PROJECT REPORT

Cryptoverse: A Cryptocurrency Dashboard

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COLLEGE NAME : **K.C.S KASI NADAR COLLEGE OF ARTS & SCIENCE**

CODE : UNM203

DEPARTMENT : **COMPUTER SCIENCE**

PROGRAM : **B.C.A COMPUTERAPPLICATION**

SEMESTER : **VI**

PROJECT SUBMITTED TO: UNIVERSITY OF MADRAS / NAAN MUDALVAN

Course Name : **Front End Development and Database Administration**

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Cryptoverse: A Cryptocurrency Dashboard

Introduction

A crypto currency dashboard that displays historical price data over the past five years is a powerful tool for investors seeking a comprehensive understanding of market dynamics. This feature-rich interface offers users a detailed historical perspective on the performance of various crypto currencies, enabling insightful analysis and informed decision-making.
Through visually intuitive charts and graphs, the dashboard allows for effective comparisons of multiple crypto currencies, aiding in the identification of top performers and overall market trends. Users can customize timeframes for a more granular examination of price movements, facilitating in-depth volatility analysis and risk assessment. This historical data not only supports investors in making data-driven decisions but also assists in recognizing recurring patterns and cycles. Beyond its role in optimizing cryptocurrency portfolios, the dashboard serves as an educational resource, empowering users to grasp the evolving nature of crypto currency markets and the nuanced factors shaping price movements over an extended period.

Description

Cryptoverse is a sophisticated cryptocurrency dashboard designed to provide investors with comprehensive insights into market dynamics through detailed historical price data analysis spanning five years. Featuring visually intuitive charts, interactive tools, and seamless navigation, the platform empowers users to identify top-performing assets and make informed investment decisions. With its robust search functionality, users can easily explore a wide range of cryptocurrencies and compare their performance over time. Cryptoverse not only serves as a powerful tool for optimizing investment portfolios but also acts as an educational resource, helping users understand the evolving nature of cryptocurrency markets.

Scenario

Sarah, a trading enthusiast, wants to analyze the historical price data of various cryptocurrencies before making investment decisions.

1. Objective: Sarah aims to identify crypto assets that have shown consistent growth over the past five years to diversify her investment portfolio effectively.

2. Using Cryptoverse: Sarah opens the Cryptoverse application on her computer.

3. Navigation: She finds the navigation within the website to be seamless, facilitated by react-router-dom. She easily navigates to the "Crypto Currencies" page, where she can explore different cryptocurrencies.

4. Browsing Cryptocurrencies: Sarah starts browsing through the list of cryptocurrencies available on the platform. She sees a wide range of options, from popular ones like Bitcoin and Ethereum to lesser-known altcoins.

5. Visual Currency Browsing: Each cryptocurrency is accompanied by beautiful chart representations of price fluctuations since its creation. Sarah appreciates the visual presentation, as it allows her to quickly grasp the historical performance of each asset.

6. Interactive Charts: Sarah clicks on the chart of Bitcoin to view more detailed historical price data. She interacts with the interactive line chart powered by react-chartjs-2 and Chart.js, adjusting the time frame to analyze price movements over the past five years.

7. Price Fluctuation Visualization: Sarah examines the historical price changes of Bitcoin and observes its volatility over the selected time frame. She also compares Bitcoin's performance with other cryptocurrencies to identify potential investment opportunities.

