Deccan Education Society's

FERGUSSON COLLEGE(AUTONOMOUS),PUNE-4

Department of Computer Science

A Project Report On

Cryptocurrency Hunter App

By

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[2022-2023]

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A Project Report On Cryptocurrency Hunter App

In partial fulfilment of requirements of the completion of S.Y.MSc(CS)
Semester- 3

Master of Science Computer Science

Submitted By:

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Under the guidance of

Mrs. Arti Nimgaonkar

[2022-2023]

(CSC5313) Computer Science Project-III

CERTIFICATE

This is to certify that the project entitled			
The Cryptocurrency Hunter App	Completed by		

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in partial fulfilment of the requirement of the completion of M.Sc.(C.S) Semester-III, has been carried out by team under my guidance satisfactorily during the academic year 2022-2023.

Place: Pune

Date: / /2022

(Mrs. Arti Nimgaonkar) (Dr.Kavita A.Khobragade) **Project Guide Head, Computer Science Department**

Internal Examiner: External Examiner:

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We take this opportunity to convey our sincere thanks to our beloved principal **Dr.Ravindrasingh G.Pardeshi** for his continual support and encouragement that made the project great success.

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We are grateful to our project guide **Ms.Arti Nimgaonkar** for her support and guidance throughout the course of our project.

We also thanks all those who have directly or indirectly guided and helped us in the preparation of this project.

Last but not the least we thank our beloved parents, friends and well-wishers who helped us to do this project by their kind help and assistance.

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1. INTRODUCTION

1.1 Detailed Problem Definition

This system is named as Cryptocurrency Hunter App. This is designed especially for a trader which wants to take trades on various cryptocurrencies in a well manner.

This system has the capability to help the traders by giving insights about cryptocurrencies. The icing on the cake is that it will provide charts about the price of cryptocurrencies of different time range.

It will also provide a wish list where a particular trader can add his favourite cryptocurrencies and take trades on them accordingly. It will also provide rankings of the cryptocurrencies. It is great project which is easily accessible by the trader and it will help the trader to reduce stress and save a lot of time and money.

1.2 Presently available system for the same

Currently, we have many websites like www.coingecko.com, www.tradingview.com, etc. Which provide information about cryptocurrencies. Also, they provide many functions to interact but need to access different sites to do so.

1.2 Need for the New System

The existing system has few limitations from which the biggest limitation is that they are not user friendly, also many of them require to be paid member to access them.

To overcome these limitations, we need a new system that will help trader analysing the data and give trader idea about the information of cryptocurrencies.

1.3 Project Scope

The proposed system is an open-source system which can be accessed on mobile or desktop/Laptop. Here the complete information about the cryptocurrencies is available.

It is very user friendly and extremely easy to access.

2. ANALYSIS

2.1 Feasibility Study

This is the measure of how beneficial or practical the development of information system will be to the organization. The area introduces the system in terms of research into why it is more viable than the existing system.

Three main areas of feasibility study are:

- i)Operational feasibility
- ii)Technical feasibility
- iii)Economic feasibility

2.1.1 TECHNICAL FEASIBILITY

Technical feasibility centres to the existing computer system (Hardware, Software etc) and to what extent it can support the proposed system.

2.1.2 ECONOMIC FEASIBILITY

The procedure is to determine the benefits and savings that are expected from a user system and compare it with the costs. If a benefit outweighs costs, then the decision is made to design and implement the system. Otherwise, further alterations are made in the proposed system

- 1.Manpower cost
- 2.Hardware cost

2.1.3 OPERATIONAL FEASIBILITY

In this case, the operational implementation cost of the system is considered.

The Cryptocurrency Agent App will save time for the traders. By use of this system, traders can the complete information at a single place without spending any money. This save both time and money.

The software which is developed has an interactive, user-friendly interface, so operational difficulties are almost eliminated.

3.1 Hardware and Software Requirements

This section describes the hardware components and software requirements needed for effective and efficient running of the system.

