IONIXX TECHNOLOGIES

Breaking barriers to crypto market

entry with great UX design

Vertical Market / Industry	:	**Finance / Unorganized data sectors**
Consumer Segment Trading	:	**Traders / Stock market / Financial services**
End-User Product	:	**Web application**
Technology Stack	:	**Javascript, CSS, React JS, Python**

Our collaborative approach

Ionixx worked closely with Cryptospace to build a cryptocurrency exchange and trading platform that offers both individual and institutional traders a simple, seamless, and friction-free trading experience. An important objective that we met for cryptospace's business is to make crypto trading accessible for users who have never traded before through an intuitive, user-centric UX methodology that:

aimed at minimizing the learning curve for new users/beginners.

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offered a quick and easy onboarding experience by guiding them through baby steps.

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cut through the perceived complexity of crypto trading applications by building a reassuring user experience, and making it as simple as online banking.

Customer background

Cryptospace is a young digital cryptocurrency exchange and trading platform founded by Ernesto Huerta, CEO of 'Huerta Consulting LLC' based in LA.

Cryptospace was looking to build a scalable and comprehensive trading platform with robust features such as customized end-to-end KYC processing, live market tracking, wallet management, and advanced order management.

The primary objective for Cryptospace was to enable non-traders to adapt to a dynamic trading environment as quickly as possible while also keeping the drop rates to a minimum through a well-designed, intuitive trading application.

Background of the existing business model

Cryptospace had a live database of user profiles collected via email and the Telegram app. The existing system depended heavily on a manual verification process where traders would actively carry out trade over-the-counter (OTC), a broker-dealer network as opposed to on a centralized exchange.

To begin with, every user would have to deposit cash through Cryptospace's ATM kiosks to get it exchanged to crypto.

A Live database of regular customers

Documents verified manually and profiles tracked with their registered mobile number

OTC (over-the-counter)

A broker-dealer network as opposed to on a centralised exchange

Registering profiles

Regular traders mobile number is registered, and given a privilege to initiate their crypto exchange request through a private telegram group

Regular customers whose mobile numbers are registered in the Cryptospace database would be able to initiate their crypto exchange request through Cryptospace's Telegram group as well.

Trading through OTC

User deposits their cash into the ATM kiosks and get exchanged to crypto

Following this, users would have to fill in a detailed crypto exchange application form and submit it to the Cryptospace team in order for their trade to be processed.

Applying Trade

The user will submit a crypto exchange request application form that covers their trade details, with respect to which the Cryptospace team will process their trade.

Users would be charged a nominal trading fee, and there's a stipulated turn around time to process their trade.

Business grown through trade commissions

Cryptospace charges a nominal trading fee for their trade

How did we tackle the challenges:

Our solution

1. Designing for optimized onboarding through well-defined workflows

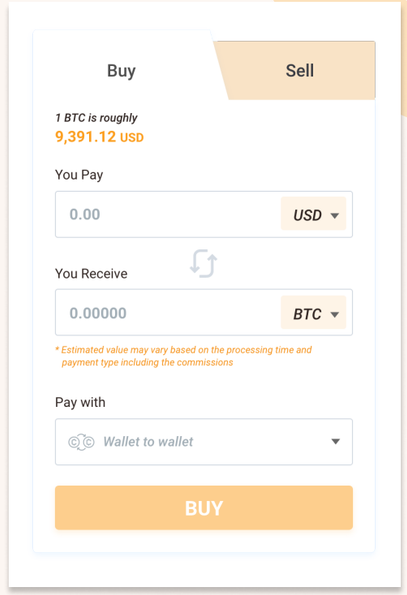
Typically, first-time users of a crypto trading application look for a smooth and frictionless onboarding experience. In order to set the stage right and sustain the interest of users who have never traded before or are beginners in crypto trading, we carefully designed an optimized, time-efficient, user-centric onboarding process. This way, we made things clear, visible, and easy to learn at the outset, so as to encourage users to stay motivated in continuing to use the app, making the overall user experience less daunting.

By simplifying tedious paper-based processes into smaller, coherent digital tasks, we minimized steep learning curves for first-time users through a seamless profile setup and less daunting order management.

With well-defined interactions for each user type (individual and institutional trader), we built distinct UX workflows for each task such as user onboarding, profile setup and registration, and end-to-end trade order management with distinctly visible logical navigation.

