

— HEAD  
Genève

# CryptoKit

UNE CARTOGRAPHIE VISUELLE DES  
TECHNOLOGIES BLOCKCHAIN 

**Hes·SO** GENÈVE  
Haute Ecole Spécialisée  
de Suisse occidentale

01

# CONTEXTE

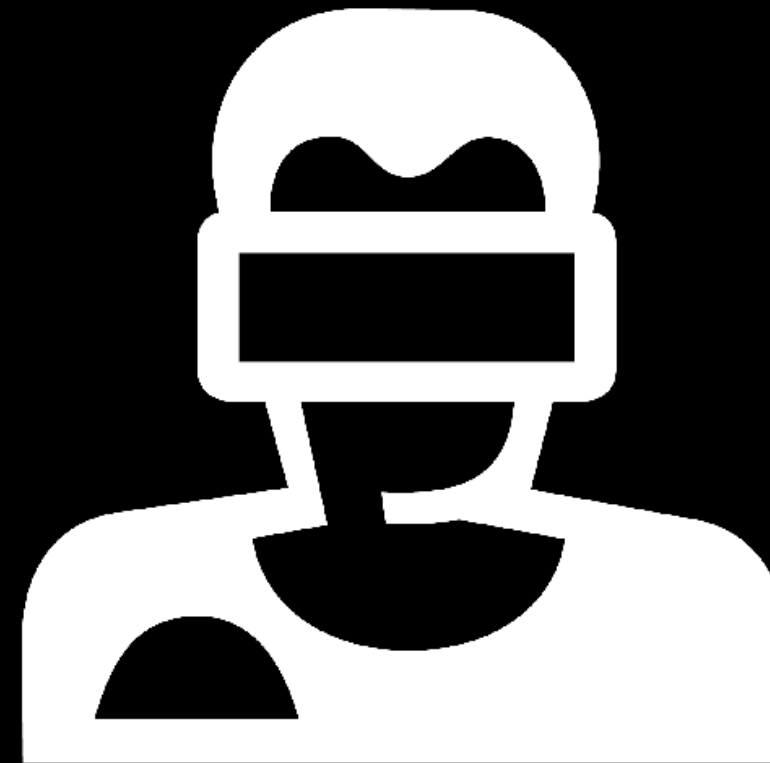
2021-2023

# ÉQUIPE DU PROJET

Anthony Masure

Océane Juvin

Guillaume Helleu



Alexandre Letexier

Kévin Donnot

Élise Gay

Chloé Michel



# HEAD – GENÈVE (HES-SO)

Environ 800 étudiant·es

Forte composante culturelle et  
exploratoire

Environ 20 projets de recherche en cours  
dans tous les champs de l'école (archi.  
d'intérieur, arts visuels, mode, design  
graphique, etc.)





02

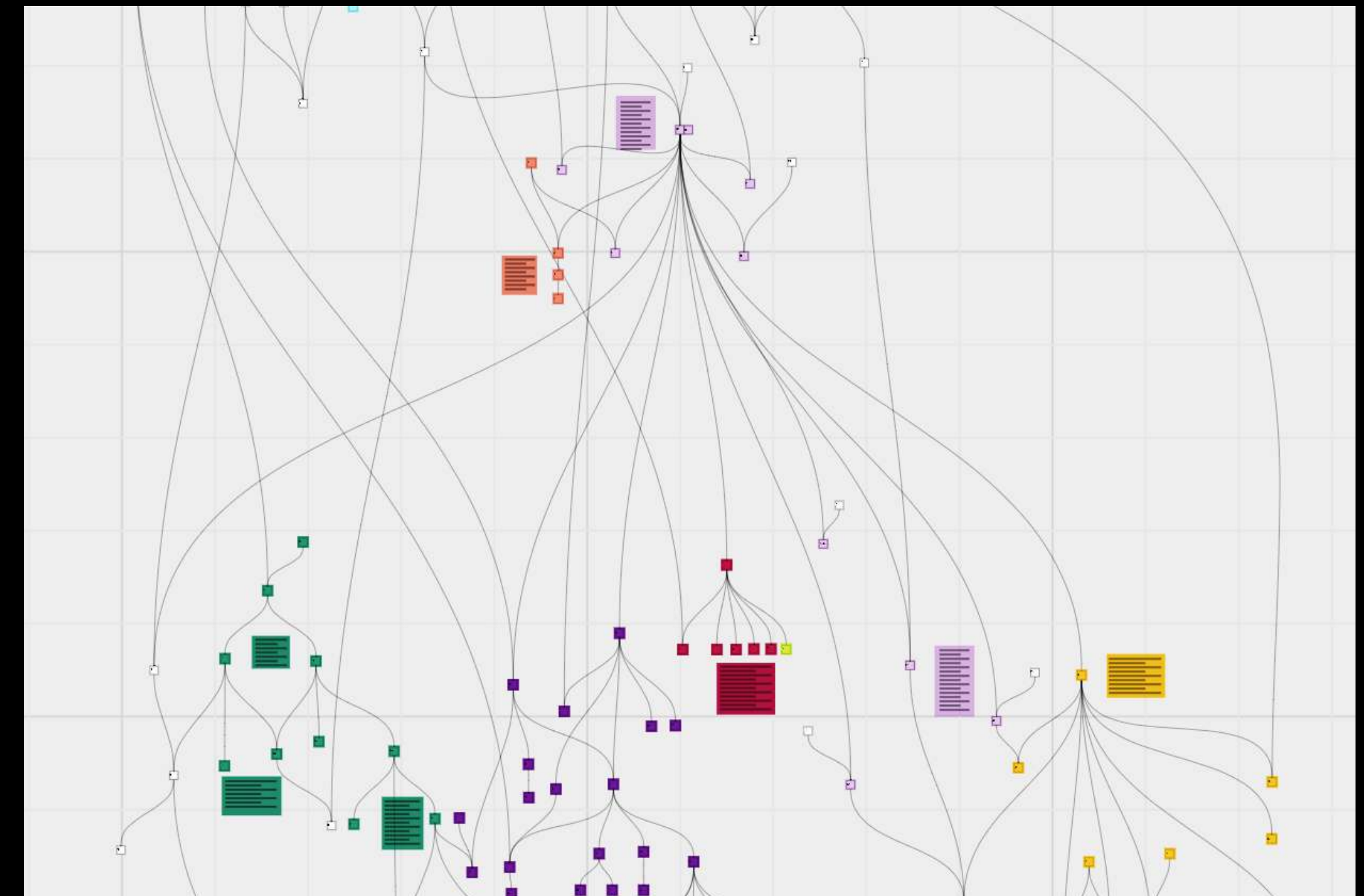
CRYPTOKIT.OTF

# MÉTHODE GRAPHIQUE

# D'UN GLOSSAIRE À UNE CARTE SÉMANTIQUE

The screenshot shows the Bitcoin Suisse Crypto Glossary page. The header includes the Bitcoin Suisse logo and navigation links for Individuals, Business, Insights, Company, and Contact. There are buttons for 'Get Started', 'Login', and 'DE'. The main content area features the title 'Bitcoin Suisse Crypto Glossary' and the date 'Nov 16, 2020'. A 'Download article as PDF' button is visible. Below the title, there are social media icons for Facebook, LinkedIn, Twitter, and a link icon. The main text area contains definitions for 'Airdrop', 'AMM', and 'APR/APY'. A 'Table of contents' sidebar on the right lists various terms: Airdrop, AMM, APR/APY, Block, Block reward, CLOB (Centralized Limit Order Book), Coinbase transaction, Confirmation, and Cryptocurrency.

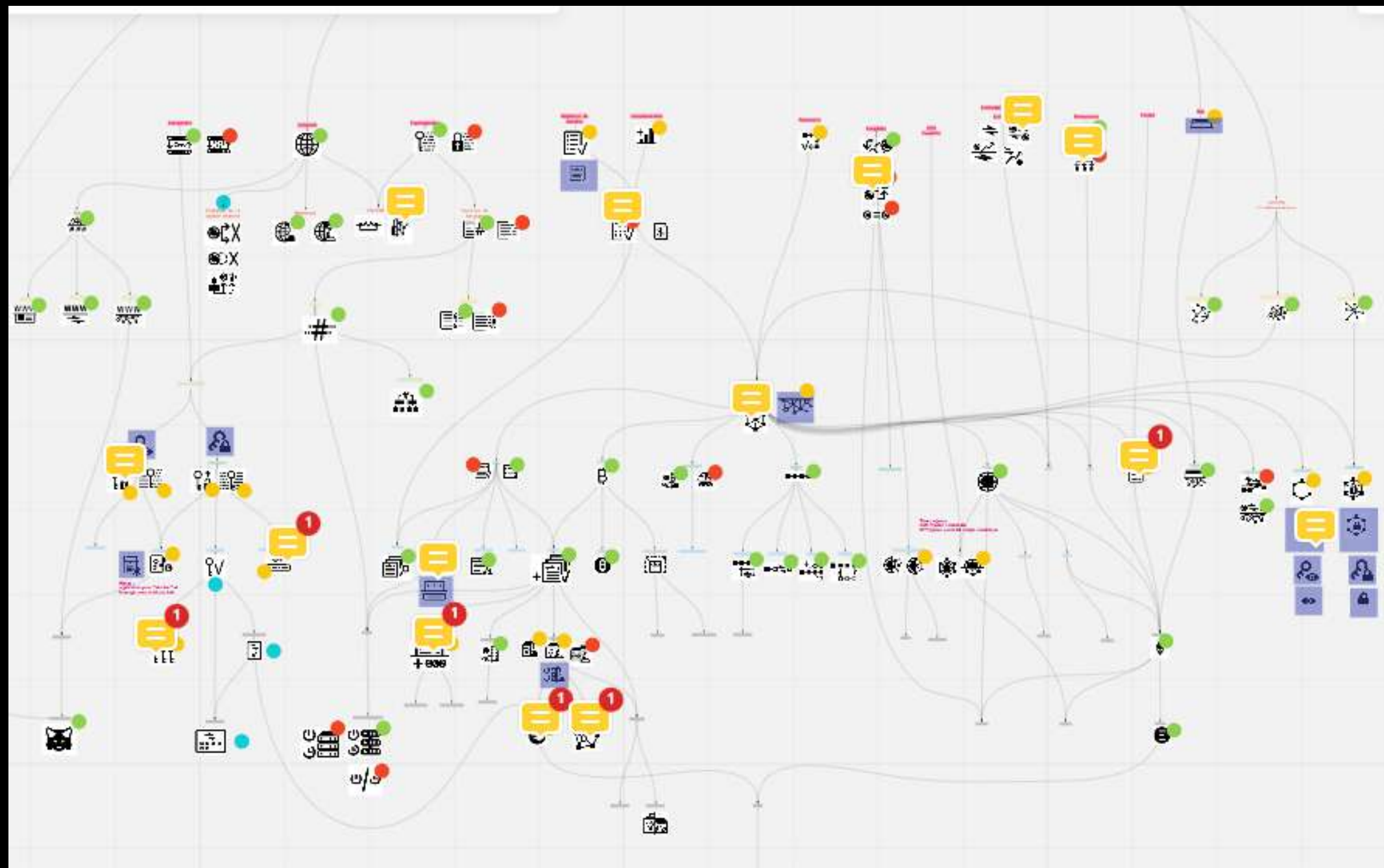
Il existe déjà de nombreux glossaires sur la blockchain



