Supported Self-Driven Learning Operating System

Tokenomics

The use of blockchain tokens within the selfdrivenOS.

Version 0.4

Background

selfdriven has a set of tokens for measuring value in the form of community service, achievements (linked to known skills set), endorsements and reflections.

It also has a token for recognising effort within the selfdriven Foundation organisation.

Tokens

The tokens are represented on the Cardano (https://cardano.org) blockchain as native-assets, linked to specific policyIDs.

e.g.

Token	SDF
Policy ID	906ba07f6419a89d7b05cca88f0ff3ee2114936c373cb2156f8426ec
View on Cardanoscan	cardanoscan.io/tokenPolicy/906ba07f6419a89d7b05cca88f0ff3ee2114936c373cb2156f8426ec

The Non-Fungible Tokens, i.e. unique tokens, eg a learner achievement, which there can ever only be one of, includes metadata (ie data) with details of, in this example, the achievement.

SDF; selfdriven Foundation Token

Issued to foundation founding and advisory members. Limited to 200,000 tokens.

SDC; selfdriven Community Token

Used for recognition of community service, positive attribute, accountability etc

1,000,000,000 tokens created initially. More will be created as required.

More diagrams @

https://drive.google.com/file/d/1YUgwCUr8S49QX3vhCPGKO0VacCFUHIAF

Worked example @

https://docs.google.com/spreadsheets/d/1UUdI535jYv24vLoCP5QEoIv8vWIovd3G04HBrXciLVc
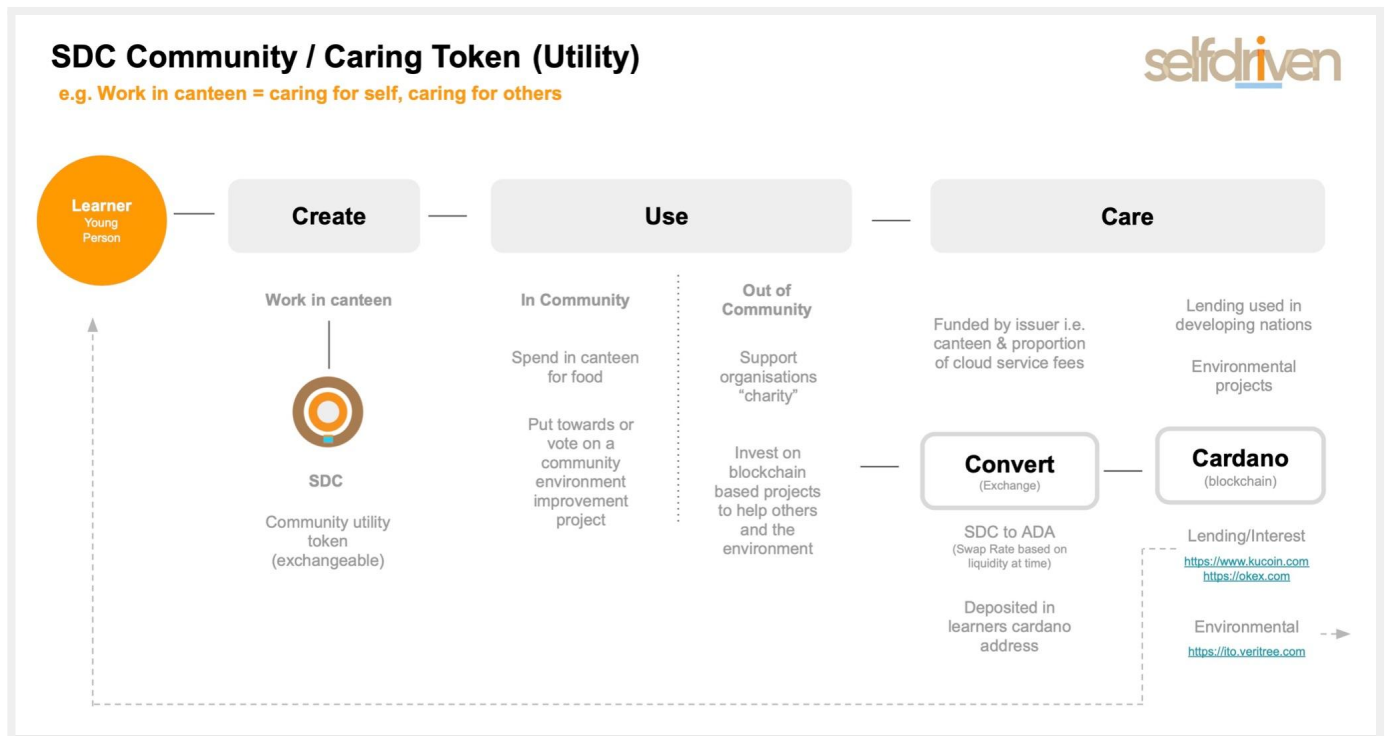
SDI; selfdriven Identity Token

The SDI token is used to record identities on-chain, so can be referenced in other on-chain tokens (assets) e.g. a SDA.

The identity token types are:

- Community Members (learners and learning-partners as individuals)
- Community Organisations (learning-partner organisations, eg University)
- Skills (standard known set of skills)
- Project Template
- *The types above are also recorded as an SDI as type: "type".*

Other types can be added as needed.

"sdi" is the selfdriven Unique ID.

The on-chain asset name is the "sdi" with the hyphen removed and converted to base16 (Hex).

Selfdriven Identity (SDI) will also work with other Digital IDs (dids) ie atalaprism.io.

