

# Cryptoplace Project Documentation

*Using CoinGecko API website to display cryptocurrency prices online*

*Used “Vite build tool” technology for this “React project”.*

- components folder contains Navbar, Footer, and LineChart.
- pages folder contains: Coin & Home Components
- We get Coins List with Market Data from “CoinGecko API”
- We Create useContext Component called “CoinContext.jsx”
- Added CoinContextProvider to ‘main.jsx’
- “CoinContext.jsx” contains:
  - 1- Import createContext from React
  - 2- API Request to “CoinGecko”
  - 3- 'allCoins' state variable which is an array with all coin objects (from the API response)
  - 4- 'currency' state variable (to specify currency displayed in the API response)
- 'setCurrency' through navbar dropdown by:
  - 1- Importing useContext in navbar
  - 2- Made a switch statement that runs through the <select> items, setting 'currency'. This was based on the <option>'s value property(usd, eur, or inr). This is in the Navbar Component.
- Display coin/currency data in the table found on the '**Home.jsx**' page
  - 1- Import useContext from React to 'Home.jsx'. Import CoinContext from ‘../../Context/CoinContext.jsx’
  - 2- Get 'allCoin' & 'currency' from 'CoinContext'
  - 3- Adding useState variable displayCoin (a copy of allCoin)
  - 4- Creating a useEffect hook with dependency array [allCoin] to setDisplayCoin(allCoin)

- 5- Mapping through first 10 coins in displayCoin. Displayed values in 'table-layout'.
- Adding Footer Component. Add it to the App Component.
  - Adding responsiveness to Navbar & Home. Style using their respective 'css' files.
  - Adding Search box functionality in Home.jsx
    - 1- Defining inputHandler function to set input (stores input field data with onChange property)
    - 2- Defining searchHandler (called with onSubmit property in the form tag): filters the data to include text typed in the input field (e.g. 'bit' is in "bitcoin"). I assign this value to const 'coins'.
    - 3- Add the statement: setDisplayCoin(coins). To display the filtered data.
    - 4- Adding dropdown with <datalist> tag, and using list attribute to link to <input> element.
  - From "CoinGecko", we get coin data by ID
    - 1- In Coin Component we set coinId to useParams from App Component
    - 2- setCoinData(response). This is the state where I save the response from API.
    - 3- I use coinData to display details on the webpage (e.g. name, image)
    - 4- Create useEffect to call fetchCoinData() function. It has the 'currency' dependency imported from CoinContext Component. I again use the useContext(CoinContext) for this.
    - 5- Display coinData when it's loaded from the API
    - 6- Fetch Coin Historical Chart Data by ID
  - Create a LineChart Component
    - 1- Installed google charts (npm i react-google-charts)
    - 2- import Chart from 'react-google-charts'
    - 3- creating useState variable 'data'. Pass it through props from Coin.jsx (historicalData) and mount LineChart Component in the 'Coin.jsx' page (with the coin details)
    - 4- adding useEffect in 'LineChart Component' to map through historical data array and display date & price in the following format [ ["Date" ,

“Prices”), [date1, price1], [date2, price2] etc. ] to be displayed on the chart. This chart displays information about the 10 previous days.

