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CTEC 415

Block Chain Creation

To build a blockchain, an IDE with a compatible programming language is needed along with an HTTP client. Python offers easily installed packages that can be used to help tailor a program to individual needs, and the Flask and Requests library both provide necessary tools for creating a blockchain within python.

For the blockchain program, it will consist of a few different methods to complete various functions. These methods and functions include:

* A method to create an initial, empty list as well as a separate list to store transactions
* A method to add transactions to the blockchain
* A method that creates the first “genesis block” of the chain and adds the proof needed to add to the chain
* A method containing a hashing algorithm to determine the proof of work
* A method to create new transactions within a block
* A method to mine a new block from the chain
* A method to return the entire chain

To interact with the chain, the HTTP client is needed. The requests sent from the client will need to contain the proper content type, sender, recipient and amount.

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| **Known** | **Unknown** |
| * How to program * How to add libraries * How to create different methods * How to create basic algorithms | * How to use an HTTP client * How to determine the proper information for an HTTP client request * The necessary code for each method to create the blockchain |