Indian Institute of Information Technology, Lucknow
भारतीय सूचना प्रौद्योगिकी संस्थान, लखनऊ
(An Institute of National Importance by the Act of Parliament)

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Cryptocurrency Trading Simulator Web-app

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GROUP - 7

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ABSTRACT

The Problem

In recent years, cryptocurrencies have become a popular and trendy investment option for many individuals. However, despite the growing popularity, **investing in cryptocurrencies can be a risky venture** if not approached with caution and knowledge of how the market works. Unfortunately, many people have suffered significant financial losses due to their lack of understanding of the cryptocurrency market.

Even those with a good grasp of the market's workings may still struggle to apply their knowledge without practical experience. However, practicing without risking one's capital is challenging, leading to many potential traders feeling hesitant to enter the market.

This is where CRYSP comes in as a solution.

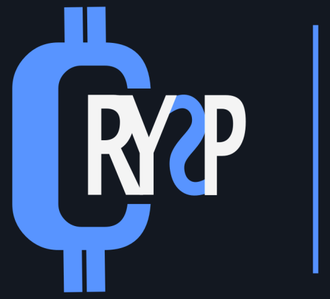
ABSTRACT

The Solution: CRYSP

- CRYSP is a cryptocurrency trading simulator web-app that **simulates the entire process of buying and selling cryptocurrencies** with **zero involvement of real money**.

- Users can create a virtual portfolio and trade with virtual currency of their choice. The platform fetches live rates using a reliable third-party cryptocurrency API to provide users with a realistic, real-time trading experience.

- CRYSP's user-friendly interface and easy navigation make it accessible for users of all levels, from beginners to experienced traders. As a result, the app serves as an effective tool for gaining a better understanding of the market and making more informed trading decisions.



MOTIVATION

Cryptocurrency trading simulators have become increasingly popular in recent years as more people become interested in trading digital assets. Let's discuss our motivation for developing CRYSP.

- **Practice trading without risk:** One of the most significant advantages of using a trading simulator is the ability to practice trading without risking real money. Traders can test different trading strategies and risk management techniques in a simulated environment without incurring any financial losses.

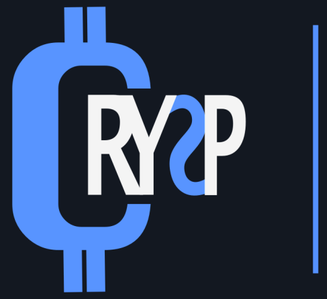
- **Learn about cryptocurrency markets:** Developing a cryptocurrency trading simulator can provide an excellent opportunity to learn about cryptocurrency markets and how they operate. By developing a trading simulator, we can gain valuable insights into the workings of the cryptocurrency markets.

MOTIVATION

- **Test trading strategies:** A cryptocurrency trading simulator can be an excellent tool for testing trading strategies. Traders can use the simulator to analyze different trading scenarios and test the effectiveness of their trading strategies and can identify potential weaknesses and optimize their strategies.

- **Improve decision-making skills**: Developing a cryptocurrency trading simulator can also help traders improve their decision-making skills. Traders can use the simulator to practice making quick and informed decisions in a volatile market environment.

- **Enhance technical skills:** Developing a cryptocurrency trading simulator can provide an opportunity for students to enhance their technical skills. Students can learn how to develop trading algorithms, analyze market data, and can develop technical skills that are highly valued in the cryptocurrency industry.

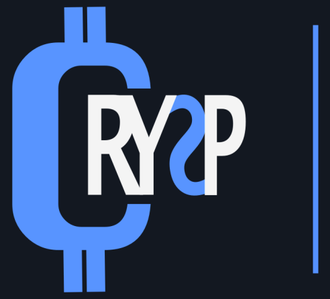


OBJECTIVES

CRYSP's main goal is to provide individuals with a safe and risk-free environment to learn and practice their trading skills. With CRYSP, traders can develop the knowledge and confidence needed to invest in cryptocurrencies successfully.

To make CRYSP a success, we primarily target to achieve the following:

- User-friendly interface and environment
- Ways for the users to earn virtual currency
- Options to trade in all well-known national currencies (like USD, INR, YEN, etc)
- ML-based cryptocurrency price-predictor model
- Store user-credentials in encrypted form



GAPS

(things yet to be implemented)

- 150+ Cryptocurrencies & all well-known currencies (10, 7)
- Users' personalized watchlist, Trade history
- Trading competitions among users
- Earn virtual currency for investing through various methods like login streak
- ML-based price predictor model

REPORTS

Technical:

- CRYSP Database Schema
- Working of the system flowchart

Work Reports:

- WBS (Deliverables & Process Centered)
- Responsibility Assignment Matrix
- Risk Management

Thank You!