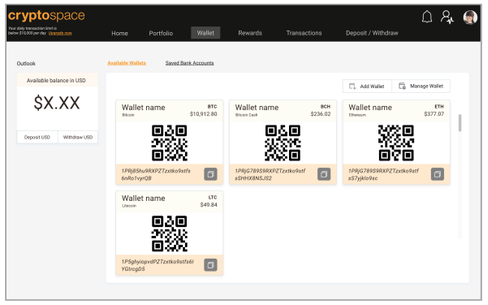
By adding a functionality for instant purchase, we enabled every user on Cryptospace to enjoy a privilege called the estimation window. This would help them tally their returns with respect to their spending capital and vice versa. This also enabled them to lock a crypto at its current price with the hit of a button, thus ensuring zero slippage.

We ensured the use of unambiguous, easy-to-follow instructions to guide first-time users to perform one task at a time. Purchase initiating factors such as available crypto's live pricing chart, summarized values, estimation window, clarity on commissions, and so on, were displayed right upfront to users even if they weren't registered users.

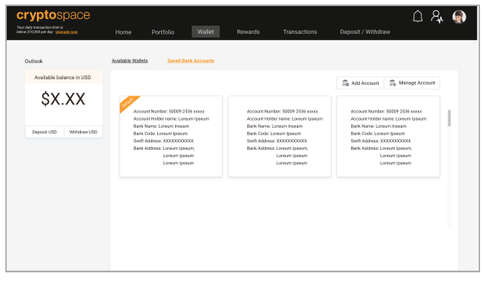


Buy/sell estimation window

We focused on user experience over platform features in order to stay attuned to first-time user needs and motivations and address them appropriately by employing sound design principles. Users were able to add their bank accounts or credit/debit cards easily into the platform for a smooth trading experience.



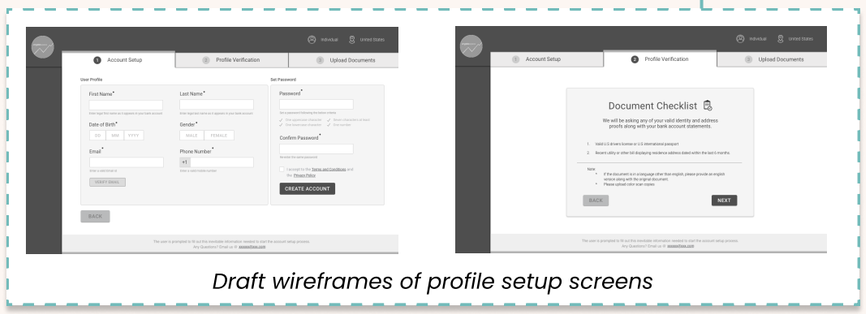
User adding wallet details



User adding bank accounts

2. Building comprehensive journey maps for a seamless user experience

Phase 1



Draft wireframes of profile setup screens

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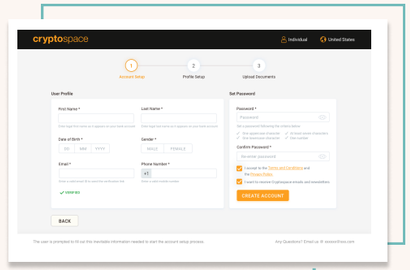

Account setup

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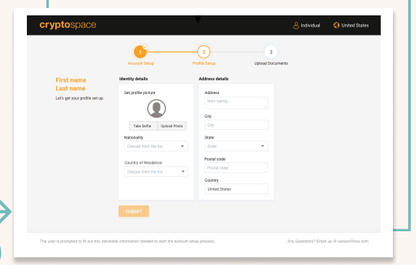
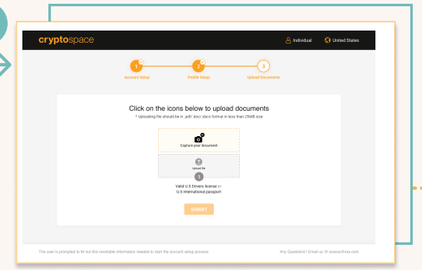