Table 1: Hardware Requirements:

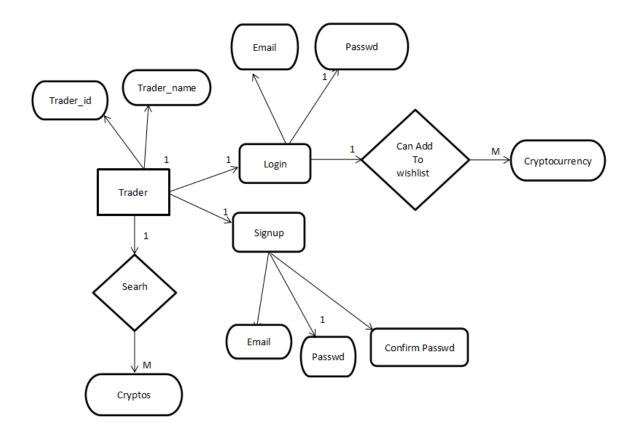
Sr.no	Hardware	Minimum System Requirement
01	Processor	2.4 GHz Processor speed
02	Memory	2 GB Ram
03	Disk Space	100 GB

Table 2: **Software Requirements:**

Sr.no	Software	Minimum System Requirement
01	Operating System	Windows 10 or MAC Ox 10.8,10.9, or 10.11, LINUX
02	Database Management System	Firebase
03	Runtime Environment	Visual Studio Code

