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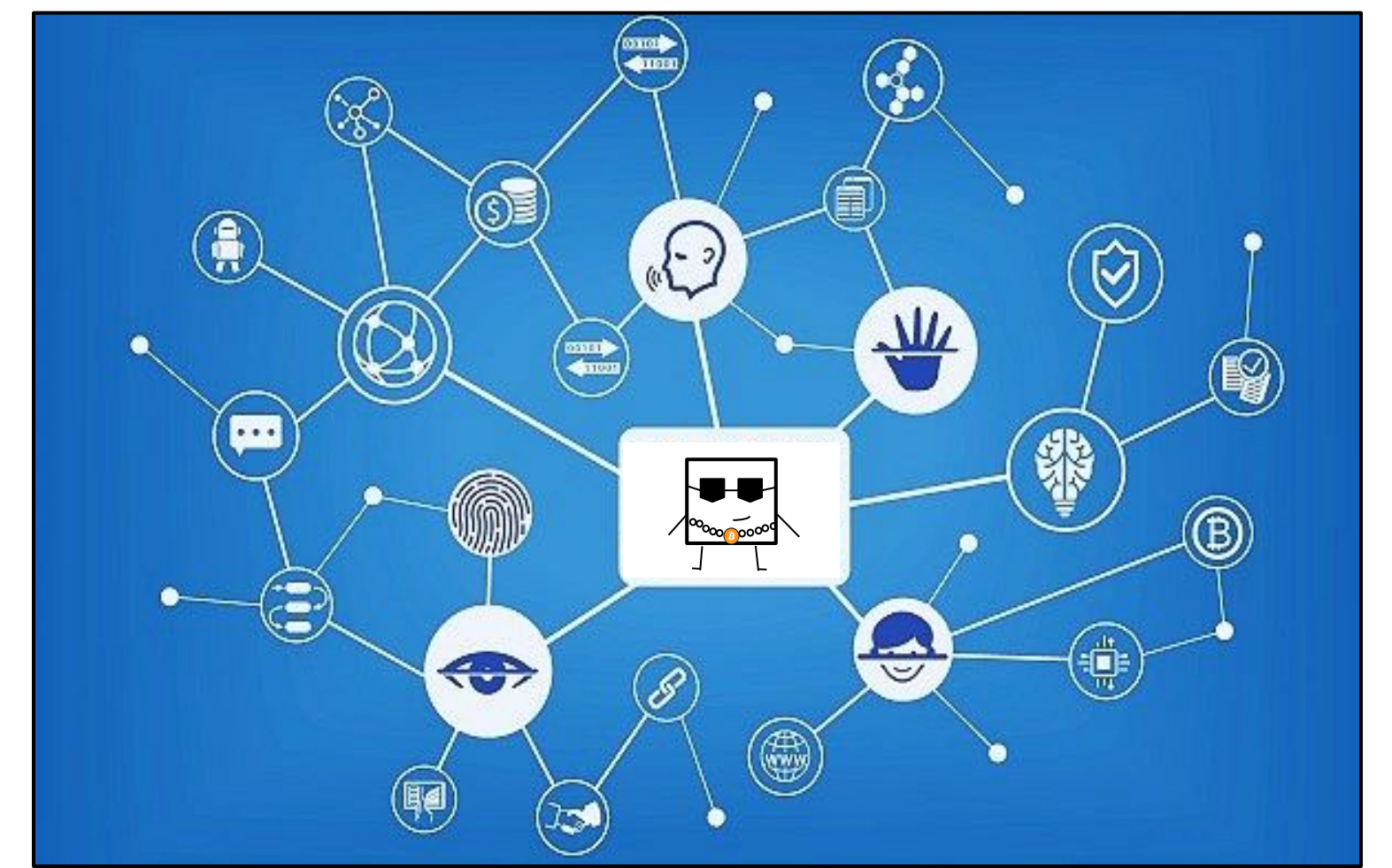
Fidelity Labs is a Fidelity Investments company based in Boston, MA. It was created in 1998 and is Fidelity's primary research branch, focusing mostly on how best to use new and emerging technologies to "improve people's financial lives". They experiment with all sorts of ideas, ranging from AI to VR/AR/wearables to blockchains/cryptocurrency.

## CryptoCurrency

Cryptocurrencies are digital assets designed to enable transactions without the need for a central authority to verify those transactions. Cryptographic keys secure and verify transactions on a public ledger (a record of all transactions), which allows any user to verify the amount of currency a given person has. Processing is taken care of by distributed computing on the part of various users, who are paid by transaction fees.

