What is claimed is:

1. A method for proving digital assets of an asset transaction platform, ~~characterized in that an asset transaction platform and a server are involved;~~ the method ~~comprises~~ comprising~~the following steps~~:

~~step 1:~~ identifying, by a server, all users on an asset transaction platform; generating, by a server, a snapshot for each of the identified users at a first time instant, each ~~taking~~ snapshot ~~of~~ including a user identity and a user assets amount ~~of each of all~~for the user at the first time instant ~~users, recorded by the asset transaction platform, by the server within a snapshot time~~, the user assets amount for each user at the first time instant being a total amount of digital assets held by the user on the asset transaction platform at the first time instant;

~~step 2:~~ generating, by the server, a user asset list for the first time instant, the user asset list for the first time instant including an entry for each of ~~exporting~~ the snapshots of the user identity and the user assets amount ~~into a user asset list~~ generated by the server for the first time instant;

~~step 3:~~ transforming, by the server, each of the plurality of entries in the user asset list into a string combined hash value. each string combined has value generated by transforming one of the entries in the user asset list using ~~setting mathematical hash functions, wherein each of the users corresponds to~~ a mathematic hash function, ~~and the mathematic hash function is used to calculate a string combined hash value of the user identity and the user assets amount or disclose the total amount of assets of each of the users and the valid user provisions of the transaction platform~~;

~~step 4:~~ generating, by the server, a merkle tree for the plurality of string combined hash values for the first time instant, the merkle tree for the first time instant including a leaf node for each of the plurality of string combined hash values~~by using the string combined hash value of each of the users as a leaf node, and storing the merkle tree~~; and

~~step 5:~~ performing an audit process of the asset transaction platform for the first time instant, the audit process including:

generating, for the first time instant, a valid user provision for the asset transaction platform, the valid user provision for the asset transaction platform for the first time instant being the total amount of digital assets held by the asset transaction platform at the first time instant;

verifying the user identity and user assets amount of each user on the asset transaction platform for the first time instant, the verifying including:

generating a first hash for each user on the asset transaction platform for the first time instant, each of the first hashes being a hash of the user identity and user assets amount for the user for the first time instant; and

comparing each of the first hashes with the string combined hash values stored in the leaf nodes in the merkle tree;

responsive to a determination that all of the first hashes match with the string combined hash values stored in the leaf nodes in the merkle tree:

generating a first summation for the first time instant, the first summation for the first time instant being a summation of the user assets amount for all of the users for the first time instant; and

comparing the first summation for the first time instant with the valid user provision for the asset transaction platform for the first time instant;

responsive to a determination that the first summation for the first time instant is less than or equal to the valid user provision of the asset transaction platform for the first time instant:

returning a result confirming the valid user provision of the asset transaction platform.~~verifying the valid user provisions and the total amount of assets of all users on the transaction platform, and drawing a conclusion.~~

2. The method for proving digital assets of a transaction platform according to claim 1, wherein the user assets amount is the sum of similar assets in various accounts of a user on a service provider platform.

3. The method for proving digital assets of a transaction platform according to claim 1, wherein the leaf node formed by the string combined hash value of each of the users is capable of being open to the public.

4. The method for proving digital assets of a transaction platform according to claim 1, wherein the ~~snapshot~~ first time instant is any time provided by the server.

5. The method for proving digital assets of a transaction platform according to claim 1, wherein the audit process is performed by a third-party auditing body; and wherein the thiry-party auditing body compares each ~~piece of information~~entry in the user asset list with the leaf node ~~open to the public~~ to ensure consistency.

~~6. The method for proving digital assets of a transaction platform according to claim 5, further comprising step 6: supplying the account number of the valid user provisions held by a service provider to the third-party auditing body, comparing the valid user provisions held by the service provider with the sum of the total amount of assets owned each of all users, and drawing a conclusion by the third-body auditing body.~~

~~7~~6. The method for proving digital assets of a transaction platform according to claim 1, wherein the user verifies own string combined hash value.