

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- <i><code>npm install -g truffle</code></i>

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>”
- 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

2. 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/>*”