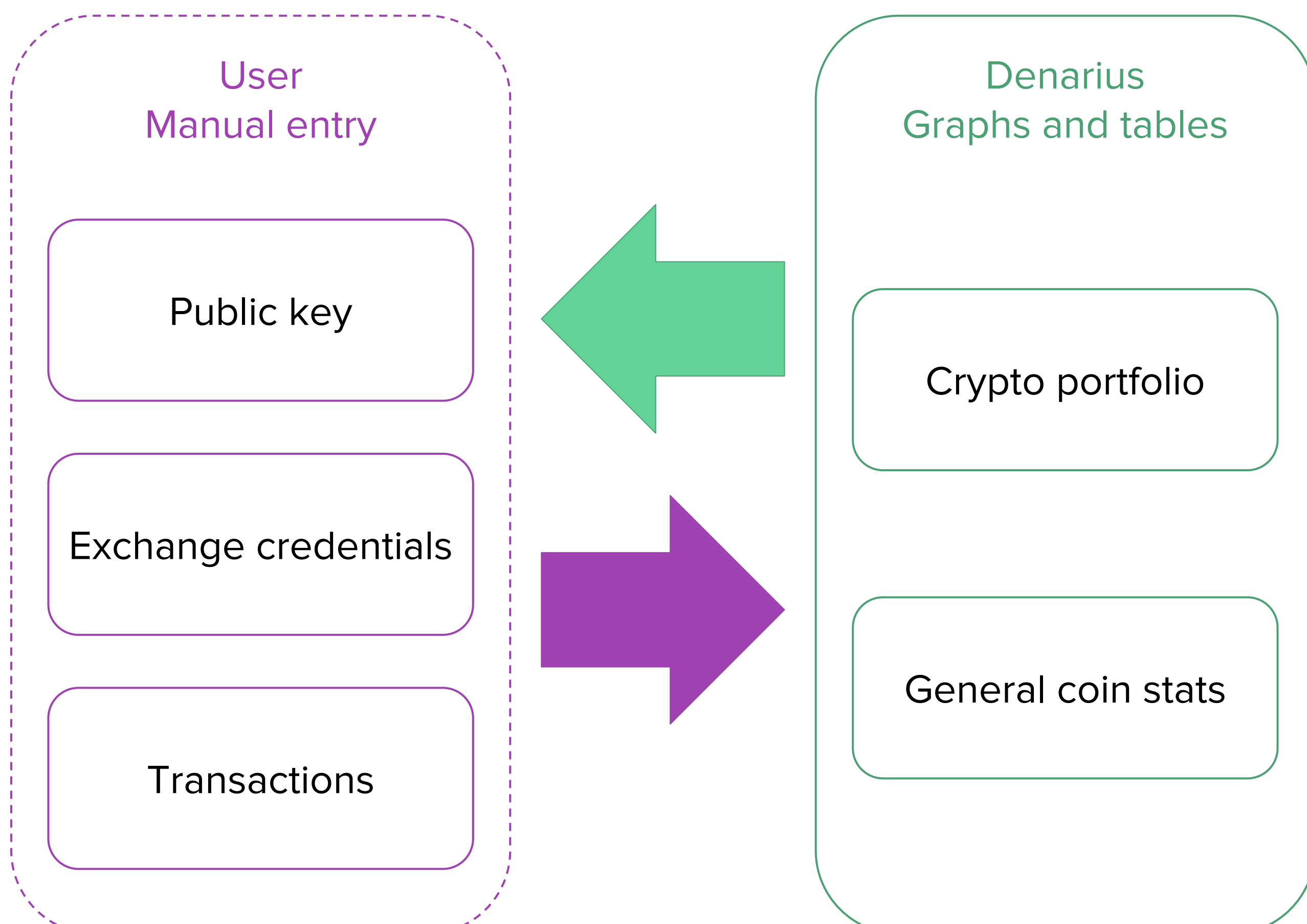
The financial world relies upon data. Traditionally, financial data is centralized: banks have a ledger to keep track of individuals' transactions, assets, and liabilities. Each bank has its own centralized infrastructure to maintain the ledger. As such, a person's investment portfolio, assets, and liabilities are easily accessible for that person to view and understand.

However, data about digital assets, such as Bitcoin, is not centralized. Rather, every computer in the blockchain network keeps its own ledger. The digital asset's protocol keeps all of the ledgers in sync. As a result, the status of the blockchain relies on the connection between all of the computers in the asset's network. Since the data is thus decentralized, it is difficult to parse. Despite being publically available - anyone can get a connection to the blockchain - the data needed to create one person's portfolio is difficult to access since it is spread throughout the entire blockchain.



## Denarius

Many cryptocurrency investors and traders hold multiple currencies at any given time. This means their assets are distributed across multiple different blockchains and decentralized ledgers. Additionally, their holdings and assets are decoupled from their fiat assets (i.e., their bank account). The simplest way to hold crypto assets is to keep track of a public and private key, a unique identifier that lets you spend and buy crypto assets. You can have multiple different keys, each for different currencies, or multiple keys for one currency. A wallet is piece of software which keeps track of of their cryptocurrency holdings and key information, and many users hold their crypto assets in one or multiple wallets. When users wish to exchange between currencies, they can either find a real life buyer/seller, or, more commonly, they can make their transaction through a cryptocurrency exchange. However a user chooses to manage their assets, these assets remain decoupled from fiat investments.



To help users make more informed decisions and use the power of last year's Fidelity Labs SCOPE project, we made the project Denarius. Denarius takes in information about currencies and a user's cryptocurrency portfolio to consolidate the user's financial holding into one place through the Fidelity portal. Currently there are three methods for users to provide information about their portfolio: public key, exchange account and manual entry in the app. Then Denarius aggregates all of this information into easily understandable tables and graphs about the user's portfolio status.