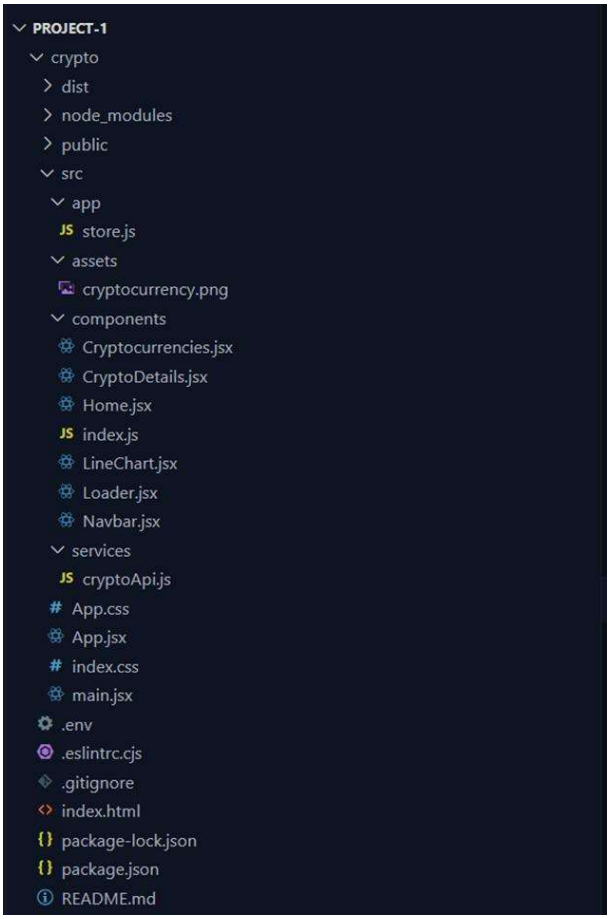
8. Search Feature: Using the search feature, Sarah easily finds specific cryptocurrencies she's interested in, such as Bitcoin and Ripple. She explores their historical price data and compares them with her other findings.

9. Insights and Decision-Making: After thorough analysis and comparison, Sarah gains valuable insights into the performance of various cryptocurrencies over the past five years. She identifies several assets that have demonstrated consistent growth and decides to include them in her investment portfolio.

10. Educational Resource: Throughout her exploration, Sarah finds the Cryptoverse application to be not only a tool for making data-driven investment decisions but also an educational resource. She learns more about the evolving nature of cryptocurrency markets and the factors influencing price movements over time.

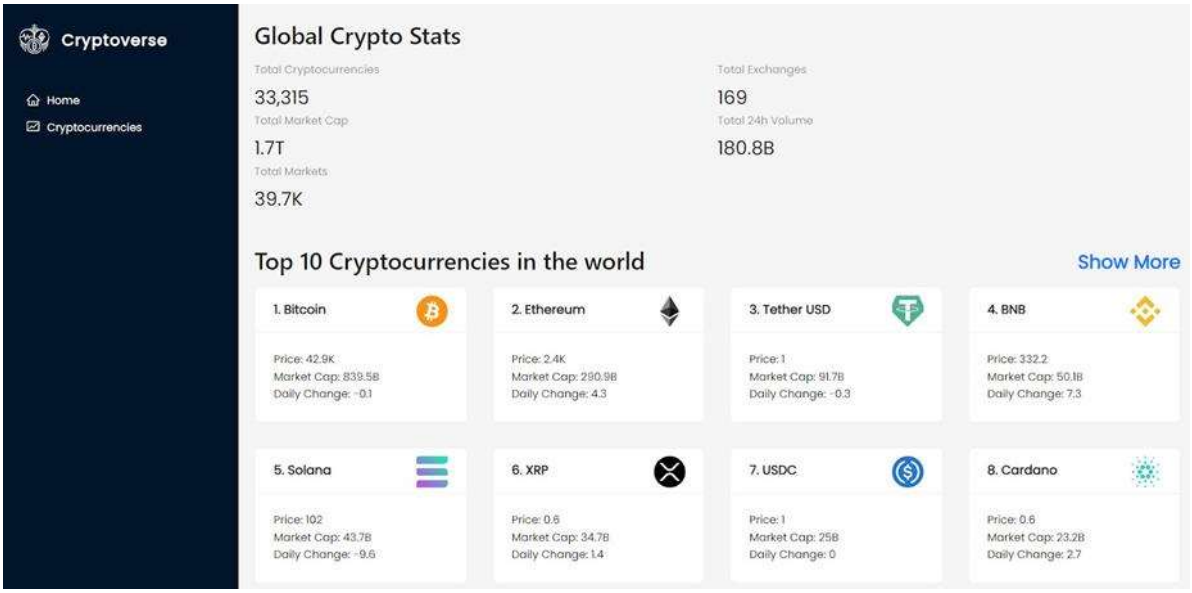
11. Further Customization and Development: Impressed by the functionality and user experience of Cryptoverse, Sarah decides to contribute to the project's development by providing feedback and suggestions for improvement. She also considers sharing the application with her fellow trading enthusiasts to help them make informed investment decisions.