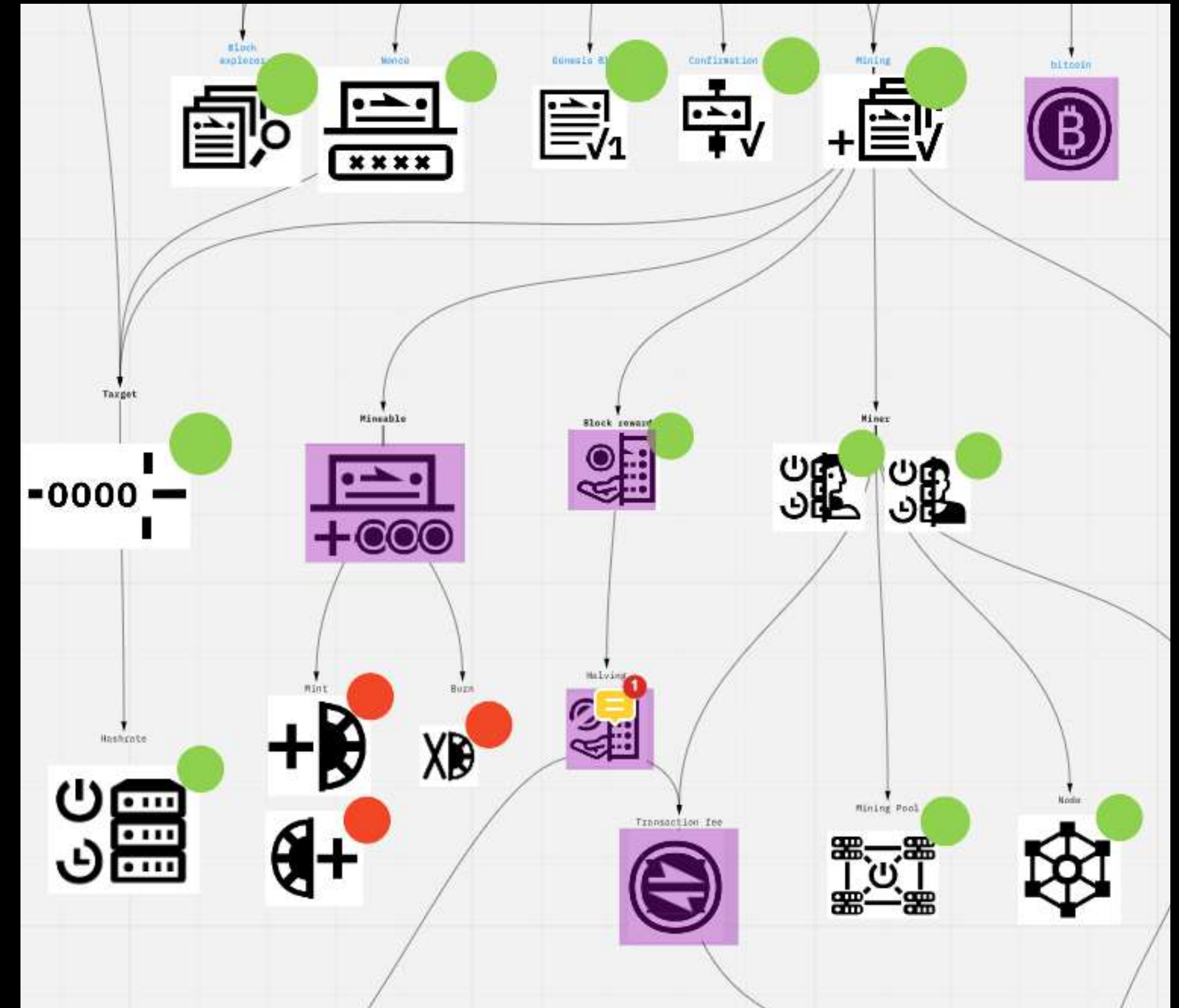
Tri des mots-clés par couches sémantiques



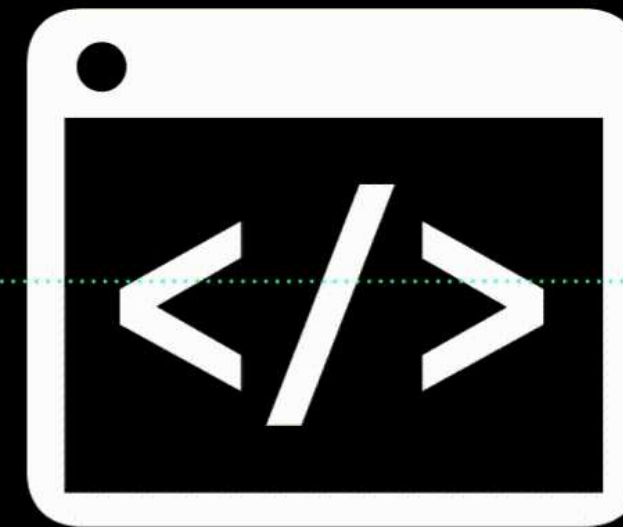
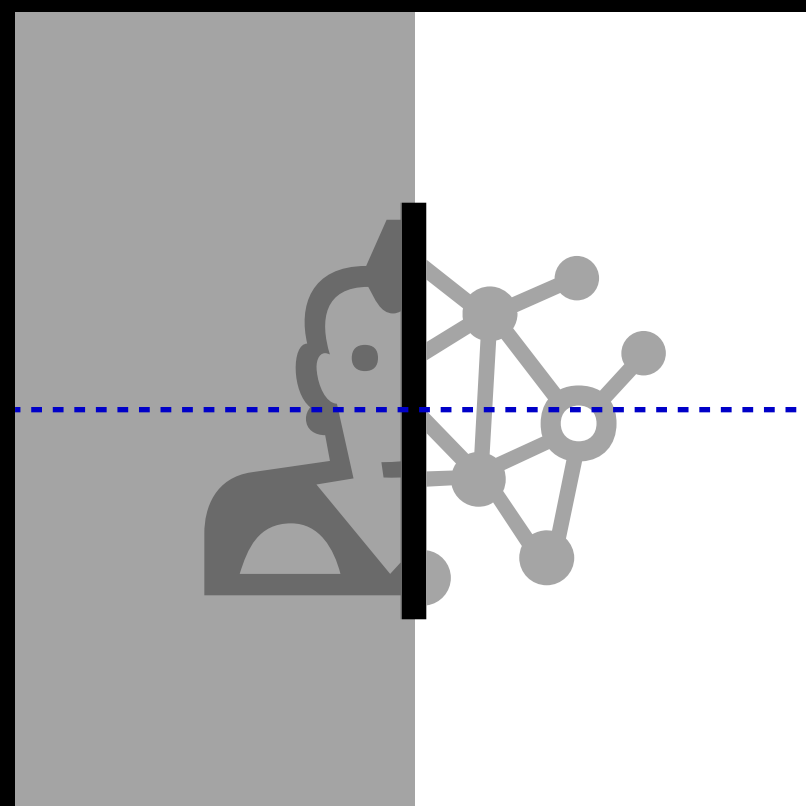
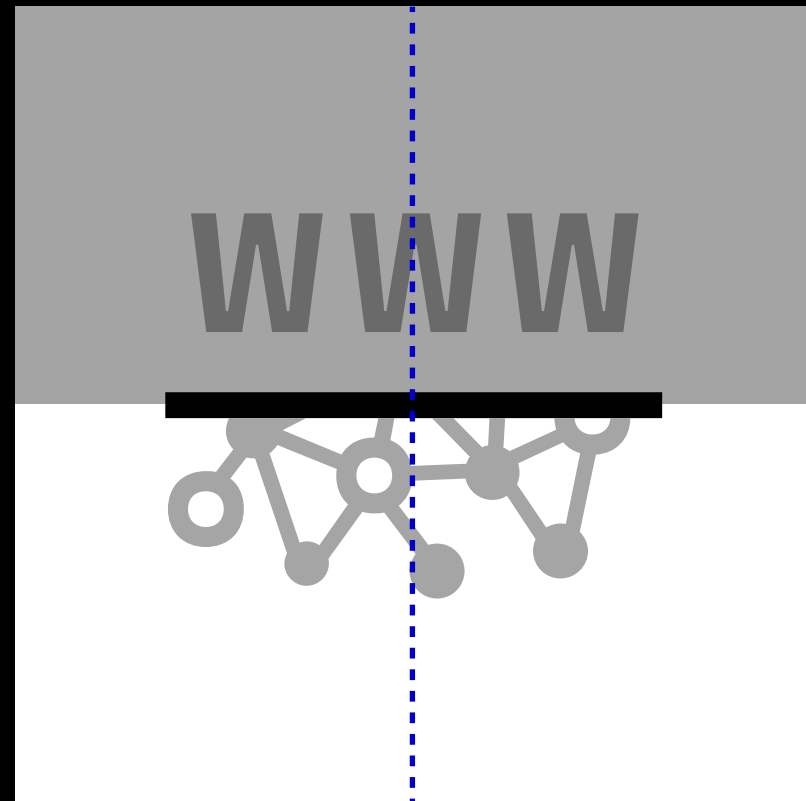
# QUEL SYSTÈME GRAPHIQUE POUR REPRÉSENTER LA BLOCKCHAIN ?



