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Report for
Crypto-currency Trading System
Project name: **Oberon**

Submitted by

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Introduction:

Cryptocurrency has taken the world by storm. It ushered a new age of digital finance and accounting. There are many cryptocurrencies, most popular being Bitcoin, Ethereum, Monero, AltCoins, Litecoins etc. For all these cryptocurrencies there are websites which allow consumers to buy/sell/ or trade it online via wallets. Sites which allow users to carry out such transactions include Blockchain Wallet, Electrum, Exodus, Coinomi etc. However, what all these websites have in common are complex UIs (User Interface), due to this limitation people feel intimidated to initiate a trial run and continuation. Our design will be simplistic, easy to use for the average consumer and will show only the required statistical analysis for a person to be well-acquainted with cryptocurrency.

About Oberon:

Oberon is a crypto-currency trading system that streamlines the cumbersome task of trading with digital currencies. As the world is moving forward from paper money to digital currencies it has been more potent than ever for a simplistic trading system.

Typically, the digital crypto-currency trading systems are a way to provide safe transactions using digital currencies as well as provide the traders to pay for any services or products they want without compromising their identities. Thus, ensuring safe, fast and secure international transactions.

Repository link:

https://github.com/razzadhossain/Group_Project-CSE311L_-Summer2021

Purpose and benefits of Project Oberon:

Oberon has created a platform for trading cryptocurrencies. It is providing a platform for the users to exchange existing cryptocurrency into any other form of currency. Using Oberon, any laymen can get a proper insight into all the different types of crypto-currencies and how to trade them in different trading mediums. This website will also notify the user of price changes for the cryptocurrency via email.

Benefits of Crypto-currency Trading System:

- 1. Streamlined trading process;** Using a Crypto-currency Trading System makes things easier for you, as it helps plan the trading activities which you can share. By doing this you can maintain and improve your training process. An Oberon also helps in getting traders reports, which is a time - consuming process when done manually.
- 2. Technology leverage:** In this digital world the working system has totally changed. Today every employee is engaged with a laptop or desktop, and with the help of Learning Management Systems you make the training future ready, it becomes interesting and exciting for your target audience.
- 3. Centralized Trading:** It becomes easy to offer centralized sources of learning to multiple users and this system of trade can be accessed from the same source anywhere in the world.
- 4. Tracking and reporting features:** Another benefit of using a trading system is that you can enhance performance through tracking and reporting tools. New users' progress can be tracked, records can be reviewed, and users can register for more than one transaction. Trading Can be done through websites. Management can access the records and calculate which area needs improvement. The learners also become aware of the areas that need improvement and

additional efforts, as the weak performance areas can be identified easily.

5. **Easy Upgrades:** Content and information can be easily upgraded, as Crypto-currency Trading System offers a centralized location for information which makes it simple to implement changes; plus, all users get the same upgraded information at the same time.
6. **Provides Security:** Oberon, as well as the crypto-currency trading softwares can provide you with a safer and more secure way to do transactions. Ensuring that your own properties and wallets can be kept secure and safe by the cutting edge block-chain technologies of the modern digital currencies.

Oberon, Crypto-currency Trading System Features:

Finally, some common features found in Oberon, our crypto-currency trading system include:

1. **Managing users, traders, roles and generating stats:** We are handling traders and keeping their data in our database also with their past transactions.
2. **Accommodating Transactions:** We Will provide them with a safe gateway for them to transaction with one wallet to the other. There will be a secure gateway so no fear of interception.
3. **Messaging and Notification:** Traders and admins will get messages and notifications for any transactions that are going on. Admins will also have an option to intercept any transactions which are suspicious till further informations are given
4. **Reports:** People can get the reports of their whole month's transactions. We will also provide them with information and insight about the information about these transactions.
5. **Administration:** There will be administrative capabilities which will ensure oversight to provide safer transactions

Use Case:

For Traders: Users will log into the system, and sign up or log into his/her profile. They can either just stay logged into their own profile or they can experience the features that we are providing them.

While logging in, if someone has forgotten their password, they can use the forget password process to get back into their profile.

When it concerns new users, they have to sign up to get started with our website.

They can purchase crypto-currencies, or they can deposit in someone's account. They will have their own wallet to view their current status.

They will also have the facility to view their transaction history whenever they want.

They can also do transactions with other people using their wallet codes directly thus ensuring a safe transaction.

They will be able to exchange currencies with others.

For Admins: Admin will have a unique password and email for logging into the system. He/She will play the most significant role in system's maintenance . Admin will have its own profile to look up the system and for checking if everything is running smoothly. If needed admin can anytime shut down the system, or can make any change he/she wants to make. Admin is more like the authority of the system. Any transaction can be denied at anytime by the Admin.SS.

Limitations:

1. Oberon only provides trading and exchange of crypto. It doesn't allow direct vendor purchases like other e-commerce websites

2. Oberon is streamlined and simple to use. It might give a bad impression to tech savvy users.
3. There is no long term integrated AI to forecast crypto-currency growth .