Project Structure:

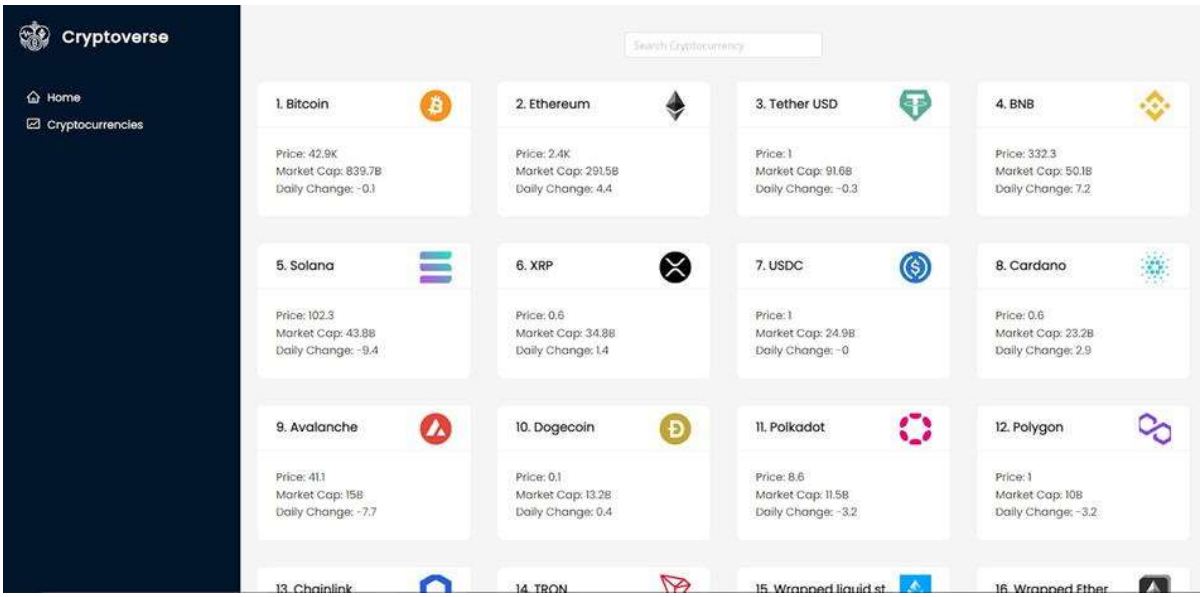


User Interface snips:

□ **Home page** : This pages consists of stats of global crypto like total cryptocurrencies, total exchanges, market cap etc. Also consist of top 10 cryptocurrencies in the world.



□ **Crypto currencies page** : This pages contains all cryptocurrencies which are currently in flow in the world. There is also a search feature where users can search and find out about their desired cryptocurrency.



□ **Crypto currency details page**:This page contains the line chart with data representation of price of cryptocurrencies. Also contains statistics and website links of cryptocurrencies.