Profile Setup

3

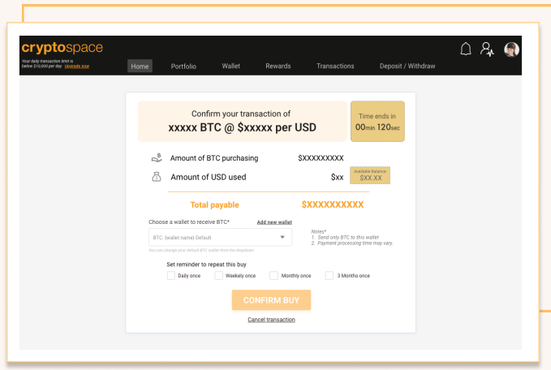


Uploading documents

4 Phase 2

New interactive website landing page

We began with the awareness that each user group (institutional trader, individual trader) is distinctly different from the other in terms of their trading preferences, motivations, expectations, and the way they approached trading tasks. Next, we identified specific attributes for each user group and drew out distinct user personas while picking out common elements that would apply across each user group. Based on the insights gathered from this exercise, we mapped user journeys with specific workflows to create custom interactions for each user group. By doing this, we enabled all user groups to carry out crypto trading in 3 simple steps without much information overwhelm.



User's purchase confirmation window

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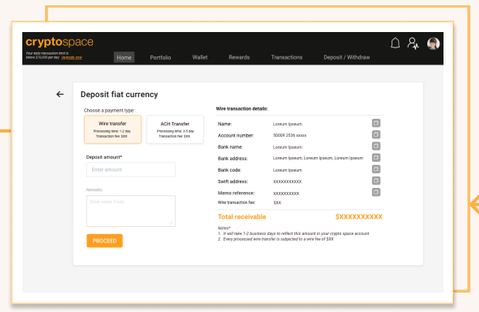

User depositing cash to start trade

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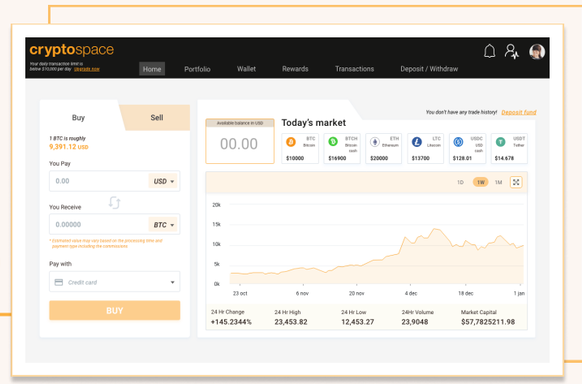

User's home screen & dashboard

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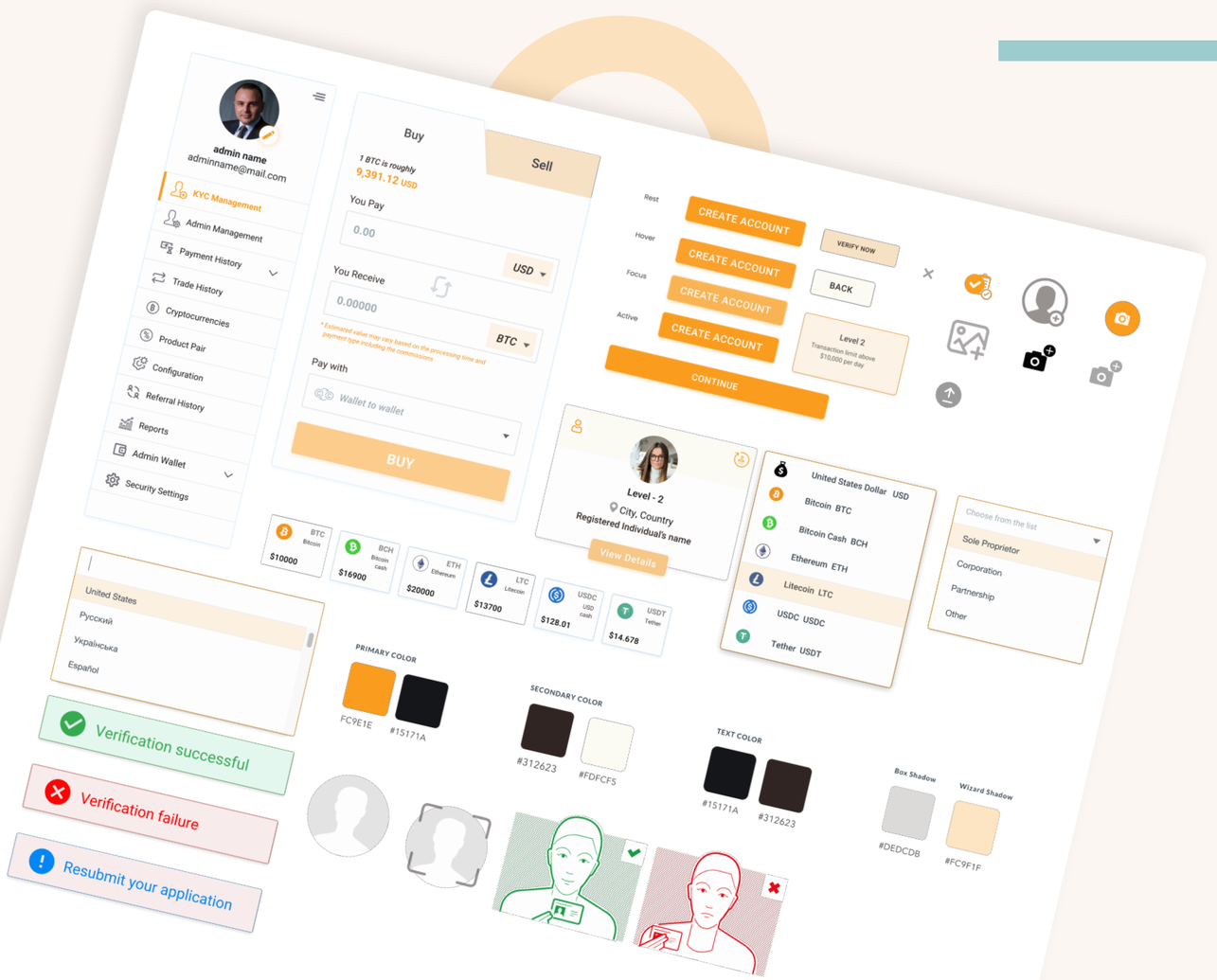
The 3 steps included: Basic account set up through a quick onboarding process, custom built KYC information processing and document upload to complete registration, and quick integration with e-wallets for users to begin trade on the fly and safely manage their crypto portfolio.

