Crypto-money in Real Life

Throughout human currency development, the currency has always evolved along with technological progress and the development of economic activities. The emergence of digital currency represented by Bitcoin is regarded as another major revolution in the form of currency. It is expected to become the mainstream currency and important financial infrastructure in the digital economy era. The most challenging security requirement of digital currency is double-spending prevention. As a consequence, transactions cannot be considered definite as soon as they are received, because it takes some time for the Bitcoin network to verify and integrate them in a state that is very hard to change. However, in many real-world scenarios (e.g., taxis, mobile ticketing, vending machines, etc.) offline payments are highly desirable. The requirement of an online connection to the Bitcoin network in order to determine the validity of the transaction makes offline payment hard to be achieved.

In this thesis, you will study the design of a crypto-money system, which supports offline payment. You will focus on user-end experience and explore the interaction between consumers and consumers, or merchants and consumers. The main task of this project is to develop a crypto-money mobile application that supports offline payment.

Requirements: You have some experience in Android (or IOS) application development and can work independently. You are interested in cryptocurrency. Some knowledge in cryptographic are welcome. We will have weekly meetings to address questions, discuss progress, and think about future ideas.

Interested? Please contact us for more details!

Contact

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