

# Case Study | Hedgex

Online marketplace that facilitates the buying, selling, and trading of cryptocurrencies. It allows users to exchange one cryptocurrency for another or trade cryptocurrencies for fiat currencies (such as US dollars, euros, etc.).



# About the application

Hedgex serve as intermediary, matching buyers and sellers and providing a platform for conducting transactions. It provides order books that display the current buy and sell orders along with their corresponding prices. Users can place market orders (buy or sell at the current market price) or limit orders (buy or sell at a specific price).

# **Summary**

#### **Users:**

Client, Admin

#### **Tech Stack:**

Angular, java, MongoDB, MySQL, AWS cloud, S3

#### Team Size (6 Oodlites)

1 Project Manager, 1 Lead Backend Developer, 1 jr. backend developer, 1 Frontend Developer, 1 QA Engineer, 1 Business Analyst

# **Scope of Work**

**Clients:** The app users registered as a client refers to an individual or entity that interacts with the platform to engage in buying, selling, or trading cryptocurrencies. The client is essentially a user of the exchange and plays a crucial role in the platform's operation. Here are some key aspects of a client's role:

- 1. Account creation: A client typically starts by creating an account on the crypto exchange platform. This involves providing personal information, completing any required verification procedures (KYC), and agreeing to the platform's terms and conditions.
- 2. Fund deposit: After the account creation process, the client deposits funds into their account through transferring cryptocurrencies This can be done through various methods, such as bank transfers, credit/debit cards, or transferring cryptocurrencies from external wallets into hedgex's inbuilt wallets.

- 3. Trading activities: The primary role of a client is to engage in trading activities on the exchange platform. Clients can place different types of orders, such as market orders or limit orders, to buy or sell cryptocurrencies based on their desired prices.
- 4. Market analysis: Clients perform market analysis to make informed trading decisions. They can analyze price charts, order books, trade history, and other available market data to evaluate market trends and potential investment opportunities.
- 5. Security measures: Clients are responsible for implementing security measures on their end to protect their account and funds. This includes setting up strong passwords, enabling two-factor authentication (2FA), and following best practices to secure their personal devices and wallets.
- 6. Withdrawals: When a client wishes to convert their cryptocurrency holdings back into fiat currency or transfer their funds to an external wallet, they can initiate a withdrawal request on the exchange platform. The platform will process the request and transfer the funds to the designated account or wallet.

**Administrator:** The role of an admin is to oversee and manage the overall operation, security, and regulatory compliance of the platform. Admins typically have elevated privileges and responsibilities compared to regular clients. Here are some key aspects of an admin's role:

- 1. Platform management: Admins are responsible for managing the technical infrastructure and overall functionality of the exchange platform. They ensure that the platform operates smoothly, performs necessary upgrades and maintenance, and addresses any technical issues that may arise.
- 2. User management: Admins handle user accounts on the exchange platform. They have the authority to create, modify, or delete user accounts, as well as manage user permissions and access levels. They also oversee the account verification process (KYC/AML) and handle any user-related disputes or issues.
- 3. Security management: Admins play a crucial role in maintaining the security of the exchange platform. They implement and enforce security measures to protect user data and funds, such as robust authentication systems, encryption protocols, and regular security audits. They monitor the platform for any potential security threats or suspicious activities.
- 4. Regulatory compliance: Admins ensure that the exchange platform operates in compliance with relevant laws and regulations. They stay updated on the evolving



- regulatory landscape and implement necessary procedures to meet compliance requirements, such as KYC/AML procedures and reporting obligations.
- 5. Market monitoring: Admins monitor the trading activities on the platform to ensure fair and orderly markets. They implement surveillance systems to detect market manipulation, fraudulent activities, or any suspicious trading patterns. They take appropriate actions to mitigate risks and maintain the integrity of the platform.
- 6. Customer support: Admins respond to user inquiries, assist with technical issues, and provide guidance on platform usage. Admins act as a point of contact between the users and the platform, helping to address any concerns or questions.