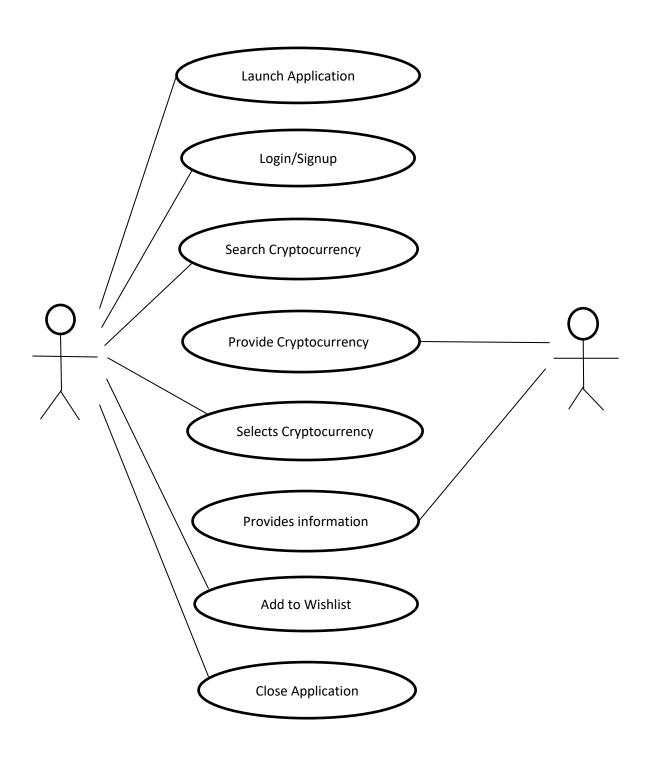
1. DESIGN

1.1 ER DIAGRAM

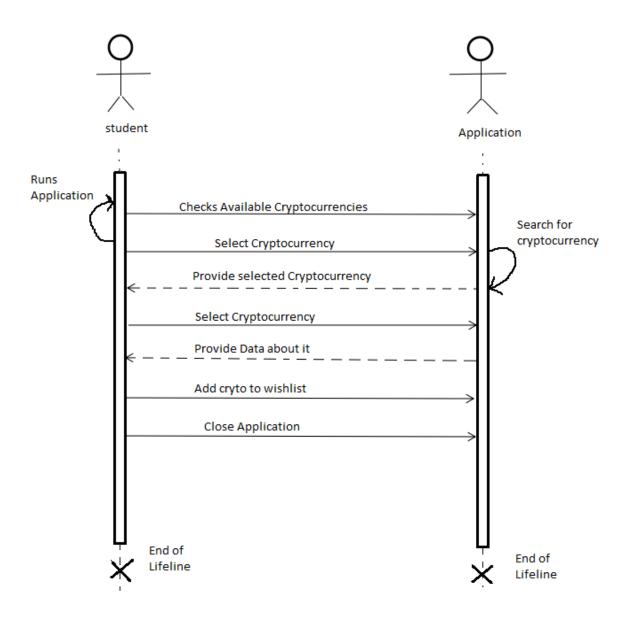


3.1 UML DIAGRAM

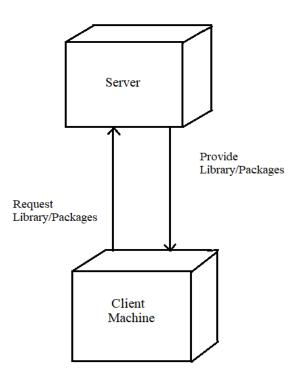
1.1.1 Use-case Diagram



1.1.2 Sequence Diagram



1.1.3 Deployment Diagram

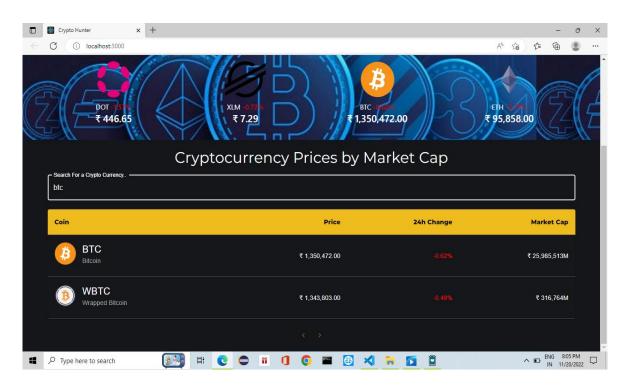


3.2 Input Output Screens and Reports

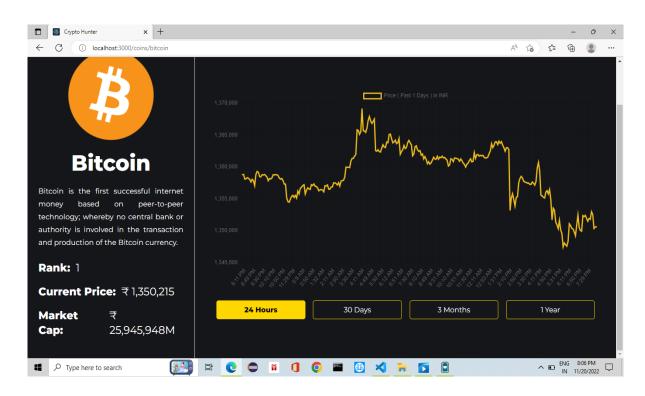
3.2.1 Home Page



3.2.2 Search Bar



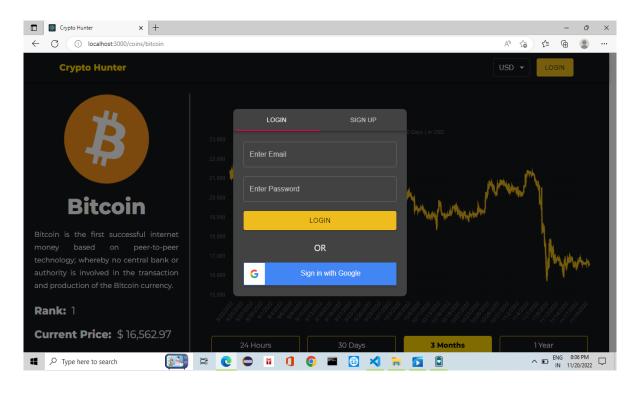
3.2.3 Bitcoin Chart



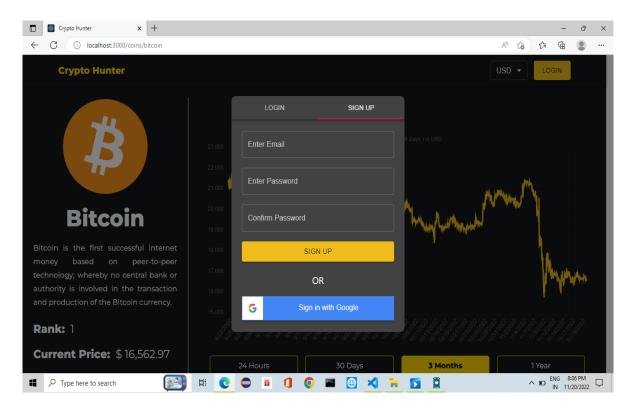
3.2.4 USD/INR Conversion



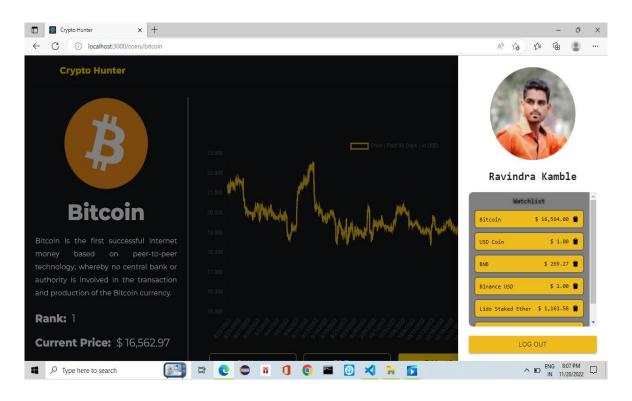
3.2.5 Login



3.2.6 SignUp



3.2.7 Add To Wishlist



3.2.8 Remove From Wishlist



2. Testing

2.1 Importance of Testing

Software testing is a method of determining whether the actual software product meets the expected requirements and ensuring that the software product is free of defects.

Here are top reasons why the testing of software is really important

1. Help in saving money

The cost effectiveness of the project happens to be one of the top reasons why companies go for software testing services.

2. Security

As a specific product undergoes testing, the user can be ensured that they are going to receive a reliable product. Personal details of user can be safe. Users can receive products that are free from vulnerability with aid of software testing.

3. Quality of product

Products should be serving the user in one way or other. It is a must that it is going to bring the value, as per the promise. Hence it should function in a complete manner for ensuring an effective customer experience, it is necessary to check device compatibility too.

4. Satisfaction of the customer

Earning the trust of client is certainly not an easy task, primarily in case the product is found to be functioning and glitching every time or the other.

The first impression is really important and if you fail to give the same, users are going to find another product which will accomplish all the requirements.

5. Determining the performance of the software

In case you introduce any software in the market without software testing and if the performance of the software does not meet the expectation, convincing people will be difficult.

Thus, it is important to test the software to check if there are any bugs or errors so that you can fix it before launching the software.

2.2 Test Cases and Test Results

Test	Test Scenario	Test Steps	Expected	Pass/
Case Id			Results	Fail
1.	Launch	Compile and	Opening of	Pass