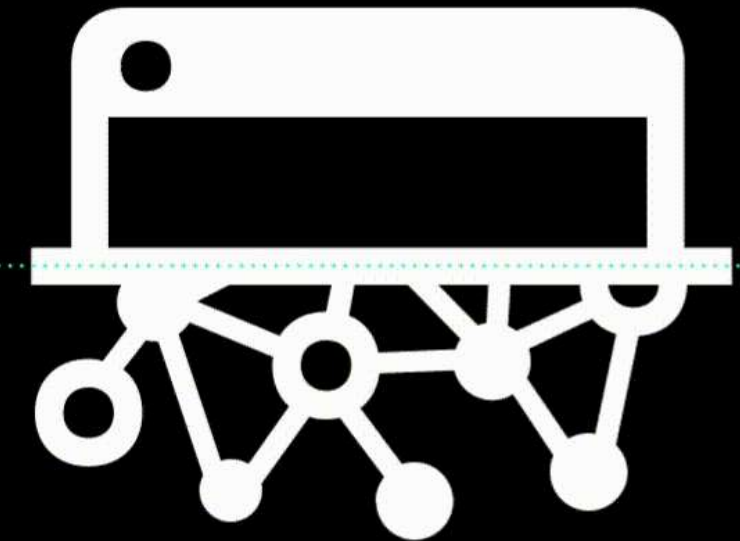
Travail collaboratif sur Miro



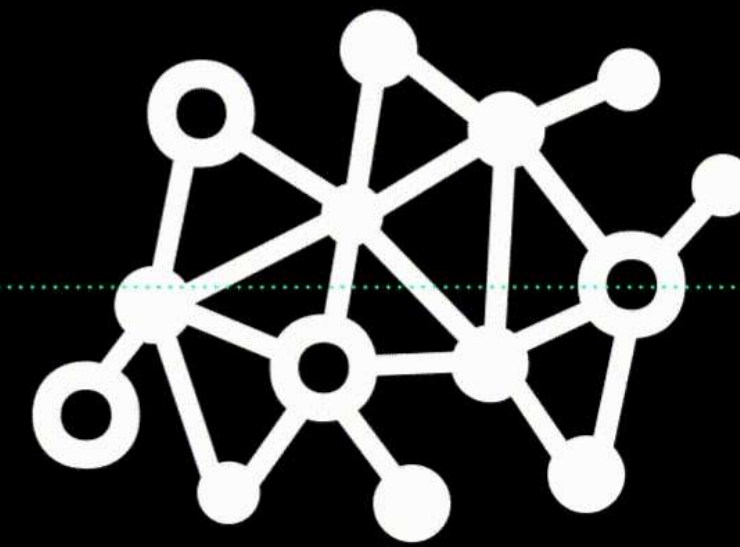
Validation des pictogrammes



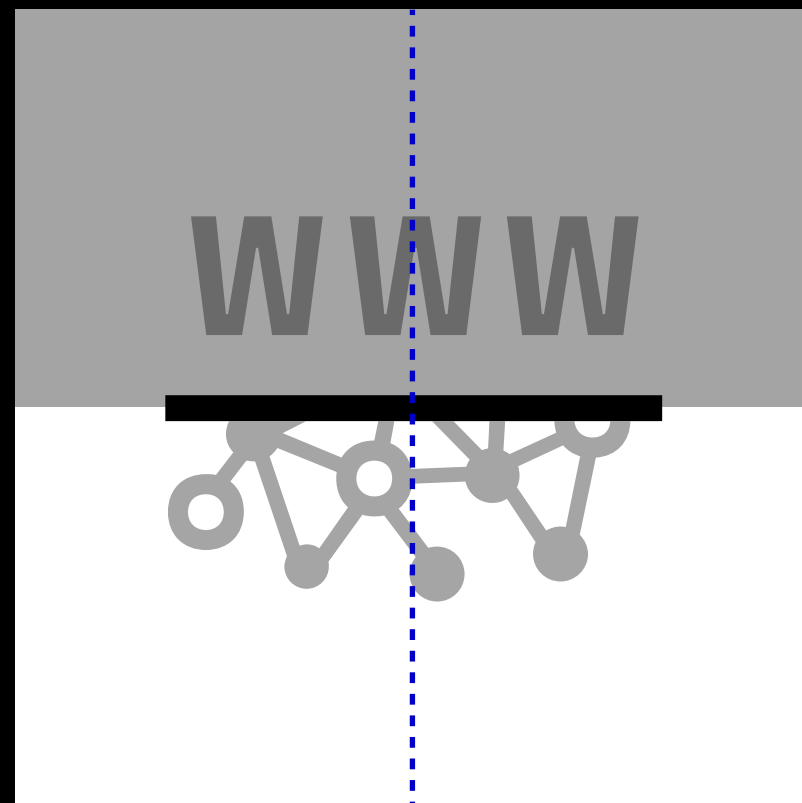
Application



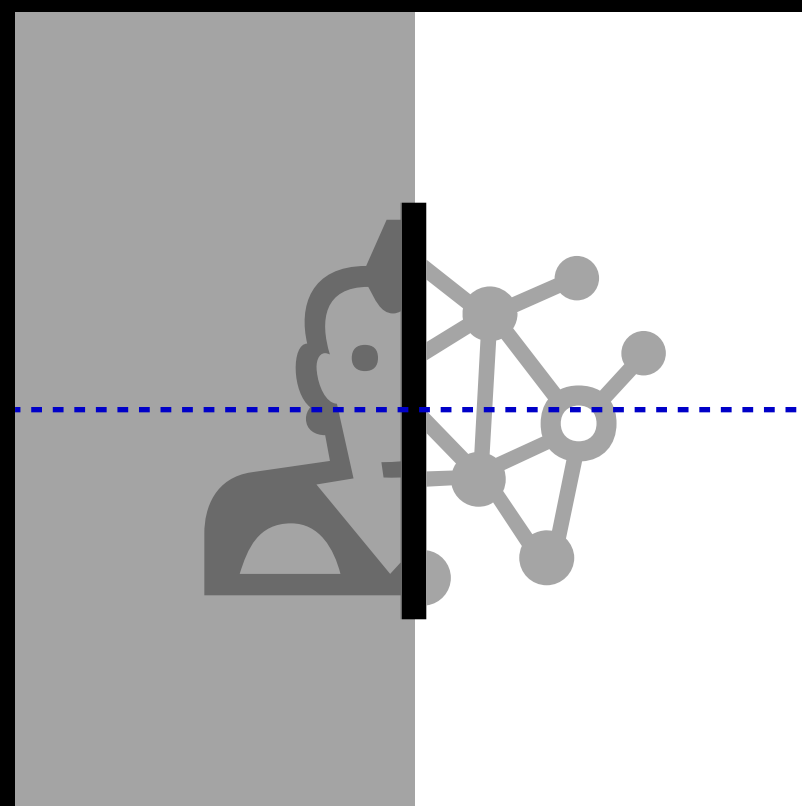
Decentralized App



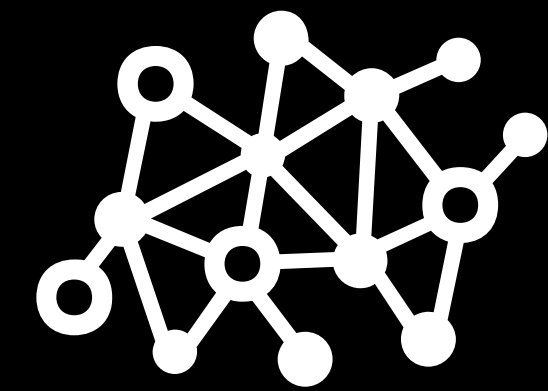
Distributed system



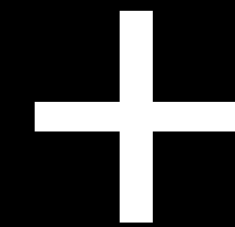
*Web3*



*Cypherpunk*

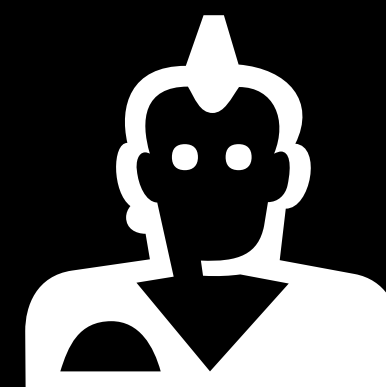


Système décentralisé

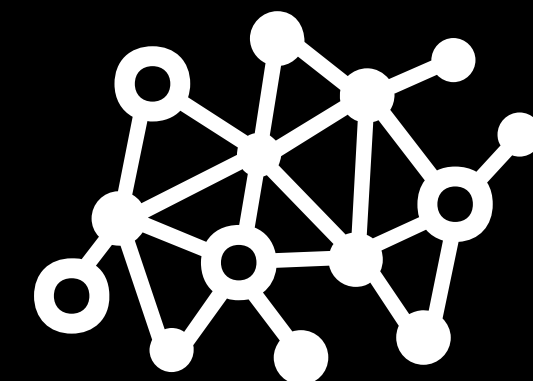
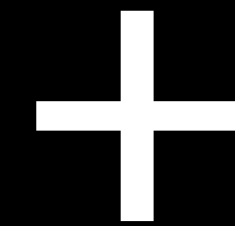


