

Cryptocurrency Tracker

Practice Problems



Assignment Questions

Cryptocurrency Tracker

Here we plan to build an app to track the crypto currency and plot their graph. Users can view all the latest cryptocurrencies. They can search for any crypto currency and view their historical chart in a 24 hours change, 30 days change, 3 months change and 1 year change.

Problem Statement

As said, build an app to track the crypto currency and plot their graph. Users can view all the latest cryptocurrencies. They can search for any crypto currency and view their graph in a 24 hours change, 30 days change, 3 months change and 1 year change.

Your task is to go through the problem statement and build the required features of the application.

Problem Breakdown

We will make cryptocurrency app using the following api :

<https://www.coingecko.com/en/api>

You are free to use any style, but it should have a decent look as per the template images. You are free to use react material as well for icons and styling.

Pre-requisites

Kindly ensure you have done signup and logged in to codesandbox if you wish to code online, else make sure to install Git, Nodejs, and NPM in your system before you kickstart development.

For your local development:

After installing the prerequisite dependencies mentioned above, you need to do the following:

- You need download the zip version of the code
- Once you have downloaded it, unzip it to any path of your choice, you need to run the command **npm install** on the project folder's terminal to install all the project dependencies.
- After all the project dependencies have been installed, you need to run the command **npm start** on your project folder's terminal to start the development server.
- The app will now be hosted on the URL <https://localhost:3000>. You can now start coding your application.

For online coding you just need to fork and start coding.

You are free to install and use any other dependencies over and above the ones installed above to ensure the completion of your tasks.

Templates

Here are a list of templates for the above project:

Template 1

1. Create the home page
2. Build the search functionality
3. Build the single page of each cryptocurrency
4. Build the 24 hour, 1 month, 3 month and 1 year change and plot it in chart
5. List out prices in different fiat currency (optional feature)

Story 1:

Your task is to create a home page as you see in the below template. It should clearly show the header section with a carousel. You need to fetch the latest coin using the following api :

Use the following ap to list out all the trending coins :

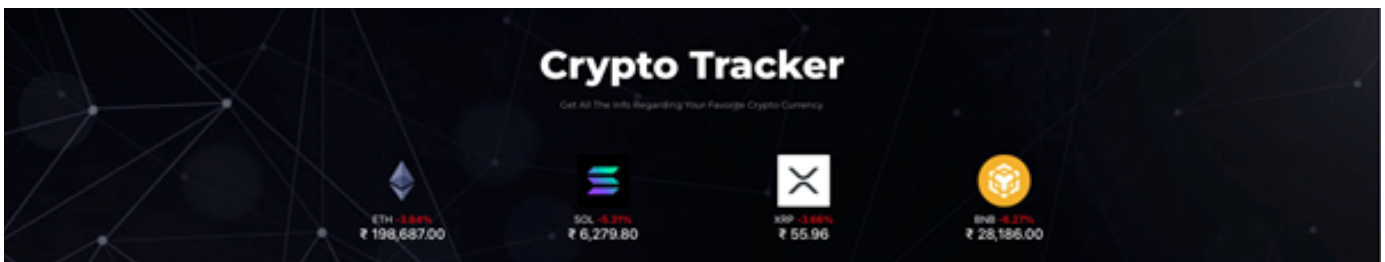
[https://api.coingecko.com/api/v3/coins/markets?vs_currency=\\${currency}&order=gecko_desc&per_page=10&page=1&sparkline=false&price_change_percentage=24h](https://api.coingecko.com/api/v3/coins/markets?vs_currency=${currency}&order=gecko_desc&per_page=10&page=1&sparkline=false&price_change_percentage=24h)

The next task is to list out all the crypto currencies in a list with their name , symbol, price , 24 hour change and market cap listed out in the table for the respective crypto currency. You can use the following api to fetch the crypto currencies and their details :

<https://www.coingecko.com/en/api/documentation>

Use the following ap to list out all the coins :

<https://api.coingecko.com/api/v3/coins/markets>







Story 2:

Create the search functionality by adding a search bar. Users should be able to search any crypto currency when the user clicks enter on the search bar. When the user searches for any cryptocurrency, it should list out on the top. It should look something like this.