	Application	execute main	application with	
		class	main screen	
2.	Login/Signup	Click on	Entered	Pass
		Login/Signup	credentials are	
		button enter	verified	
		credentials		
3.	Search	Enter	Relevant names	Pass
	cryptocurrency	cryptocurrency	appear	
		In search bar		
4.	Select	Relevant	Complete info	Pass
	cryptocurrency	information	about selected	
		should appear	appear	
5.	Historical data	Select time span	Appropriate	Pass
			chart according	
			to time span will	
			appear	
6.	Favourite Cryptos	Add cryptos to	Cryptos will be	Pass
		Wishlist	added to the	
			Wishlist	

5.Drawbacks

In our project, we have developed the application such that the traders can understand the information given. But still there are some limitations in the project.

- Traders cannot make trades on cryptocurrencies on this application, they have to trade on other exchanges.
- Traders cannot deposit/withdraw money on/from this application, they can just analyse the data.
- There are no indicators which can help the trader understand much about the cryptocurrency chart.

6. Conclusion

We have successfully designed and developed the project named "The Cryptocurrency Hunter App".

Working on this project was a good experience. This project is designed to encourage the traders to analyse the current information about various cryptocurrencies.

This project was developed using React language. This language was chosen to make our project platform independent and ready to use anywhere.

Implementation of this project has satisfactorily performed the task of educating the traders about cryptocurrencies. This project will help a lot of traders to make good profit.

This project has some disadvantages as we discussed above, but in spite of that it is very useful application for the traders to learn.

7 .Future Enhancements

- In the future we can add various indicators on the chart of cryptocurrency which will help the trader to understand the chat more deeply.
- We can add the feature of placing orders in this project.
- Another enhancement we can do is adding the feature of money deposit and withdrawal.
- We can add the above feature so that traders can buy and sell cryptocurrencies.
- We can turn this application into a well-known Exchange which will have every single feature a trader needs.

8 .References and Bibliography

For this project we have visited various websites which have helped us, some of them are listed below:

Websites:

www.coingecko.com

www.tradingview.com