# Let's discuss about top functionalities offered

## **Backend Development**

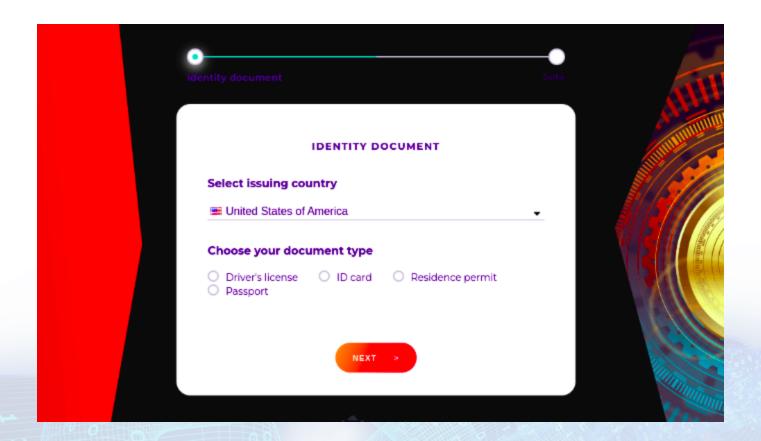
Client required dedicated backend interfaces for clients and admin.

#### **Frontend Development**

Client required dedicated frontend interfaces for clients and admin.

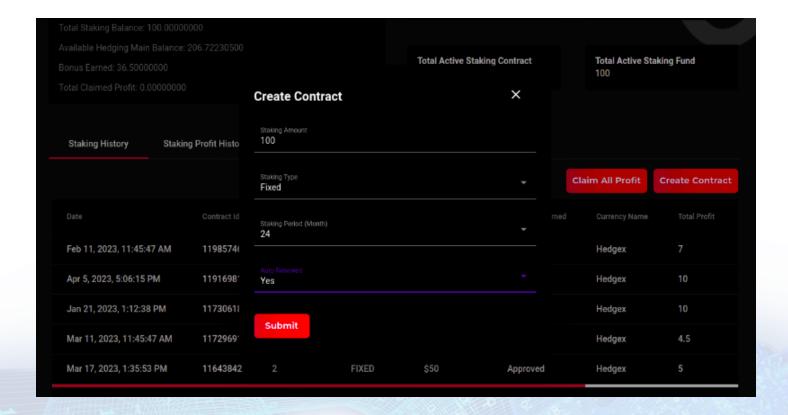
#### **KYC** verification

KYC verification is the process of verifying the identity and authenticity of users by providing their supporting documentation.



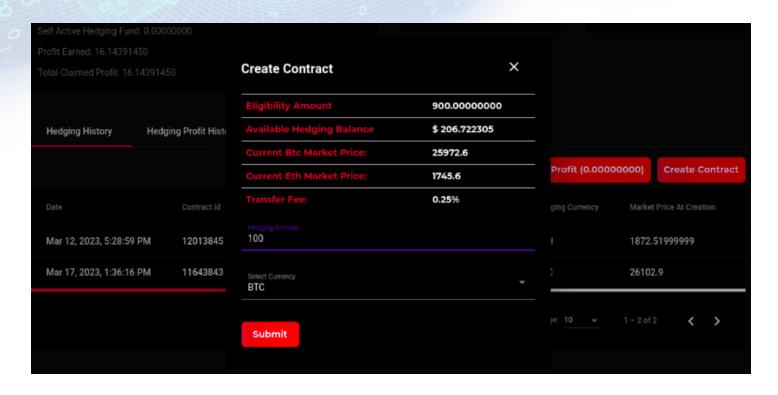
## **Staking**

Staking is a process in which cryptocurrency holders lock up their funds on a contract to support the operations of a blockchain network and, in return, earn rewards fixed by the admin. Staking is offered in 2 types- fixed, monthly. Fixed staking rewards are offered to the client after the complete locking tenure is finished, Monthly staking rewards are offered to the client every month, generally fixed staking rewards are higher than monthly rewards.



#### Hedging

Hedging is a process in which a client creates a contract and locks their funds onto it, clients gain the rewards if the market is going up, but in case of market failure, the client doesn't bear the loss. Hedging is a profit making feature for clients with minimal risks. Hedging rewards percentage is also dictated by the admin only.



