodejs.org/en/download/> |
| Truffle | Open terminal or CMD and type command given below-  ***npm install -g truffle*** |

# Code Compilation Guide

## Step1: Download Code from GitHub:

* To download source code go to following link “[**https://github.com/naushad0625/Ethereum-based-Home-tracker.git**](https://github.com/naushad0625/Ethereum-based-Home-tracker.git)”
* Click on the green button named “**clone or download**”
* And then “**Download ZIP**”

## Step2: Installing Node packages:

1. **CMD or Terminal based (If you are using Ubuntu it is better to use terminal):**

* Unzip downloaded source code
* There are two directories named “**assetTrackerBackend**” and “**assetTrackerFrontend**”
* Open **CMD** or **Terminal** and go to “**assetTrackerBackend**” directory and type the following command-

**npm install**

* Open another **CMD** or **Terminal** and go to “**assetTrackerFrontend**” directory and type the same previous command-

**npm install**

1. **Vs code terminal based (less recommended):**

* Open these two different projects in two vs code window
* Click “ **ctrl** + **~** ” to open terminal in vs code and type –

***npm install***

## Step3: Creating Ethereum network:

In this step you are going to create an ethereum test network to test your ethereum project.

* Open **Ganache** app installed in your pc
* Click on **QUICKSTART** and it is done
* Here you will see 10 ethereum account addresses each with 100 ethers
* Every time you run this application it will give you 10 account address and 100 ethers for each account

## Step4: Deploy smart contract:

Your smart contract is stored in “**assetTrackerBackend**” directory. And use **CMD** or **Terminal** for this operation.

* Open **CMD** or **Terminal**
* Go to “**assetTrackerBackend**” directory and type the following command-
* ***truffle compile***
* ***truffle migrate***
* Your smart contract has been deployed to ethereum network

## Step5: Running and Exploring

All configuration to run this application has been completed. Now you can run this project and explore.

* Open **terminal/CMD** on “**assetTrackerBackend**” directory and type the following commands sequentially-

“***nodemon*”**

* Open **terminal/Cmd** on “**assetTrackerFrontend**” directory and type the following command-

“***nodemon*”**

* Open following link in a browser-

“***http://localhost:43012/***”