How to develop a cryptocurrency app?

Small and large companies around the world are increasingly implementing support for such a payment method as cryptocurrency. Users readily accept innovations and new forms of money, and therefore developers release new solutions designed to work with digital assets.

For this, developers use different technologies to improve user experience, among which are the Internet of things (IoT), AI, blockchain, machine learning, etc. If you are thinking about creating a cryptocurrency application, then this article is for you. Financial custom software development continues to gain momentum as modern consumers stay with companies that are ready to meet their needs.

Picture 1 of How to develop a cryptocurrency app?

Types of crypto wallets

There are two types of cryptocurrency wallets: custodial and non-custodial. Custodial - a service or application in which the developer is responsible for key storage and backup.

Types of custodial wallets:

1. 1. Exchange. Issued by a crypto exchange for each input cryptocurrency. The addresses are generated on the servers of the crypto exchange, as are the private keys, which are stored there or in other places, but not on customer devices.
2. 2. Software (certain types). There are solutions for computers that also store keys on the developer's servers, but this is becoming less common.
3. 3. Non-custodial - an application or device that stores private keys. When registering in such a wallet, the user specifies a mnemonic phrase. With its help, you can return access to the cryptocurrency if the keys are lost.

Types of non-custodial wallets:

1. 1. Desktop is a PC program through which users gain access to the blockchain.
2. 2. Mobile - an application for smartphones and tablets. Convenient for frequent transactions, payment for purchases, and services where cryptocurrency is accepted.
3. 3. A web wallet is a service of a fintech startup, used by those who do not want to install the application on a smartphone or computer.
4. 4. Hardware - a physical device for storing keys. Such solutions are popular among long-term investors and whales.

The main functions of a wallet for digital assets

Most mobile crypto wallets have almost the same functions as banking apps or popular payment systems. They allow you to conduct transactions through QR codes, transfer cryptocurrency to other users, and pay for purchases. The main functions are as follows:

1. 1. Registration and authorization. Implemented through email, social media accounts, or phone numbers.
2. 2. Generation of crypto addresses in a P2P payment system.
3. 3. Linking an account, a cryptocurrency address. If the user already has accounts in other payment systems, you need the ability to add them to the application.
4. 4. QR scanner. For reading someone else's cryptocurrency address with a smartphone/tablet camera.
5. 5. Increased security. The application must support two-factor and hardware authentication and automatically log out of the account when idle. Users are also often interested in compatibility with a fingerprint scanner (Touch ID) and a face scanner (Face ID).
6. 6. Asset management. Displaying the current balance, incoming/outgoing operations for a certain period, monitoring of the portfolio status, etc.
7. 7. Push notifications. Notification of the completion of the transaction, the arrival of digital assets, and other important financial information.

Non-custodial mobile wallets for crypto exchanges need additional, in their own way important, functions. They may be more related to market prices, conversion, and exchange of one cryptocurrency for others.

Stages of developing a mobile crypto wallet

A customer should initially understand how he sees a mobile crypto wallet for his project. This should be formalized as a technical task (TOR) after filling out a brief with the team of a development company. Only after that, a team starts developing.

Assessment and planning

The project manager studies the brief and wishes of the customer, discusses who from the team to involve in the new project, and calculates the time and cost of development. The result of his work is the concept of the project painted according to the goals and steps.

Analytics

The team lead specifies the technical requirements for the future product. He draws up application specifications and describes the development plan and tasks for programmers in more detail. Analytics can also be conducted by a project manager or software architect.

Design engineering

If the customer does not have sketches or a prototype of the user interface, the UI / UX designer creates it from scratch. First, a wireframe is created with the main details of the future application, then prototypes. When the customer approves the interface and required functions the final design will be developed.

Programming

Developers start writing program code, taking into account the TOR, brief and existing prototypes. When developing for iOS, they use Swift or Objective-C. And when developing for Android - C ++, C #, Java, Kotlin,

or Python.

After the code is ready and the application is working, the UI/UX designer checks its interface. The result of the stage is the alpha version of the crypto wallet, ready for testing.

Testing and fixing bugs

When the developers submit the alpha version, testers and QA engineers will start testing the crypto wallet. If there are bugs or shortcomings, the developers will immediately fix them. The release of the beta version will take place only after all team members are convinced of the quality of the released application.

Release

The last step is to publish the product in the Apple App Store and/or Google Play. This step can be performed by the customer himself.

Technical support and further development

After release, the app usually collects feedback from users. In the first 2-3 months, experienced users can fix certain errors, and determine the functionality that needs improvement. The task of the developers is to fix the bugs. It is recommended to take feedback into account, as it is very important for the further development of the project and retention of users.

Summary

The development of an application to manage crypto assets opens up a lot of possibilities for users. During the development process, it is possible to implement not only the main set of wallet functions but also additional features that users will surely appreciate. Contact the Intellectsoft company to develop reliable custom software to use cryptocurrency. Skilled experts will provide full-cycle custom financial software development to fit your business tasks and budget requirements while leveraging innovative technologies.