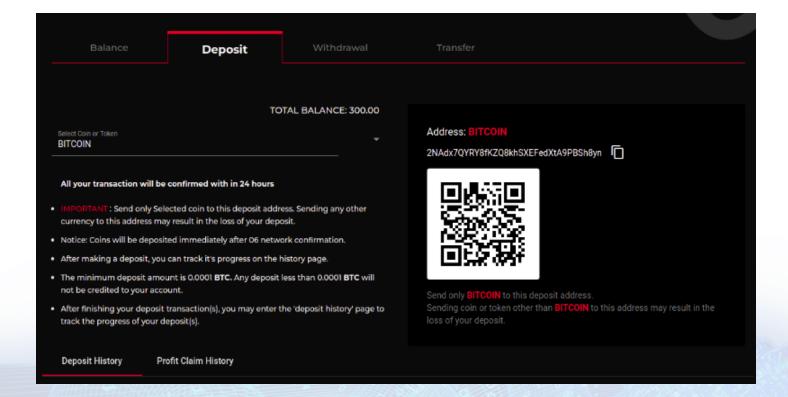
## **Affiliate Brokerage**

Affiliate brokerage is a multi marketing program in which a client can refer the users onto the hedgex platform and gain a percentage of hedging profits of the referred users upto 25 levels.

Brokerage Commission History	Total Team	Business	Report Hedç	gexian Credit Score	Today's Repo	orts	
					Claim All Profit (67.74607046)		46)
Order Descending	Levels All		From 5/14/2023	<b></b>	To 6/14/20	123	
Date	Brokerage From	Level	User Actual Level	Hedging Amount	Loyalty Level	Brokerage Percent	
Jun 13,2023, 07:01:40 PM	shweta.singh@oodles.io	2	2	200	STANDARD	5	0
Jun 13,2023, 07:01:40 PM	shipra	1	2	100	PREMIUM_	PLUS 1	0
Jun 13,2023, 07:01:40 PM	Vishu	1	1	100	BASIC	1	0
Jun 13,2023, 07:01:40 PM	Vishu	1	1	50	BASIC	1	0

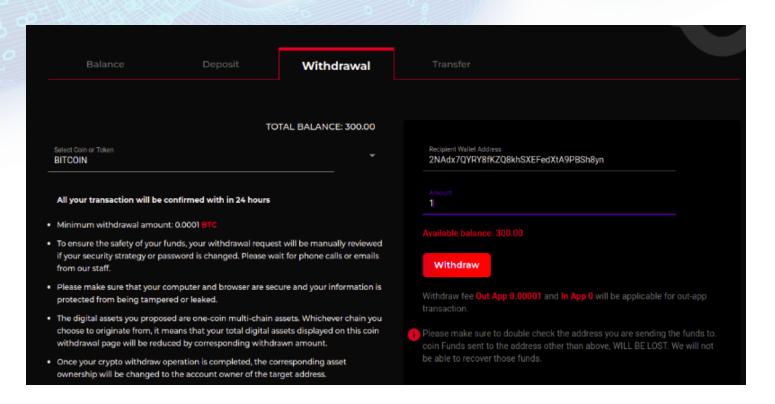
## **Deposit**

Deposit is the process of adding funds or cryptocurrencies to a user's account on the platform. It allows users to transfer their assets from external wallets or sources into their exchange account, enabling them to trade or engage in other activities within the platform