**WWW**

*World Wide Web*

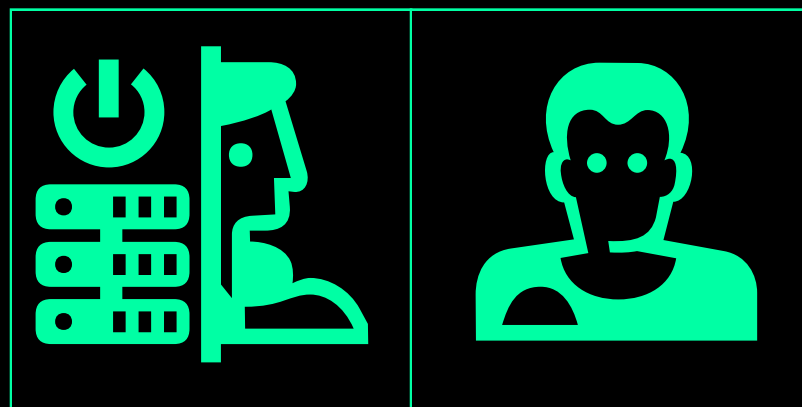


*Punk*

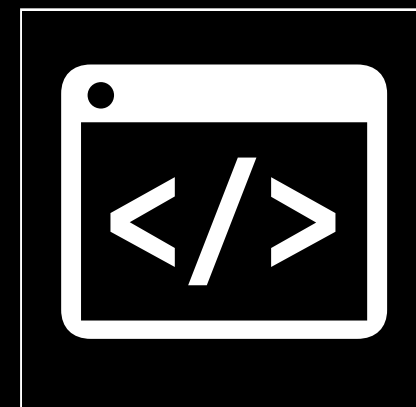


Système décentralisé

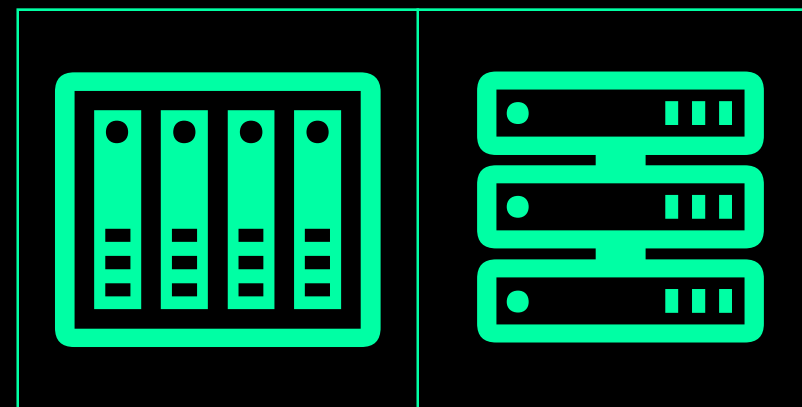
acteur·ices / rôles



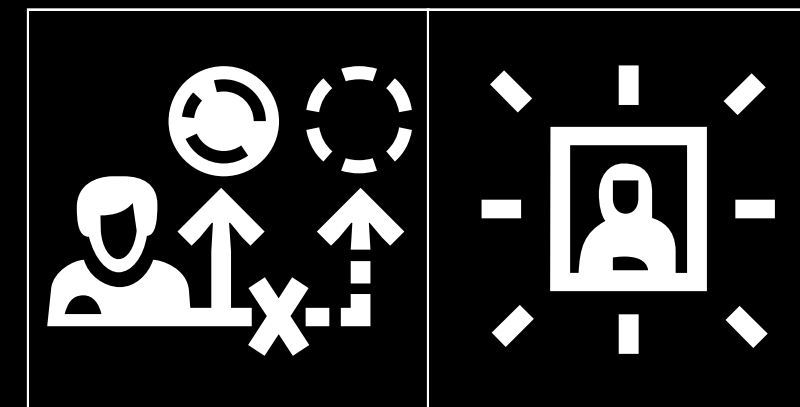
logiciels



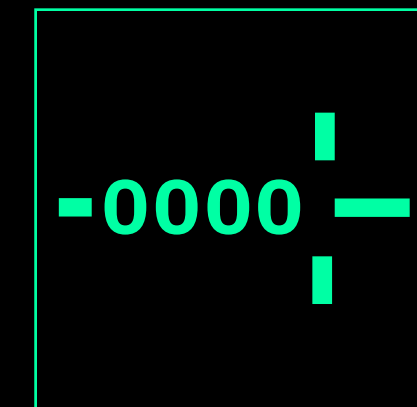
matériel informatique



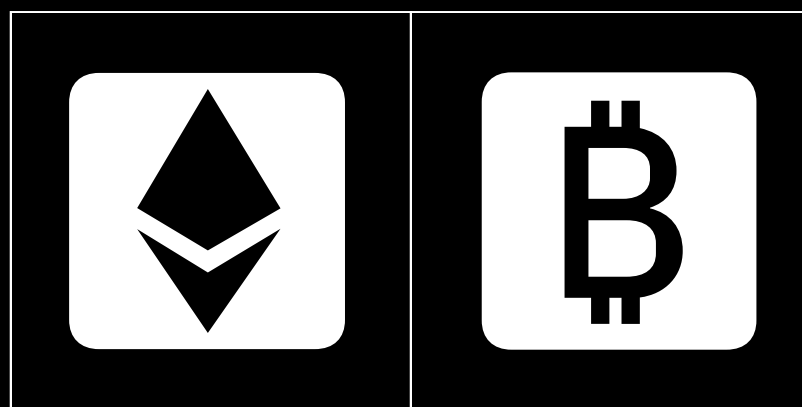
concepts



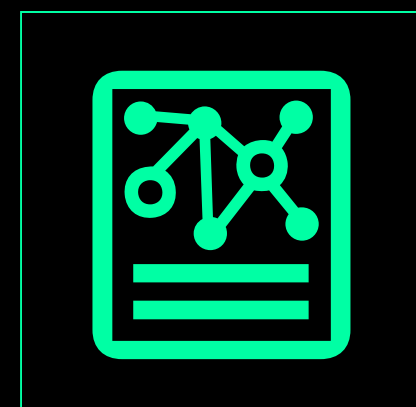
nombres



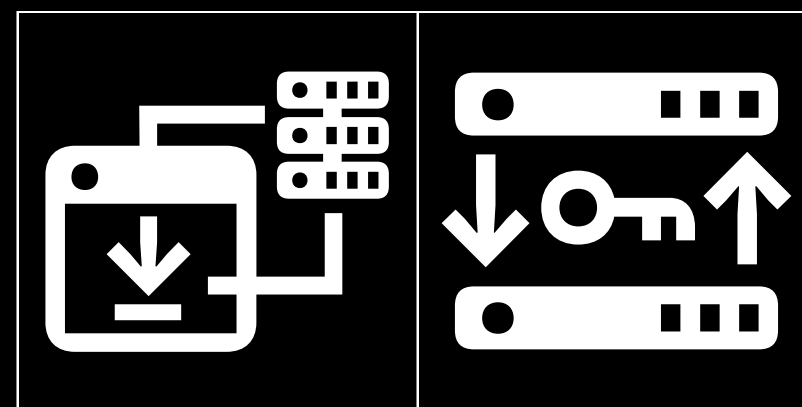
sociétés



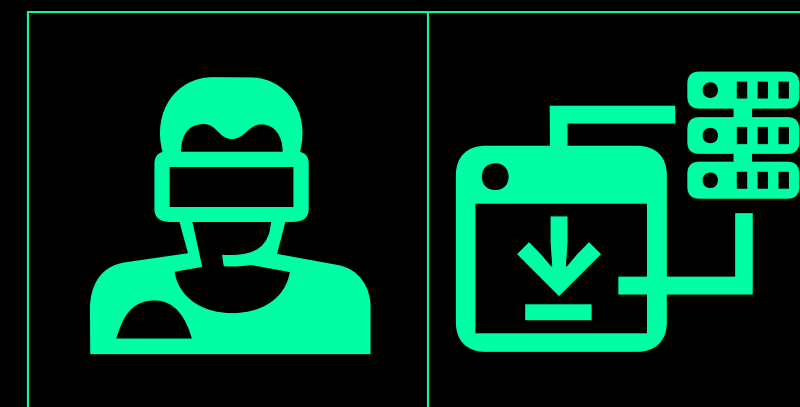
documents



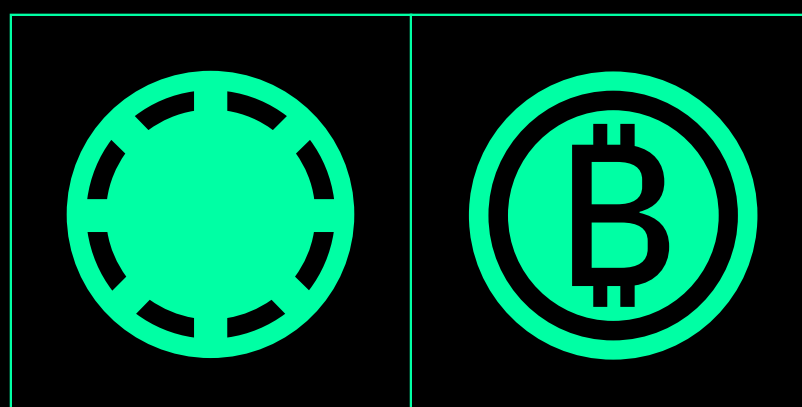
mécanismes



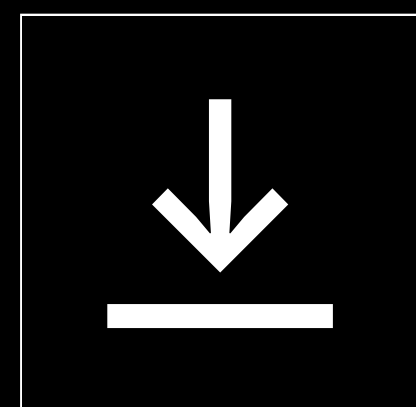
technologies



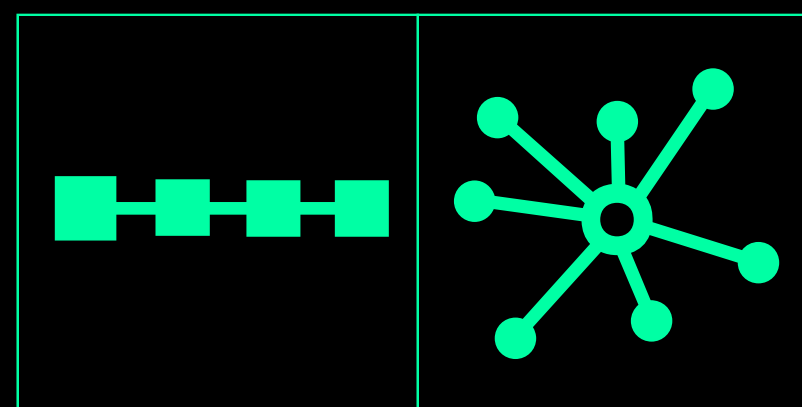
actifs numériques



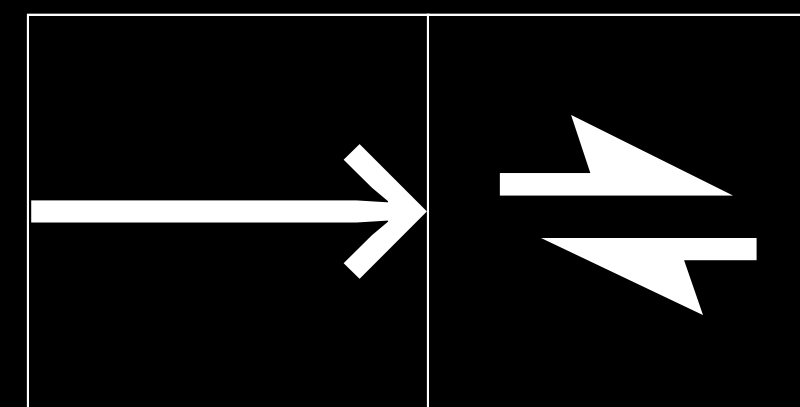
opérations



systèmes d'organisation

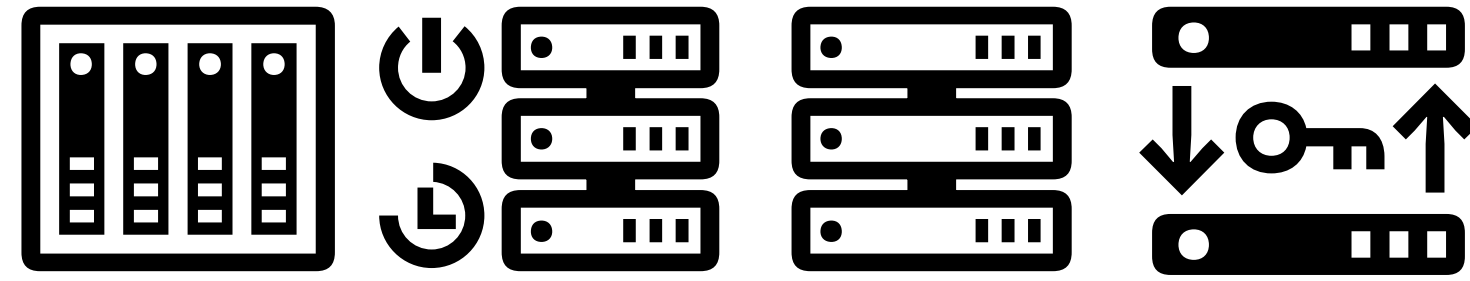


relations

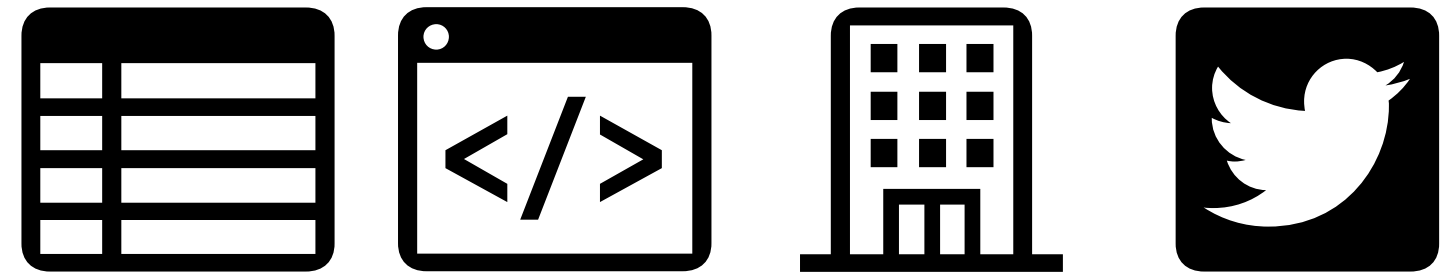
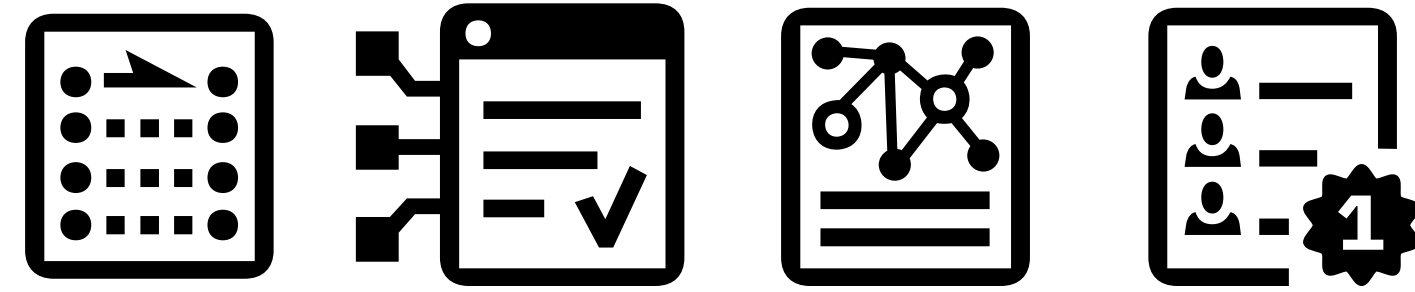