SDA; selfdriven Achievement Token

Achievement tokens that are linked to known skills and the community member as represented by SDI tokens.

"sda" is the selfdriven Unique ID.

The on-chain asset name is the "sda" with the hyphen removed and converted to base16 (Hex).

selfdriven On-Chain Policy IDs

The following are the official selfdriven *Cardano Policy IDs*.

Token	Policy ID
SDF	906ba07f6419a89d7b05cca88f0ff3ee2114936c373cb2156f8426ec cardanoscan.io/tokenPolicy/906ba07f6419a89d7b05cca88f0ff3ee2114936c373cb2156f8426ec
SDC	e487d8ea06a917008df8822d65140cc933af324e805f4ddcae8fc089
SDI	[TBC]
SDA	[TBC]

Lab Zone Policy IDs

These are used by the selfdriven Lab team for testing and showing by example.
The assets/data held within these policies are not valid and should not be used in any real-world uses..

Token	Policy ID
SDC (lab)	[TBC]
SDI (lab)	92be578d1c063b70edf9b2ca0b53c7a58142b65eba43a5b55bdd6cb7
SDA (lab)	96dd4df64ec0857af3a90ebdb5d3318fbef6774fe8c4b50e090af1c6

Metadata

Token transactions include metadata that links the transaction back to the selfdrivenOS data i.e. and achievement linked to skills.

selfdriven has a number of meta-data formats based on the token type, with each being uniquely identified by a *Metadata ID (ASCII representation of the token name)*.

Token Name	Metadata ID	Notes
SDF	115100102	Foundation (200,000). Locked.
SDC	11510099	Community (1,000,000,000)
SDI	115100105	Identity (Community Members, Community Organisation, Skill)
SDA	11510097	Achievement
SDR	115100114	Reflection
SDE	115100101	Endorsement

Examples

Token Name	Policy ID	Metadata
| **SDI (lab)** | 92be578d1c063b70edf9b2ca0b53c7a58142b65eba43a5b55bdd6cb7<br><br>View on cardanoscan | ```json
{
    "115100105": {
        "92be578d1c063b70edf9b2ca0b53c7a58142b65eba43a5b55bdd6cb7": {
            "SDI-skill": {
                "e4e4a9501a4648f48a71c37685c32e02": {
                    "zone": "lab",
                    "type": {
                        "sdi": "707599e9-bf08-4881-a25a-061142b33ee2",
                        "name": "skill"
                    },
                    "sdi": "e4e4a950-1a46-48f4-8a71-c37685c32e02",
                    "name": "Canteen Supervisor-1-G",
                    "reference": {
                        "number": "301000111",
                        "domain": "301",
                        "source": "00",
                        "level": "011",
                        "capacity": "1"
                    },
                    "notes": "Canteen [301] Supervisor [1] Level 1 [1], Gets It [1]",
                    "url": [
                        "https://",
                        "identity.selfdriven.cloud/",
                        "#skill/",
                        "e4e4a950-1a46-48f4-8a71-c37685c32e02"
                    ],
                    "image": ["ipfs://", "bafkreigz7afau3e5xz5fdrrlgbc6ohp6wazvzbizy4t4pgtf3owgrngtl4"]
                }
            }
        }
    }
}
```<br><br>https://www.selfdriven.foundation/selfdriven-metadata-example-sdi.json |
| **SDA (lab)** | 96dd4df64ec0857af3a90ebdb5d3318fbef6774fe8c4b50e090af1c6<br><br>View on cardanoscan | ```json
{
    "11510097": {
        "96dd4df64ec0857af3a90ebdb5d3318fbef6774fe8c4b50e090af1c6": {
            "SDA": {
                "535591d747b44af88fbf549d62d22983": {
                    "zone": "lab",
                    "sda": "535591d7-47b4-4af8-8fbf-549d62d22983",
                    "issued": {
                        "to": {
                            "sdi": "61fa1431-ca95-48be-beec-6a91c5a5f1bb"
                        },
                        "by": {
                            "sdi": "3a22327d-eff6-4875-88ba-bd024709c295"
                        },
                        "date": "08 Dec 2021"
                    },
                    "skills":
                    [
                        {
                            "sdi:": "707599e9-bf08-4881-a25a-061142b33ee2"
                        },
                        {
                            "sdi:": "df711d36-d2af-46f9-8e96-3084f1ac913c"
                        }
                    ],
                    "url": [
                        "https://",
                        "verify.selfdriven.cloud/",
                        "#sda/",
                        "535591d7-47b4-4af8-8fbf-549d62d22983"
                    ],
                    "image": ["ipfs://", "bafkreifrbeyf576hpl2ef2nosvig5vwkyxffsciov64ncaxp2hjkltiqoi"]
                }
            }
        }
    }
}
```<br><br>https://www.selfdriven.foundation/selfdriven-metadata-example-sda.json |

User Experience

- Tokens are accessible within app.selfdriven.cloud via integration for BlockFrost
- Wallet set up and interactions is planned to be via whitelabelling of lace.io Wallet once it is available.

Selfdriven Play / Gamification

- Supporting play within a learning community.
- Use tokens and NFTs to learn-to-earn
- Use learner art work.
- Earned NFTs = SDC multipliers and also add to the learners SDN.

References

- selfdriven whitepaper (www.selfdriven.foundation)
- ADA Handles:
  - https://handle.me/selfdriven
  - https://handle.me/selfdrivenx (Exchange address)

Tech Stuff

Clarity	https://clearcontracts.io/products	DAO creation as service. Smart Contracts
Maestro	https://www.gomaestro.org	ISPO/Stake Pools as service.