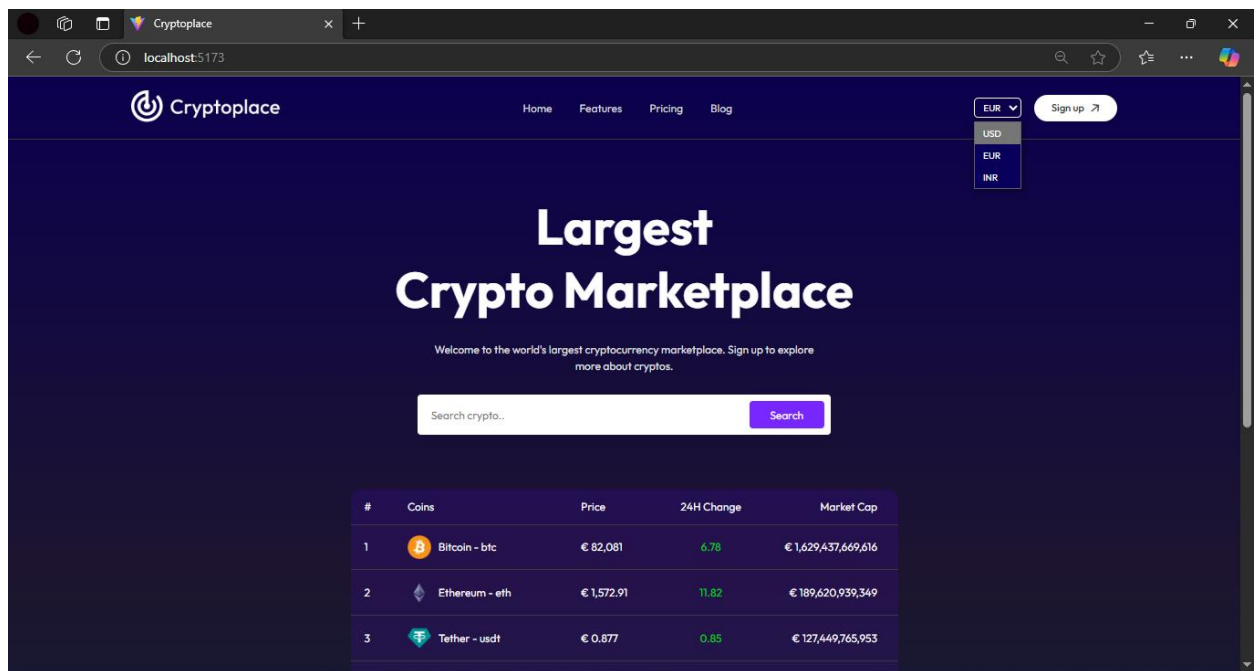
- Display other data of a particular coin including (coin rank, coin current price, market cap, 24h high data, 24h low data). After that adding css properties in Coin.css

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## *Project Summary:*

*Displayed in this Cryptocurrency website:*

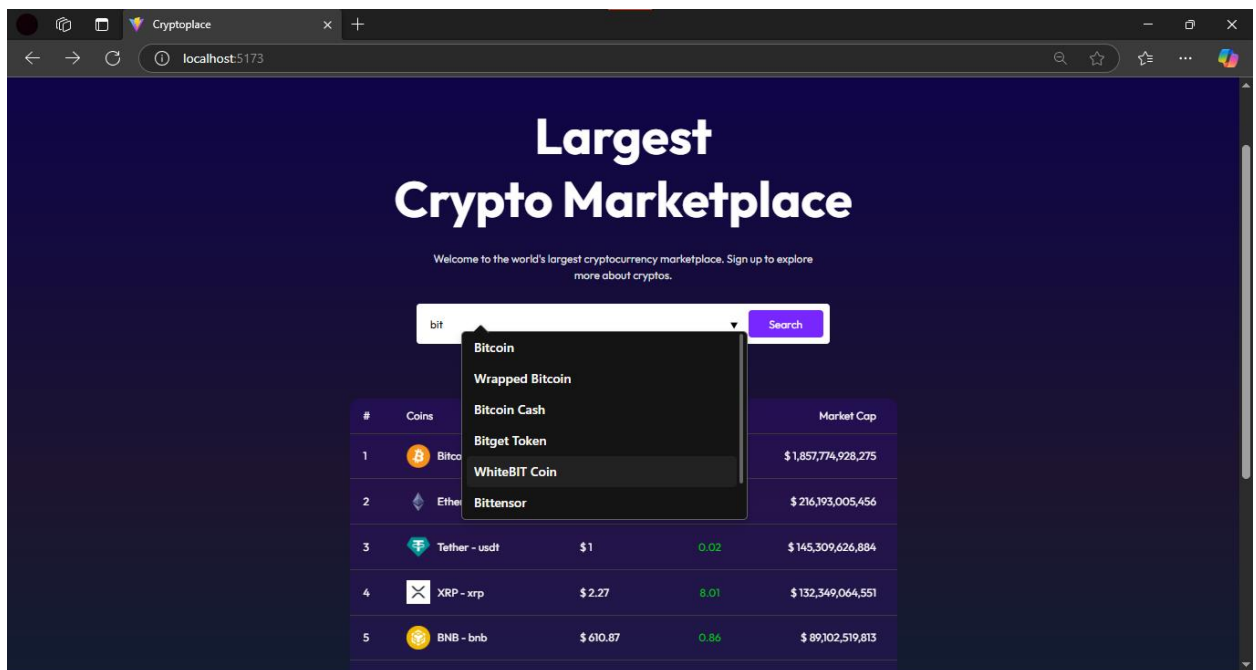
- *Cryptocurrency name, image, price, 24h change, and market cap*