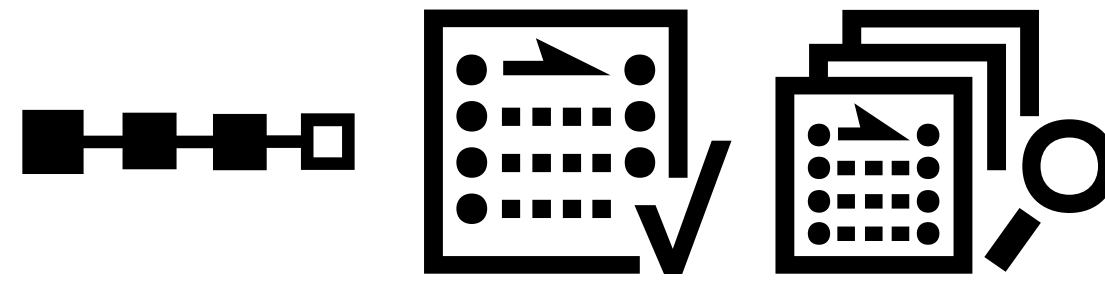
Matériel  
informatique



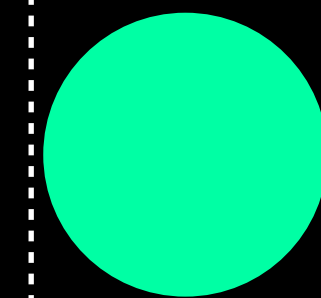
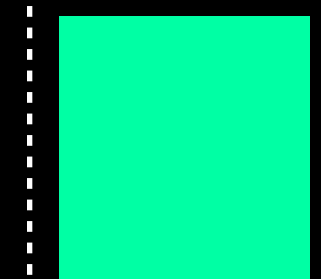
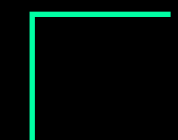
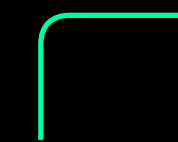
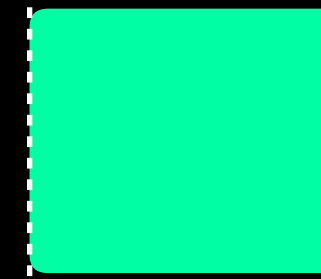
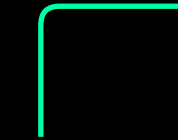
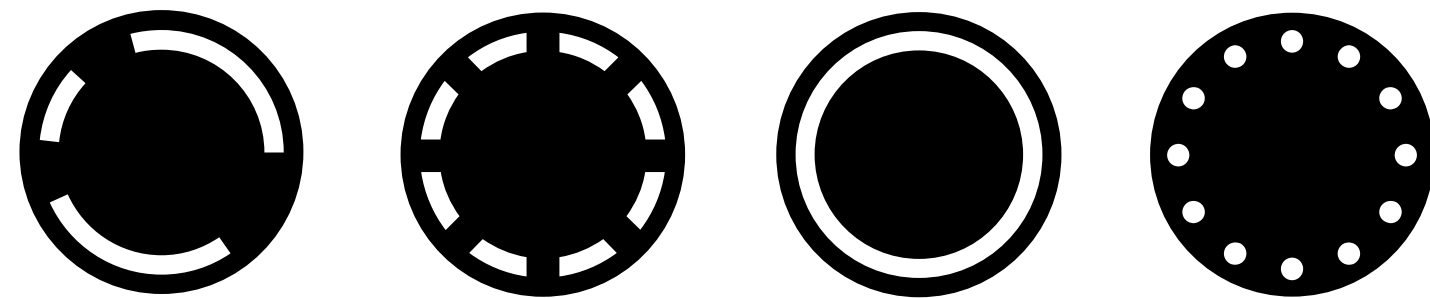
Application  
Concept  
Société



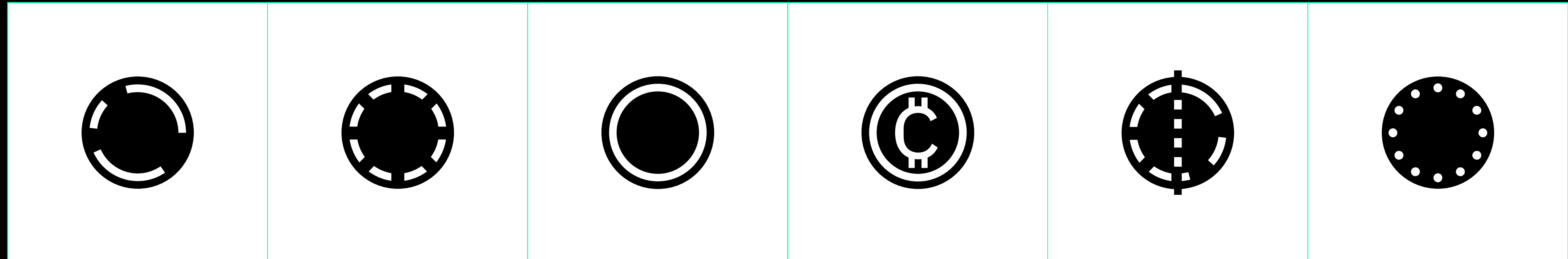
Bloc de la  
blockchain



Actif  
numérique



# ACTIFS NUMÉRIQUES



Monnaie fiduciaire

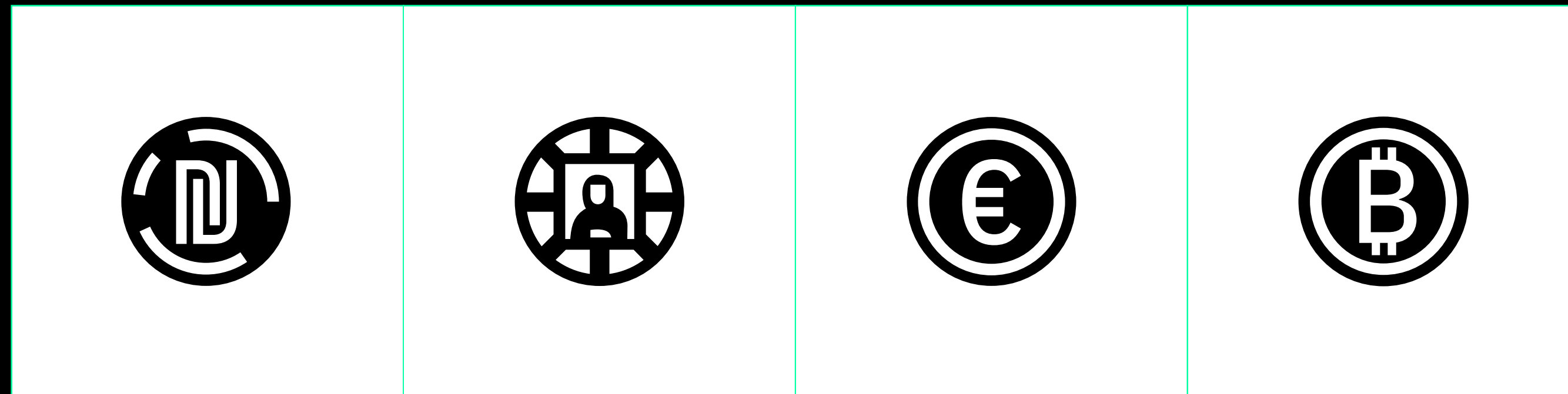
Jeton

Crypto-actif

Cryptomonnaie

Cryptomonnaie  
stable

CBDC  
(Monnaie numérique  
de banque centrale)

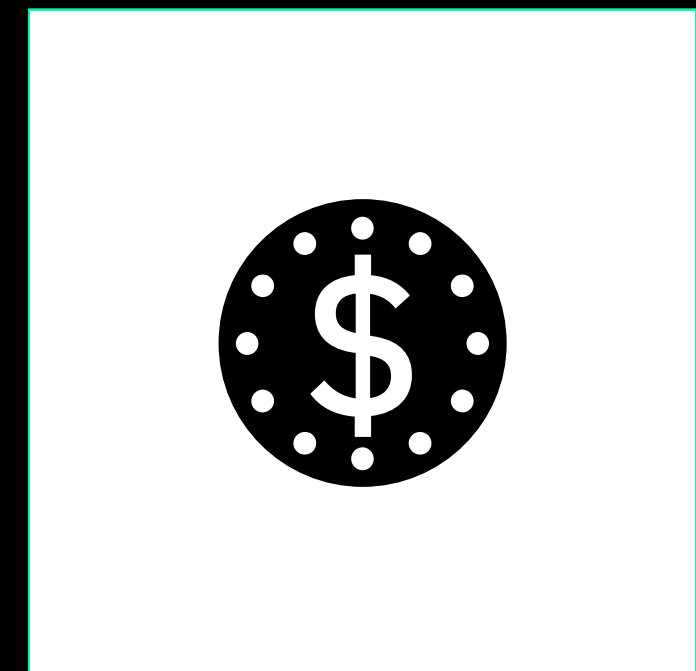


Shekel

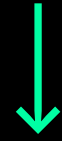
NFT  
(Jeton Non Fongible)

EUROC

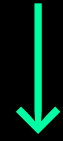
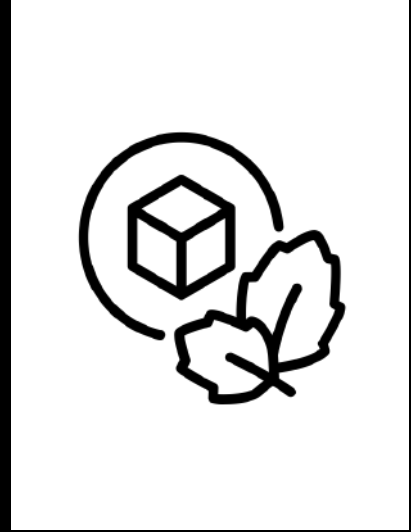
bitcoin



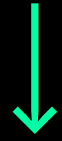
Dollar (CBDC)



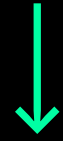
*Burn*  
Destruction



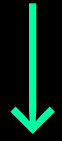
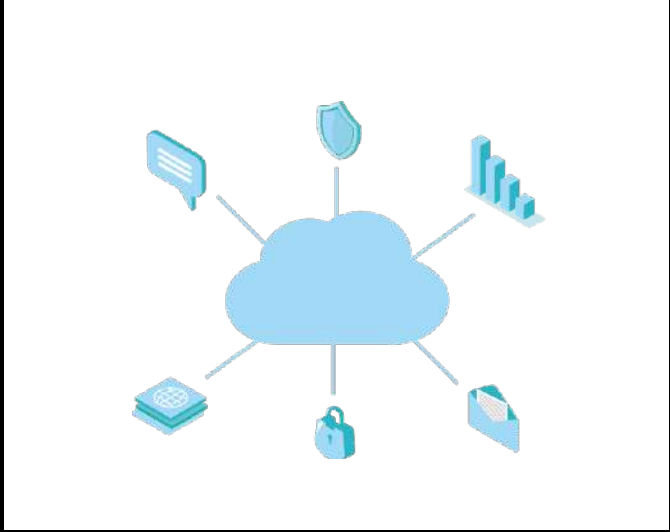
*Mintable*  
Monnayable