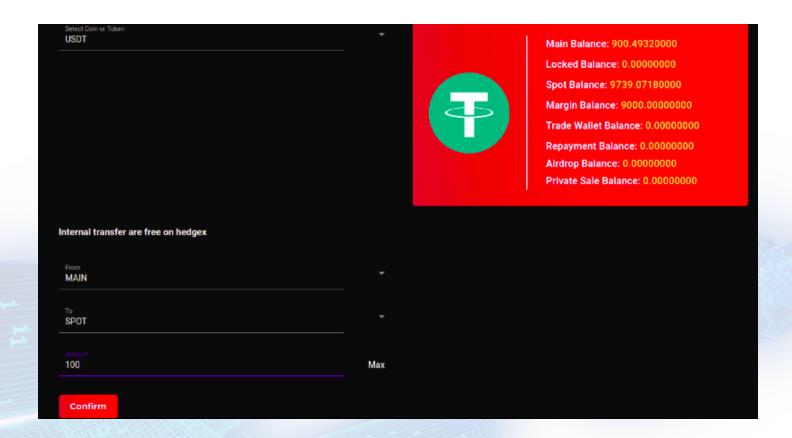
#### Withdraw

Withdraw is the process of transferring funds or cryptocurrencies from a user's account on the platform to an external wallet or destination. It allows users to move their assets out of the exchange and have control over them outside of the platform.



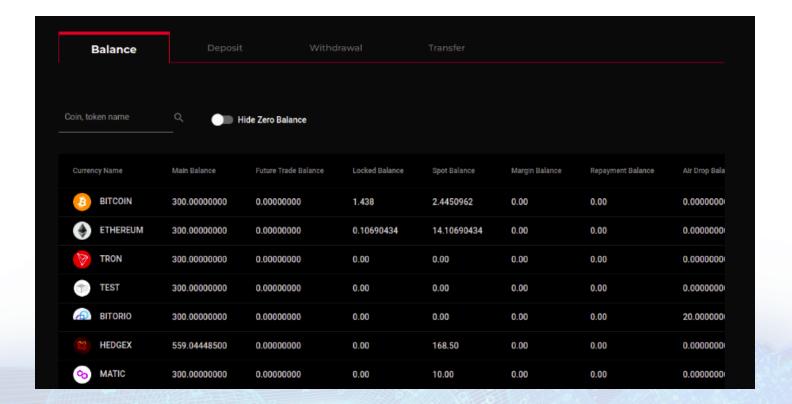
#### **Transfer**

Transfer refers to the ability to move funds between different wallets within the same exchange platform. Initial transfers are free on hedgex.



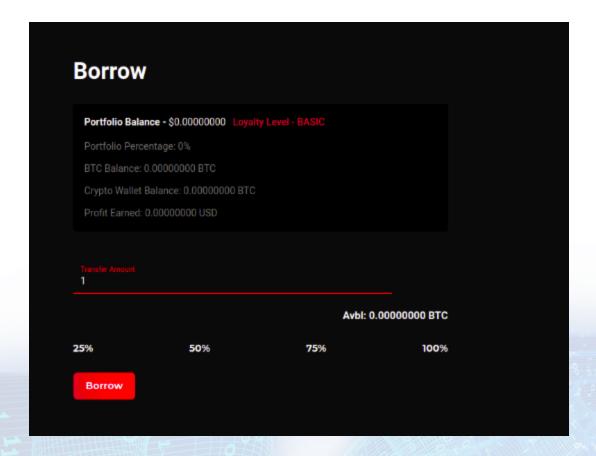
#### **Balance**

Balance is a functionality where users can view all the funds into their wallet.



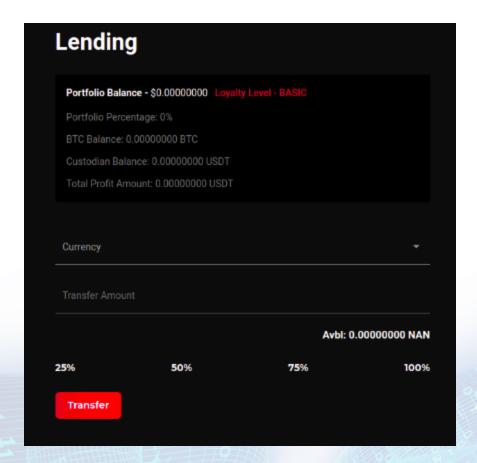
#### **Borrow**

The borrow functionality refers to the ability for users to borrow funds or cryptocurrencies from the platform usually with the intention of leveraging those assets for trading or investment purposes. It enables users to access additional capital or assets beyond what they currently hold in their own accounts.