Solution Description:

Front-end Plan:

- i)** Main page
- ii)** Login page
- iii)** Register page
- iv)** Wallet
- v)** Trade page
- vi)** Exchange page

Back-end development:

1. Profile management:

Trader profile

Admin profile

Account creating facility:

Sign up form

Login

Forget password

Trading facility:

Trading, Exchange and transfer

Tools and Technologies:

1. Database: MySQL
2. Protocol: http
3. Front end: HTML, CSS
4. Back-end: PHP

Advantages:

- 1. User-friendly UI:** The UI experience of Oberon is completely simplistic and user-friendly
- 2. Ensures better platform for trade:** Oberon ensures a better platform where traders can trade their crypto wallet into other people or they can exchange their current crypto wallet to other currencies.
- 3. Fast transaction:** Oberon ensures fast, secure and safe transaction of digital currency
- 4. Better experience than banks:** Currently, all the financial institutions are stagnant in their own markets as a result consumers feel mistreated. Oberon will empower traders to take action for a better system
- 5. Ensuring a more breathable space:** Oberon takes all the complexities out of digital currencies out and gives a more breathable simple space where buyers and sellers can interact.

Hardware/Hosting plan:

Here is a list of possible cloud plans. We have to choose one that fits best and is also economical.

Cloud Provider	DC location	Latency (ms)	Starter description	Starter price (USD)	Mobile app ext. (with Redis)	Mobile app ext. price (USD)	Total expense (USD/mo)
AWS (Amazon Inc.)	Singapore	83	EC2- small, EBS, Transfer 20TB, 0.12\$/GB	\$16.84	0.022/hr for a cache.t2.micro, goes lower (\$0.009/hr) with 3 year term	\$15.84	\$32.68
Godaddy (Godaddy Inc.)	Singapore	80	1 GB memory, 1 core, 30GB SSD, 2TB Transfer	\$14.99	512 MB memory 1 CPU 20GB SSD 1TB transfer	\$5.00	\$19.99
Azure (Microsoft)	Chennai	110	1 core, 20 GB Disk, \$0.018/hr, 0.75GB memory	\$13.39	250MB, \$0.022/hr	\$16.37	\$29.76
Azure (Microsoft)	Singapore	88	1 core, 20 GB Disk, \$0.018/hr, 0.75GB memory	\$13.39	250MB, \$0.022/hr	\$16.37	\$29.76
GCP (Google Inc.)	Singapore	??	1 shared vCPU .6 GB memory 10 GB disk	\$4.28	0.6 GB memory, 10 GB disk	\$4.28	\$8.56

Project Schedule:

Here is a sample project schedule for this project:

SL	Deliverable	Week					Man-week
		1	2	3	4	5	
1	Front end development*	-	-	-	-	-	2.5
2	Profile management	-	-	-	-	-	1.5
3	Account management	-	-	-	-	-	1.5
4	Search facility	-	-	-	-	-	2.0
5	Deployment and final release	-	-	-	-	-	1.0
	Total duration	1.5	2.5	2.5	1.5	0.5	8.5

Budgetary price:

Potential budget of the project(Excluding all the taxes and VATs):

Serial No.	Deliverable	Expense	Comment
1	Initial stage(ER diagrams)	X	
2	UI Design	X	
3	Front-end Development (HTML,CSS)	X	
4	Back-end Development	X	
5	Database Design (MySQL)	X	
6	Setting up Middleware	X	
7	UI integration (PHP)	X	
	Total	X	

Some Screenshots of Project:

Welcome to Oberon! The New Cryptocurrency Exchange

Login

OBERON

Home About Us Services How it Works Contact Us

The Next-Generation Digital Currency Exchange

Peer To Peer Transactions

Easy to Transact

Read More

Foolproof Security

Borderless Payments

Read More

No fear of Loss

Fraud Protection

Read More

No Expensive Softwares

Open Source Software

Read More

The screenshot shows the Oberon homepage with a yellow header bar. Below the header is a black navigation bar with the brand name 'OBERON' in white. The main content area features a large title 'The Next-Generation Digital Currency Exchange'. Below the title are four cards, each containing an icon and text. The first card says 'Easy to Transact' with 'Peer To Peer Transactions' below it. The second card says 'Foolproof Security' with 'Borderless Payments' below it. The third card says 'No fear of Loss' with 'Fraud Protection' below it. The fourth card says 'No Expensive Softwares' with 'Open Source Software' below it. Each card has a 'Read More' button at the bottom.

Welcome to Oberon! About Us!

Home About Us Services Contact Login

The Next-Generation Digital Currency Exchange

Bitcoin is a secure and inexpensive way to handle payments

Read More

BitCoin offers Innovation PIONEERING MONEY CHANGERS

Read More

The screenshot shows the Oberon 'About Us' page with a yellow header bar. Below the header is a black navigation bar with the links 'Home', 'About Us', 'Services', 'Contact', and 'Login'. The main content area features a large title 'The Next-Generation Digital Currency Exchange'. Below the title are two yellow boxes. The top yellow box contains the text 'Bitcoin is a secure and inexpensive way to handle payments' and a 'Read More' button. The bottom yellow box contains the text 'BitCoin offers Innovation PIONEERING MONEY CHANGERS' and a 'Read More' button. To the right of these boxes is a large image of several Bitcoin coins and a padlock, symbolizing security. A small text 'Text by New Screenshot' is visible near the bottom right of the image.