*Mining*  
Minage



*Oracle*  
Oracle



*Cloud*  
Stockage à distance

Croquis pour le dessin  
des avatars



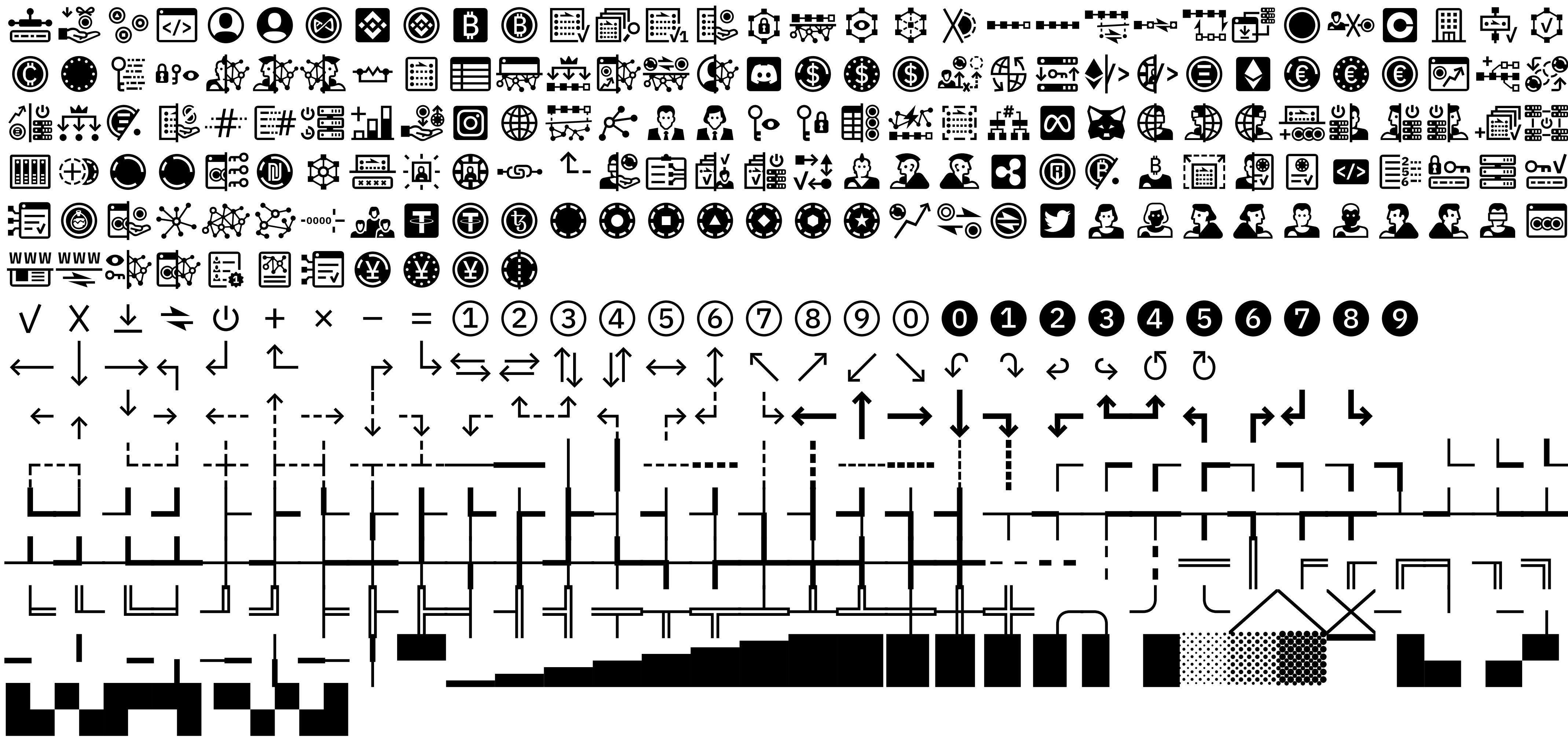
utilisateur 1				mineur	
utilisateur 2				RV	
				profil	
<i>punk</i>			<i>cypher-punk</i>	Satoshi Nakamoto	
				équipe	
				société	

# DESSIN TYPOGRAPHIQUE

# CRYPTOKIT.OTF, UN CARACTÈRE PLEIN DE PICTOGRAMMES







# UN *FORK* ET COMPAGNON POUR IBM PLEX

IBM Plex Sans:  
Natural and engineered  
letterforms in balance.

# Structural functionalism *#logics*

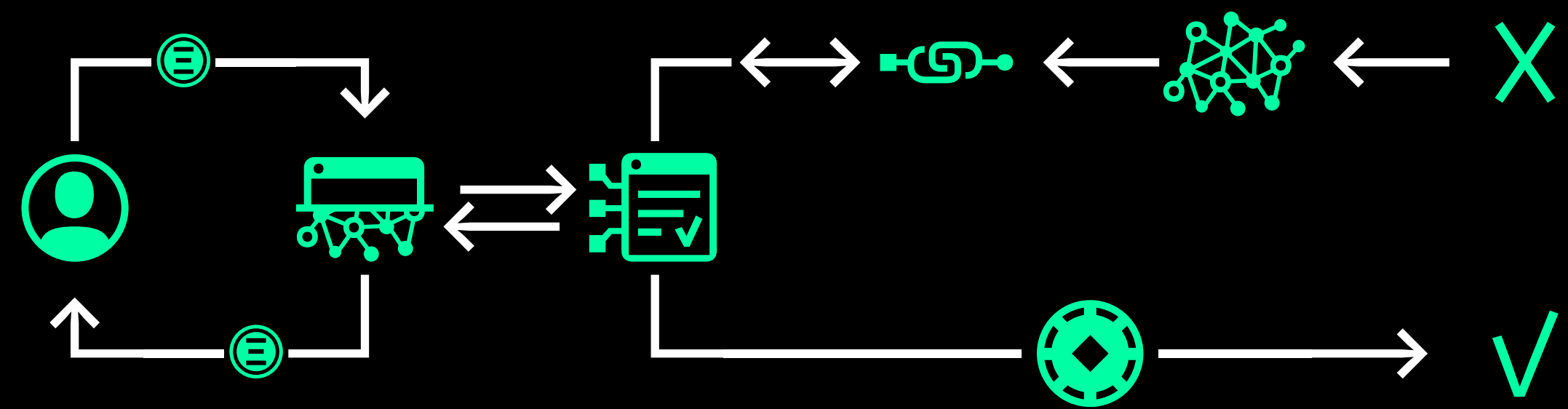
*While one may regard  
functionalism as a logical  
extension of the organic  
analogies for societies  
presented by political  
philosophers such as Rousseau,  
sociology draws firmer  
attention to those institutions  
unique to industrialized  
capitalist society*

*Functionalist thought, from Comte  
onwards, has looked particularly  
towards biology as the science  
providing the closest and most  
compatible model for social science.  
Biology has been taken to provide  
a guide to conceptualizing  
the structure and the function  
of social systems and to analyzing  
processes of evolution via  
mechanisms of adaptation*





① Pour envoyer 5 bitcoins à Marc, Lisa 🧑 va utiliser sa clé privée 🔑 pour signer sa transaction 📄 qui sera mise en attente dans la mempool 📄📄📄. ② Les mineurs 🏠🏠🏠 ayant préalablement téléchargé le logiciel-client Bitcoin et alloué leur puissance de calcul au protocole ₿ vont sélectionner parmi la mempool 📄📄📄 les transactions à insérer dans leur version du bloc à miner 📄.