Use the following ap to search through all the coins :

<https://api.coingecko.com/api/v3/coins/markets>


Cryptocurrency Prices by Market Cap			
Search For a Crypto Currency.. ether			
Coin	Price	24h Change	Market Cap
 ETH Ethereum	₹ 198,453.00	-4.40%	₹ 23,762,843M
 USDT Tether	₹ 76.49	+0.38%	₹ 6,118,646M
 STETH Lido Staked Ether	₹ 198,275.00	-4.25%	₹ 442,233M
 ETC Ethereum Classic	₹ 2,017.20	-5.04%	₹ 269,044M

Story 3:

In this task you need to navigate to the respective cryptocurrency single page details. The user should be able to see the symbol, , market cap , rank and market cap on the left side of the page

Use the following api for details of a single coin:

<https://api.coingecko.com/api/v3/coins/{id}>



Ethereum

Ethereum is a **smart contract platform** that enables developers to build tokens and decentralized applications (dapps).

Rank: 2

Current Price: ₹ 199,018

Market Cap: ₹ 23,814,693M

Story 4:

In this task you need to display the historical chart of the respective currency in 24 hour change, 1 month change, 3 month change and 1 year change using charts.js

Use the following api for details of a single coin's historical chart:

[https://api.coingecko.com/api/v3/coins/\\${id}/market_chart?vs_currency=\\${currency}&days=\\${days}](https://api.coingecko.com/api/v3/coins/${id}/market_chart?vs_currency=${currency}&days=${days})

**Story 5:**

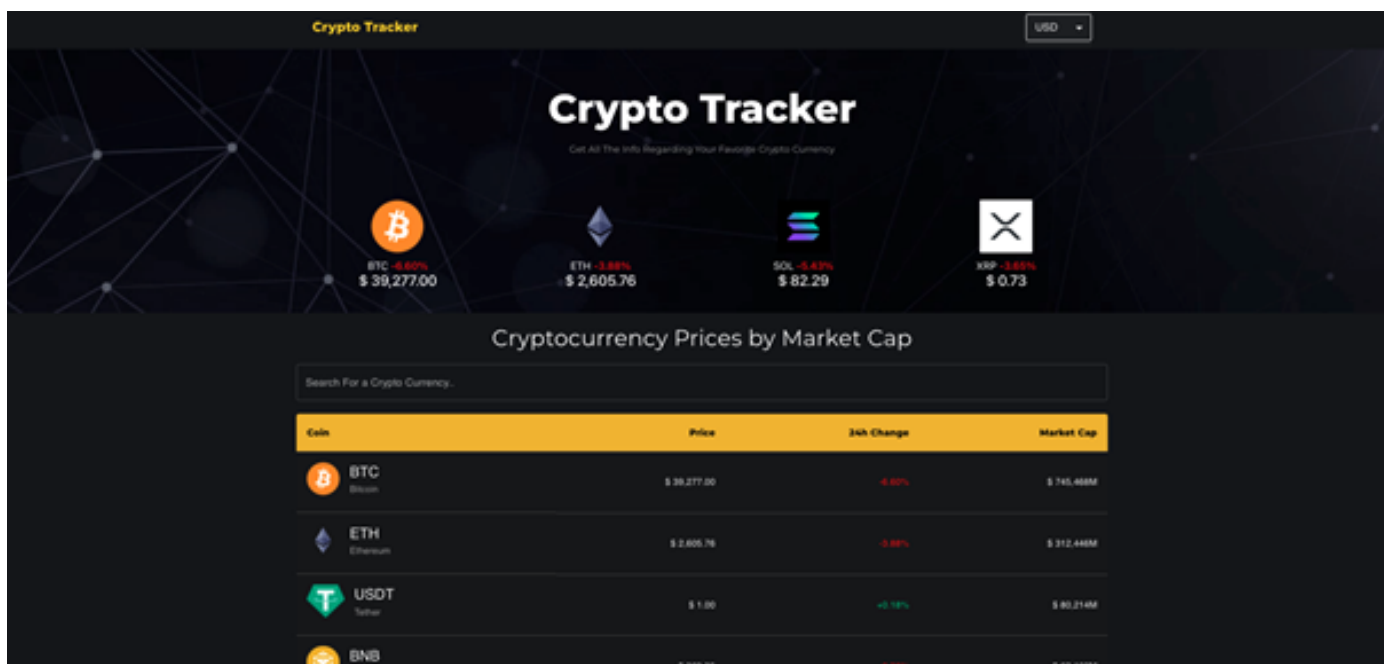
This feature is an additional feature.

The cryptocurrencies are globally viewed in dollars.

Implement the logic to show cryptocurrencies features in dollars as well.

Create a header as shown below with a drop down to select the currency.

Create a separate file and set the currency and symbol.



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Assignment Solutions

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Github link : <https://github.com/Utkarshini12/Crypto-Tracker>