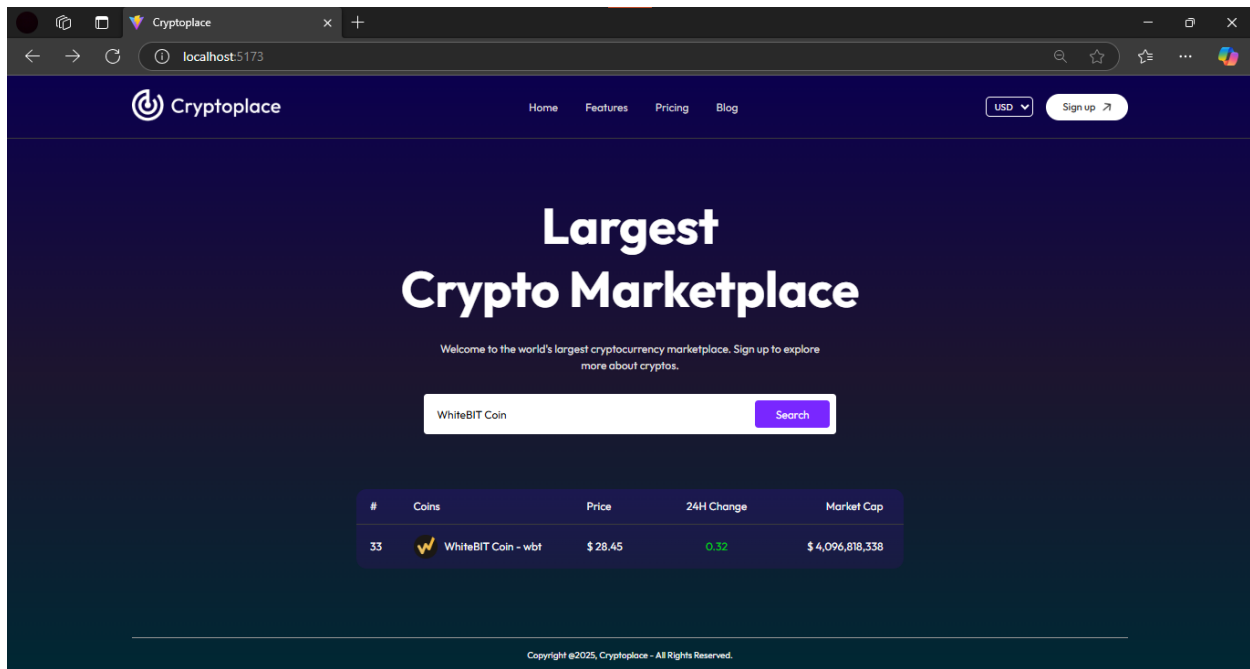
The screenshot shows the Cryptoplace website with a search bar at the top. Below the search bar is a table listing the top 10 cryptocurrencies. The table has five columns: #, Coins, Price, 24H Change, and Market Cap. The coins listed are Bitcoin, Ethereum, Tether, XRP, BNB, Solana, USDC, Dogecoin, Cardano, and TRON.

#	Coins	Price	24H Change	Market Cap
1	Bitcoin - btc	\$ 93,569	5.87	\$ 1,857,774,928,275
2	Ethereum - eth	\$ 1,793.05	10.87	\$ 216,193,005,456
3	Tether - usdt	\$ 1	0.02	\$ 145,309,626,884
4	XRP - xrp	\$ 2.27	8.01	\$ 132,349,064,551
5	BNB - bnb	\$ 610.87	0.86	\$ 89,102,519,813
6	Solana - sol	\$ 151.71	8.73	\$ 78,476,838,805
7	USDC - usdc	\$ 1	-0.01	\$ 61,743,185,581
8	Dogecoin - doge	\$ 0.182	11.49	\$ 27,092,166,618
9	Cardano - ada	\$ 0.7	9.72	\$ 25,177,145,208
10	TRON - trx	\$ 0.246	-0.74	\$ 23,326,366,027

- Use search box to find different currencies



- Then we can click on the coin to open the currency detail page



- On this detail page you can see the currency image, name, graph, and other information about the crypto currency



*This project was made by Mohamed Walid Abd El Mohsen using React and Coingecko API*

*Thank you.*