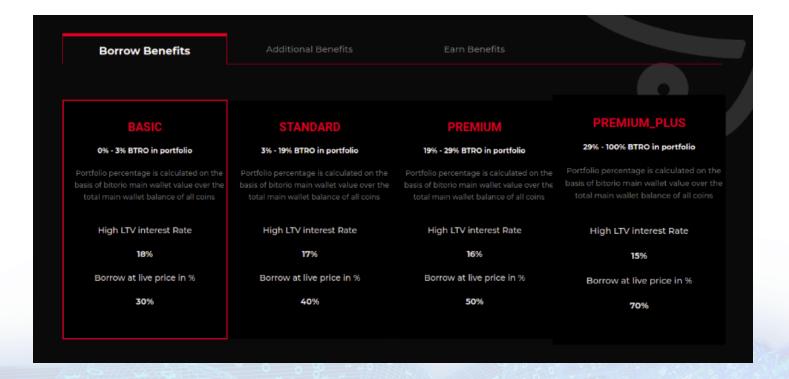
# Lending

Lending refers to the process of providing funds or cryptocurrencies to the platform in exchange for earning interest on the lent amount. It allows users to act as lenders and earn passive income by lending their assets to the platform.



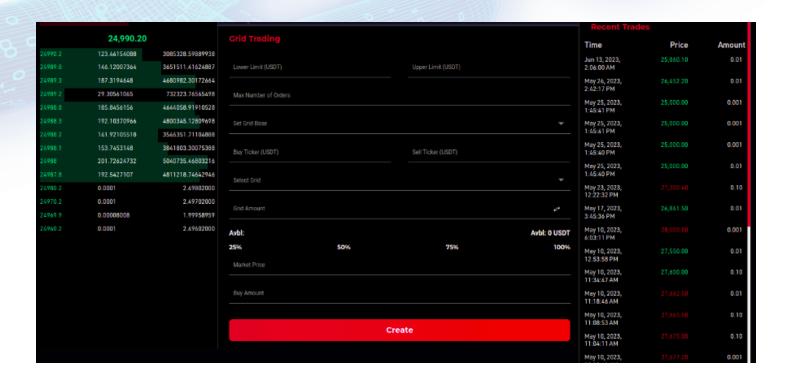
# **Loyalty level**

Hedgex offers 4 types of loyalty levels based on the activeness of the user activities onto the platform, loyalty level dictates the reward percentage provided to the users in case of hedging, staking, and affiliate brokerage.



#### **Grid Trading**

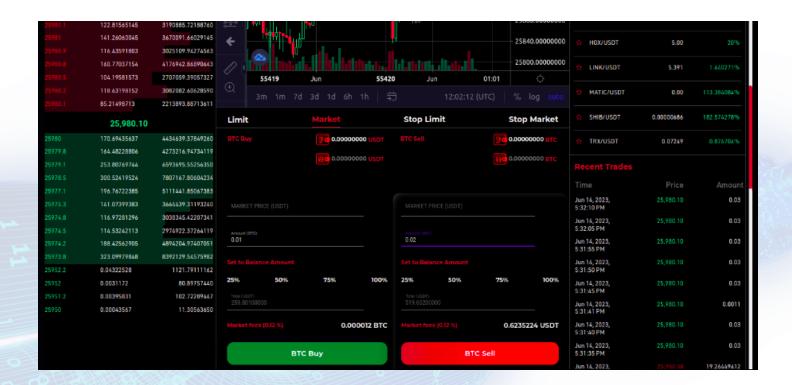
Grid trading involves placing buy and sell orders at predefined price levels, creating a grid-like pattern of trades. The purpose of grid trading is to capitalize on price fluctuations within a specific range and generate profits from the repetitive movement of prices.



## **Spot Trading**

Spot trading refers to the purchase or sale of cryptocurrencies, at the current market price for immediate delivery. In spot trading, the transaction is settled immediately, with the buyer receiving ownership of the asset and the seller receiving the agreed-upon payment.

Other than this, users can also place the limit order to set a specific price at which they are willing to buy or sell the asset.



#### Swap

A currency swap is a financial agreement between two parties to exchange a specified amount of one currency for another currency, at a predetermined exchange rate.