Ways to purchase bitcoin WITH BLOCKCHAIN TECHNOLOGY



Create your Wallet

How to get bitcoins

Place holder text



Create A Bitcoin Address

Use credit card or bank account

Place holder text



Invest or Shop or Donate

Start using bitcoin

Place holder text

Learn more about BLOCKCHAIN TECHNOLOGY

Choose Your Platform

Place holder text

Choose Your Wallet

Place holder text

Begin Bitcoin Transactions

Place holder text

Our contact information:

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Website: [Github/RazzadHossain](https://github/RazzadHossain)

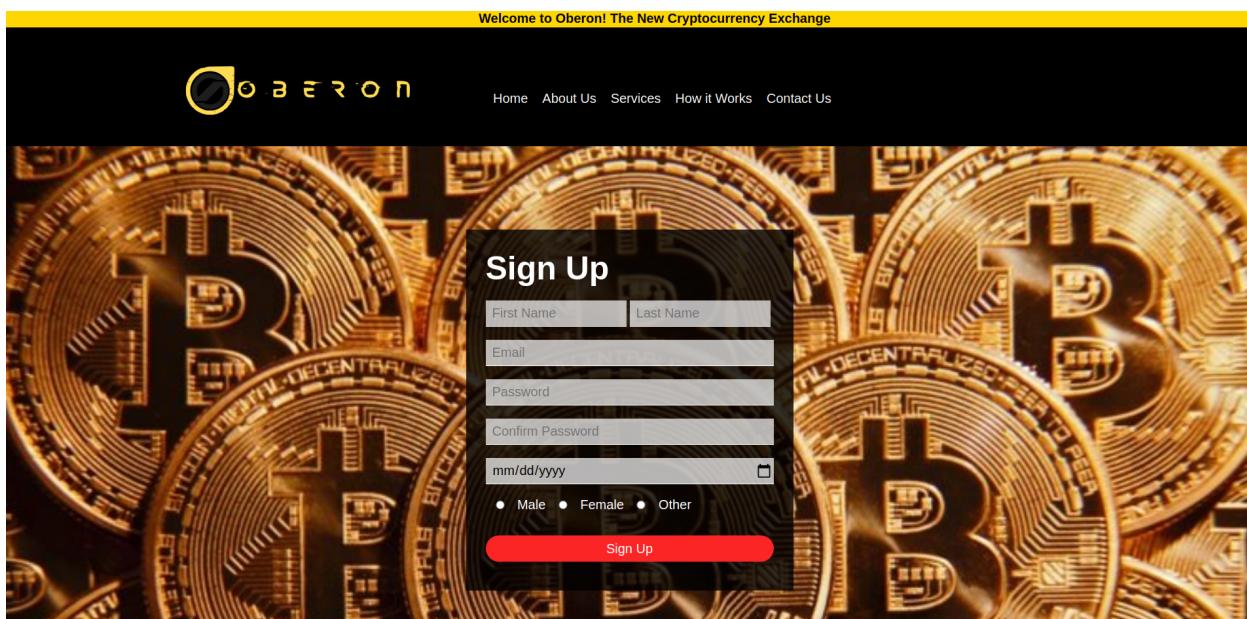
Any queries?

First Name

Last Name

Country Australia
 Write something..

Subject



Welcome to Oberon! The New Cryptocurrency Exchange

Logout

Greetings, Admin

Dashboard

Total Users	Exchange Market	Max Buy Currency Amount	Max Sell Currency Amount
2	0	0	0

Total Crypto Fees	Total USD Fees	Referral Bonus USD	Total Trade
0	0	0	0

All Users		
Company	Contact	Country
Oberon Inc.	Oberon	Bangladesh

Deposits

70%

Analytics Dashboard

Monitor Key metrics. Check reporting and insights

PURCHASES
Number of purchase

\$17,663

2% less purchase

UNIQUE VISITORS
Number of visitors

17,663

2% less visitors

Actions needed

...

74%

Conclusion:

A Crypto-currency Trading Platform is used to provide a safe, secure and fast platform for trading, transferring and exchanging crypto-currencies.

Project Oberon is dedicated to providing steps to ensure that all the traders have a breathable environment where they can trade with relative ease without all the usual hassles. To simply put it, our project provides:

- I. A user-friendly UI(User Interface).
- II. Ensuring a better platform for trading currencies
- III. Fast transactions.
- IV. Giving a better experience in comparison to the banks.
- V. Making trading, bidding, exchange of currencies less complicated and easier

Thus, providing a more simple, friendly and secure environment for trading, transferring and exchanging for all users

Appendix:

Contact information

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