IBM Plex Mono Regular

Cryptokit

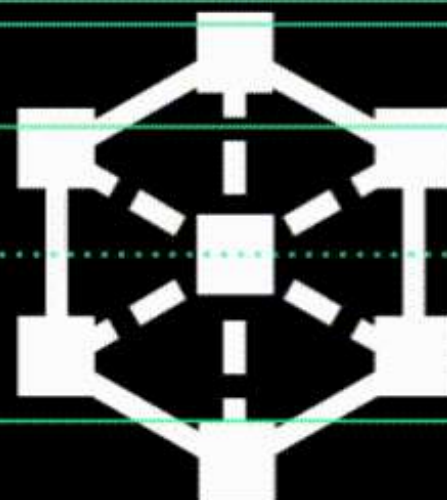
a

c

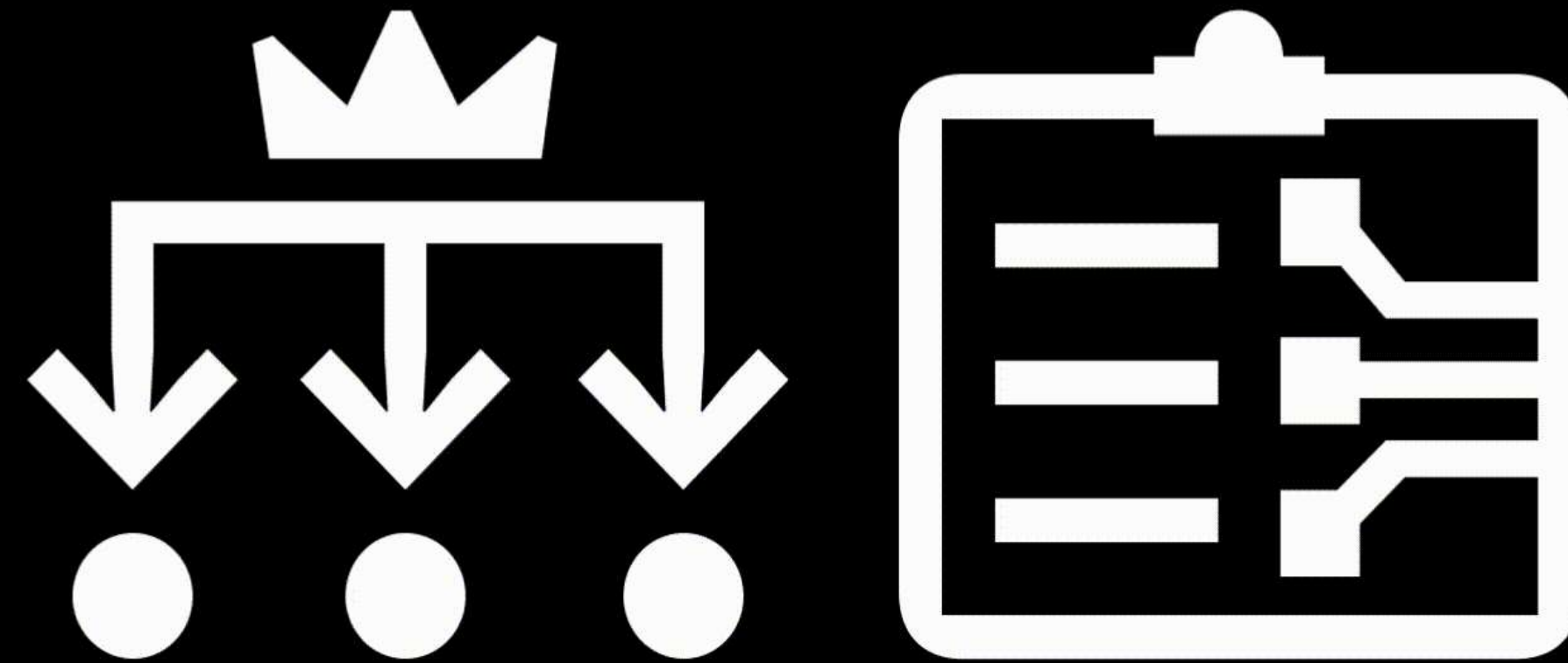
x

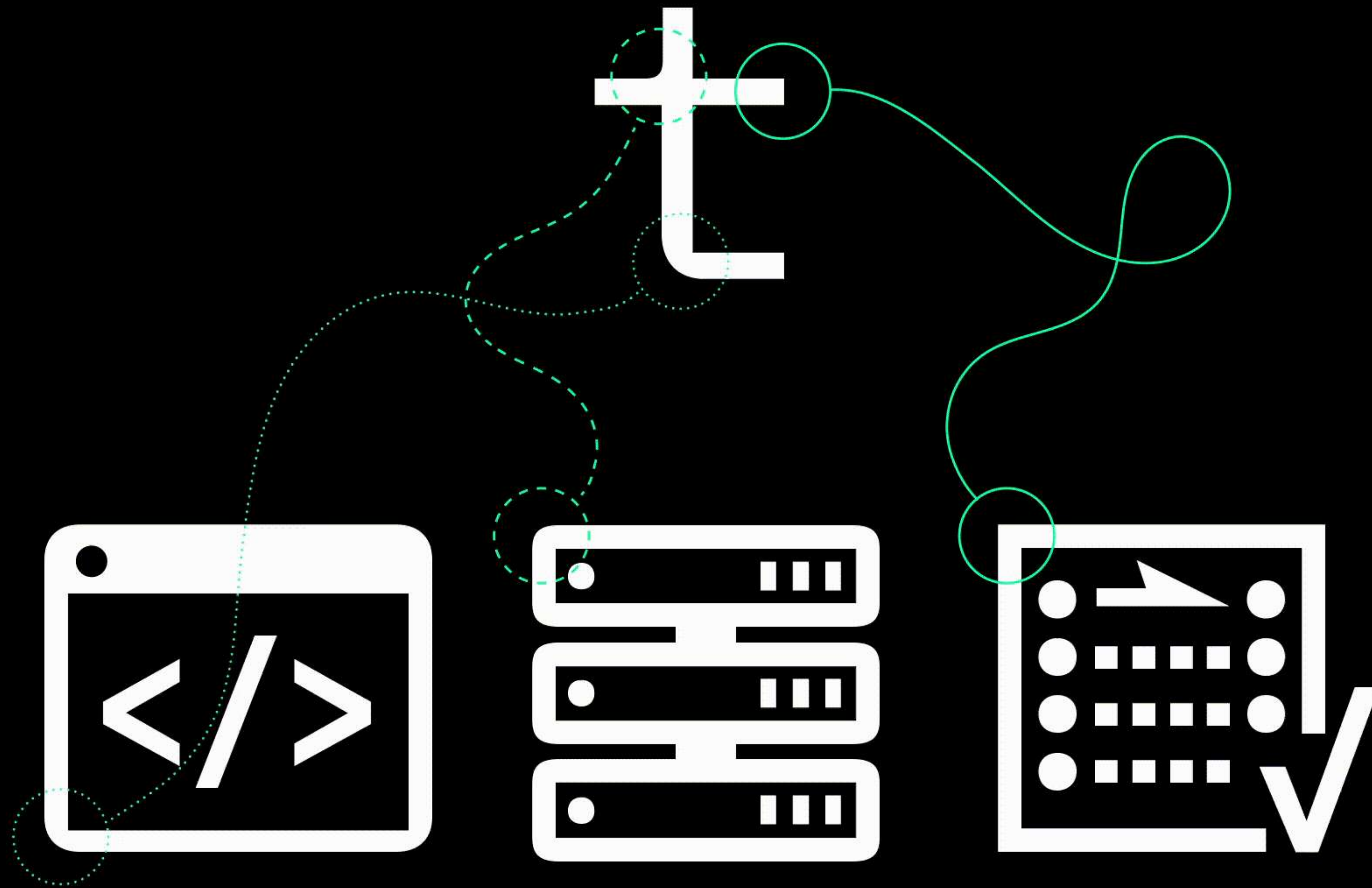
Crypto

d



# COIN





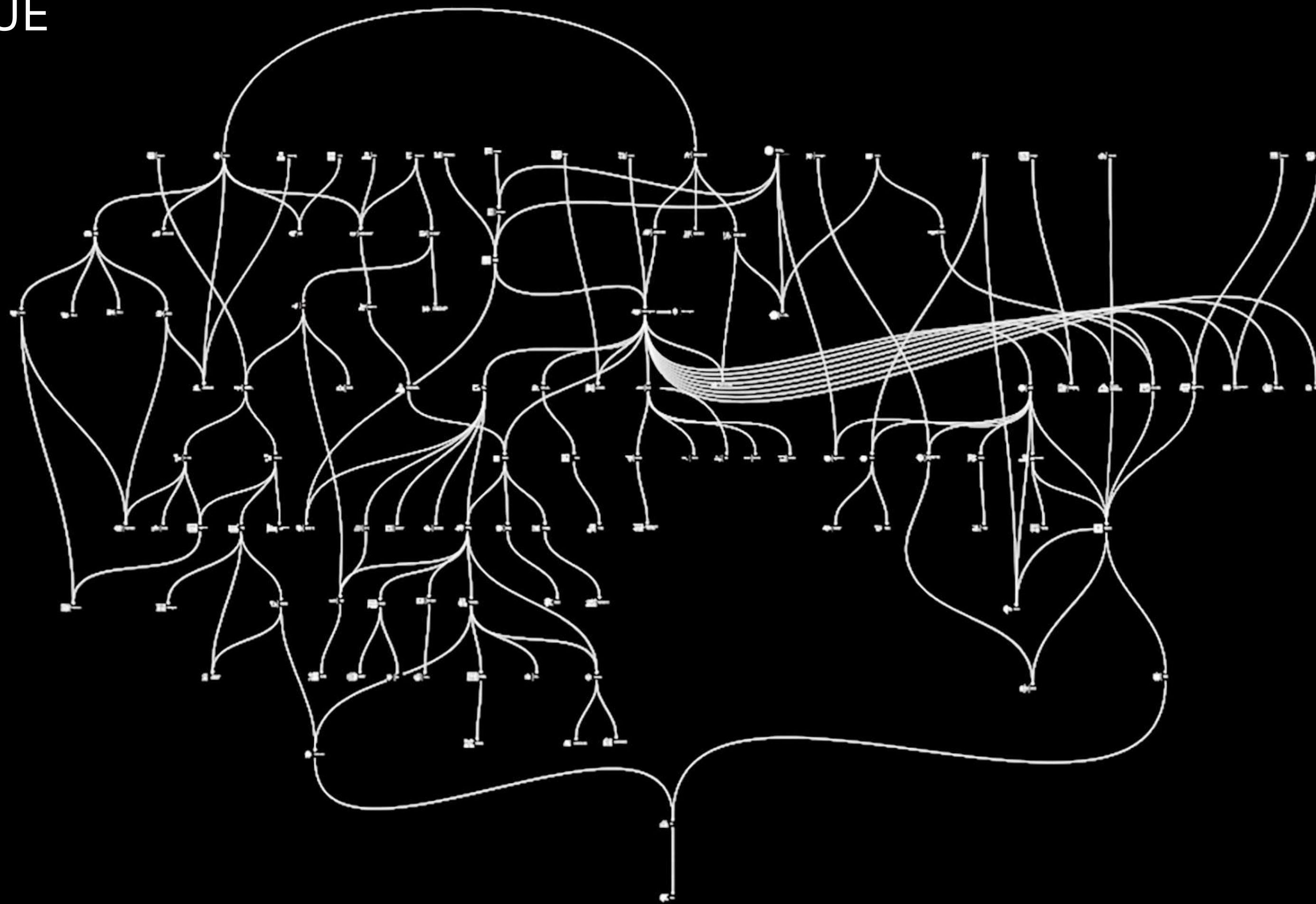
03

# USAGES

# POSTER



# CARTE SÉMANTIQUE



De la fonction au lexical (travail dans Miro)

# STRUCTURE LEXICALE

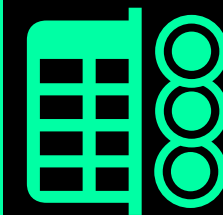
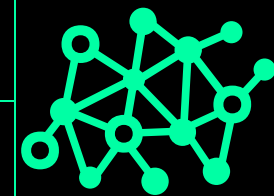
Blockchain