3. Creating aesthetic value with first principles of visual hierarchy

We worked on an extensible UI style guide that aligned with Cryptospace's brand color palette. The brand color of bright orange is used for all important Call to Action (CTA) functions.

As a sharp departure from the archaic visual design that is characteristic of a financial services platform, we used warm colors and removed extraneous elements to offer users a simple, minimalist, and unobtrusive visual interface. This allowed users to easily navigate different menu elements while also helping them to stay invested in the application.



4. Leveraging our technological expertise

We suggested building Cryptospace's technical architecture on microservices because it is proven to provide the three main aspects for a large-scale trading application: efficiency,security, and flexibility/scalability.

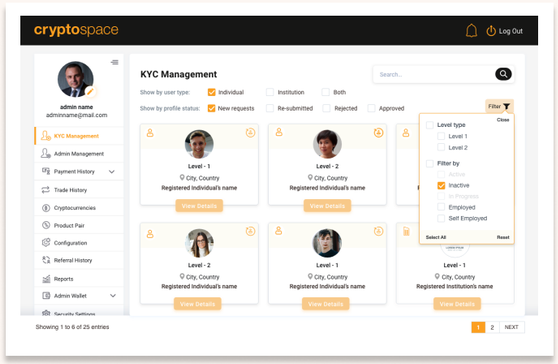
With microservices in the mix, we were able to build a flexible system that processes requests, orders, and transactions without latency gap and integrates with external e-wallets and other external platforms.

Microservices architecture rendered a high degree of flexibility to the platform making it possible to accommodate both client-side and server-side changes.

5. Focusing on scalability and stability

By developing the front end of Cryptospace on reactjs, we ensured that the stability of the platform was taken care of, thereby ensuring that large volumes of data could be processed without the system crashing.

Through a continuous integration / continuous delivery model, our development team provided their expertise to deploy the application with ease using different branching strategies for version control. The use of Kubernetes clusters as the core deployment platform for Cryptospace helped automate a lot of complex trading functions. It also contributed significantly to scaling the application easily owing to Kubernetes' inherent load-balancing capabilities.



Admin's home screen

Key features of the solution

- Fiat - Crypto Purchases
- Crypto - Fiat Purchases
  - Fiat to crypto - BUY
  - Crypto to fiat - SELL
  - Crypto to crypto - BUY
  - Crypto to crypto - SELL
- Complete Automated KYC
- Risk Analysis of Customers
- Integrated Wallet Management
- Market Data Analysis
- Reward & Loyalty Program
- Complete Order Management System
- End-to-end Admin ManagementSystem

Tech stack

Backend Programming Language

Python (Django)

Architecture

Microservices Architecture

Frontend Language

React JS

Deployment & Monitoring

Kubernetes