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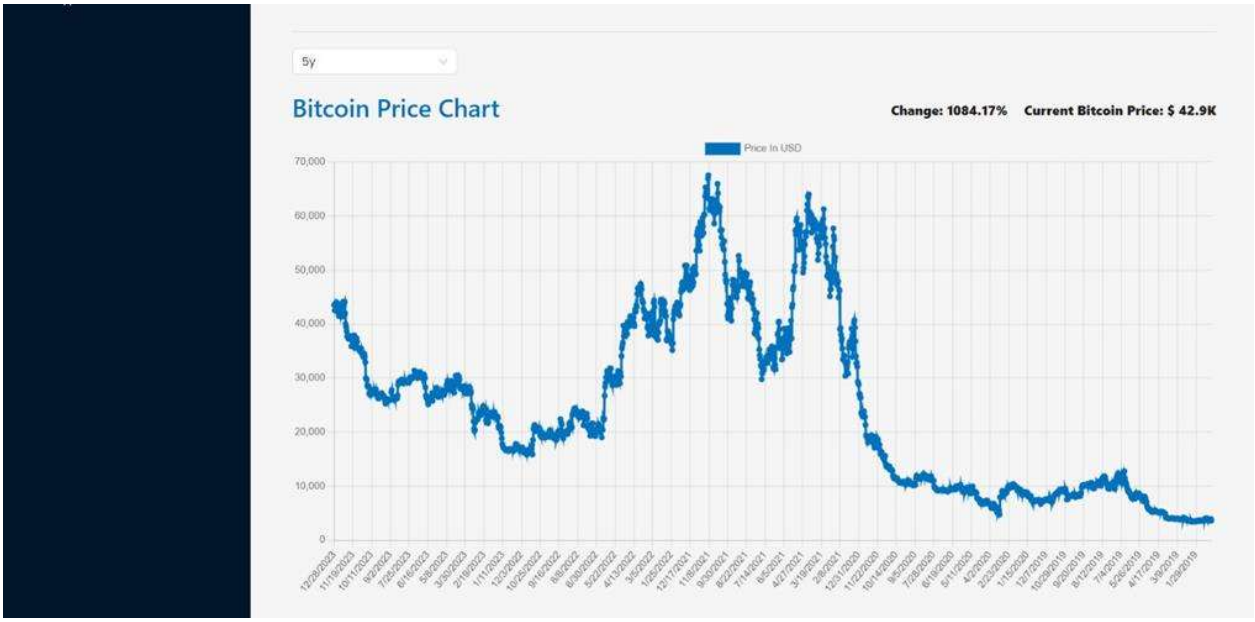

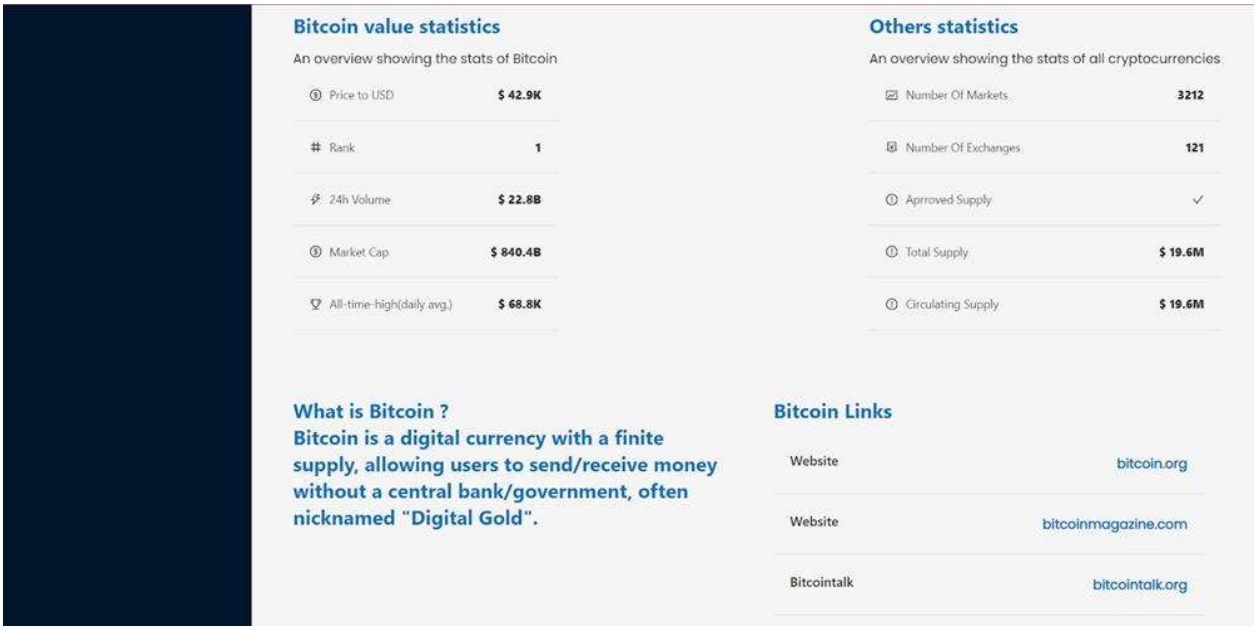

Project Demo link:
https://drive.google.com/file/d/1v7xTDfk6QtU5Ti0j9mxEdfbScYB6mcTX/view?usp=sharing