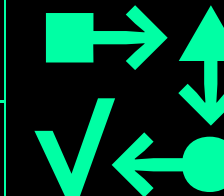


# STRUCTURE LEXICALE

Distributed system

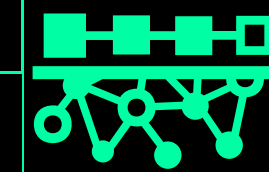


Ledger



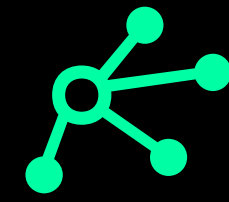
Protocol

Blockchain

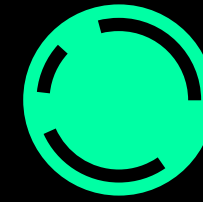


# STRUCTURE LEXICALE

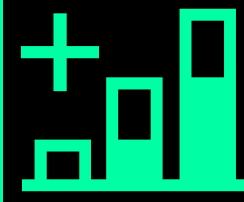
Interrelation system



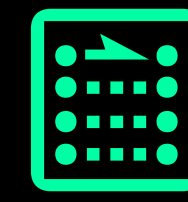
FIAT



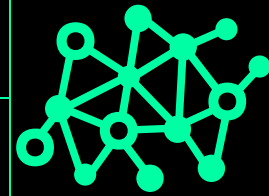
Incrementation



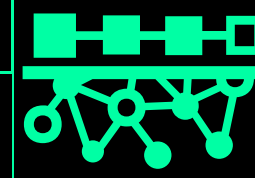
Data register



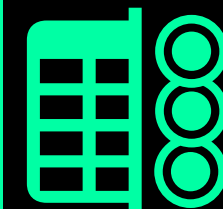
Distributed system



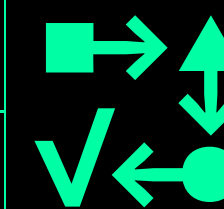
Blockchain



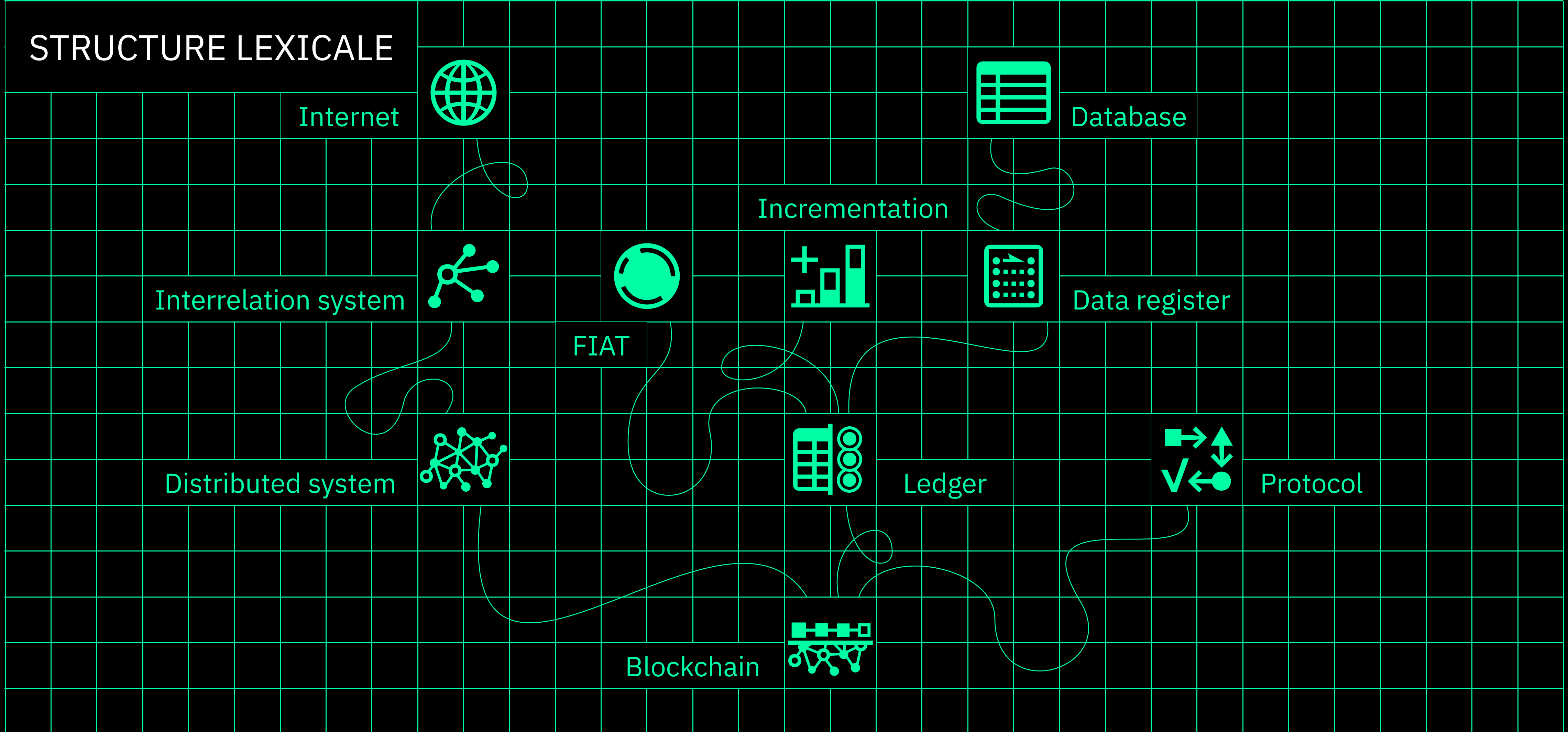
Ledger



Protocol

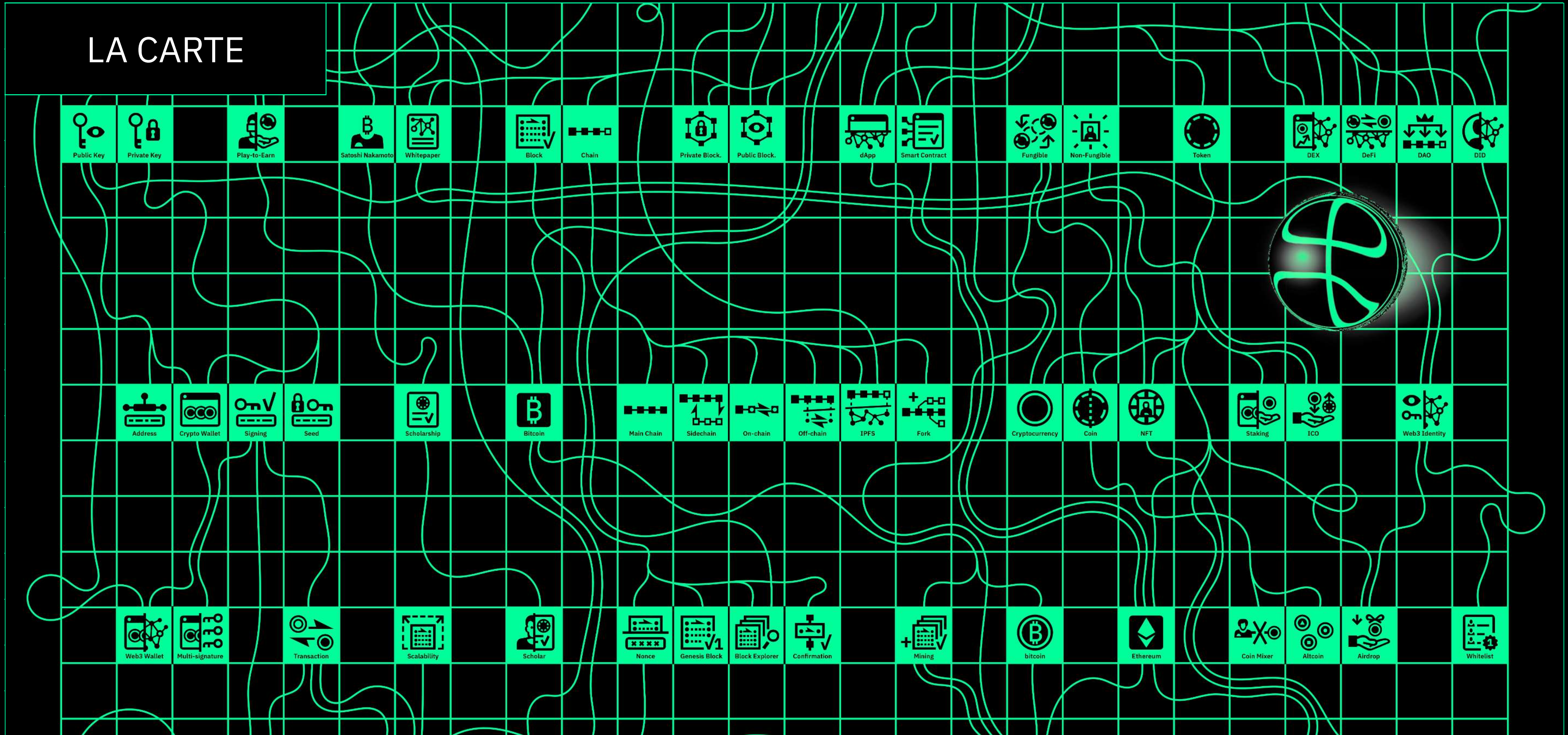


# STRUCTURE LEXICALE





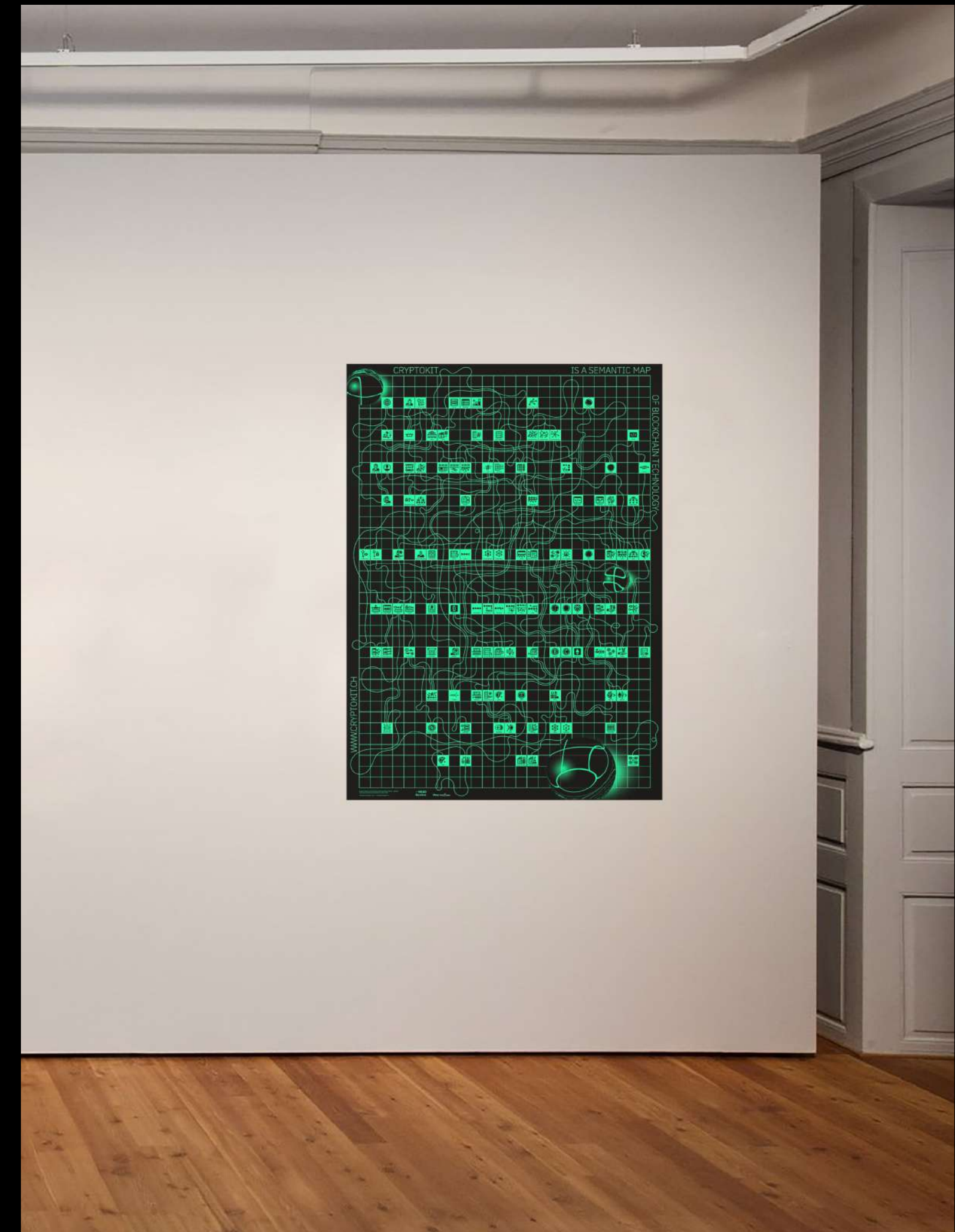
# LA CARTE



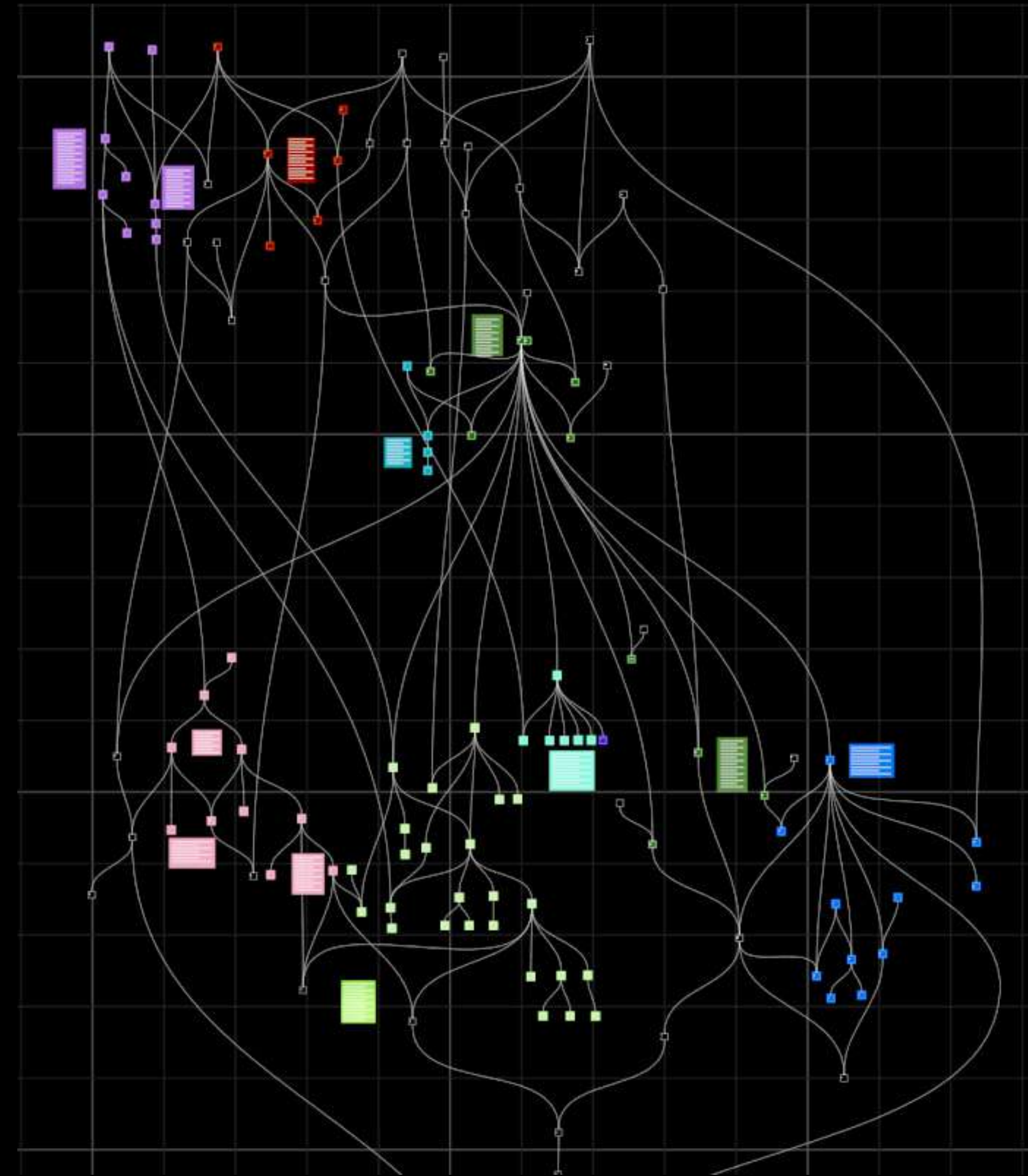


# POSTER DIDACTIQUE

Design graphique E+K  
Sérigraphie noir et vert  
Format F4 (89.5 × 128 cm)  
CHF 30



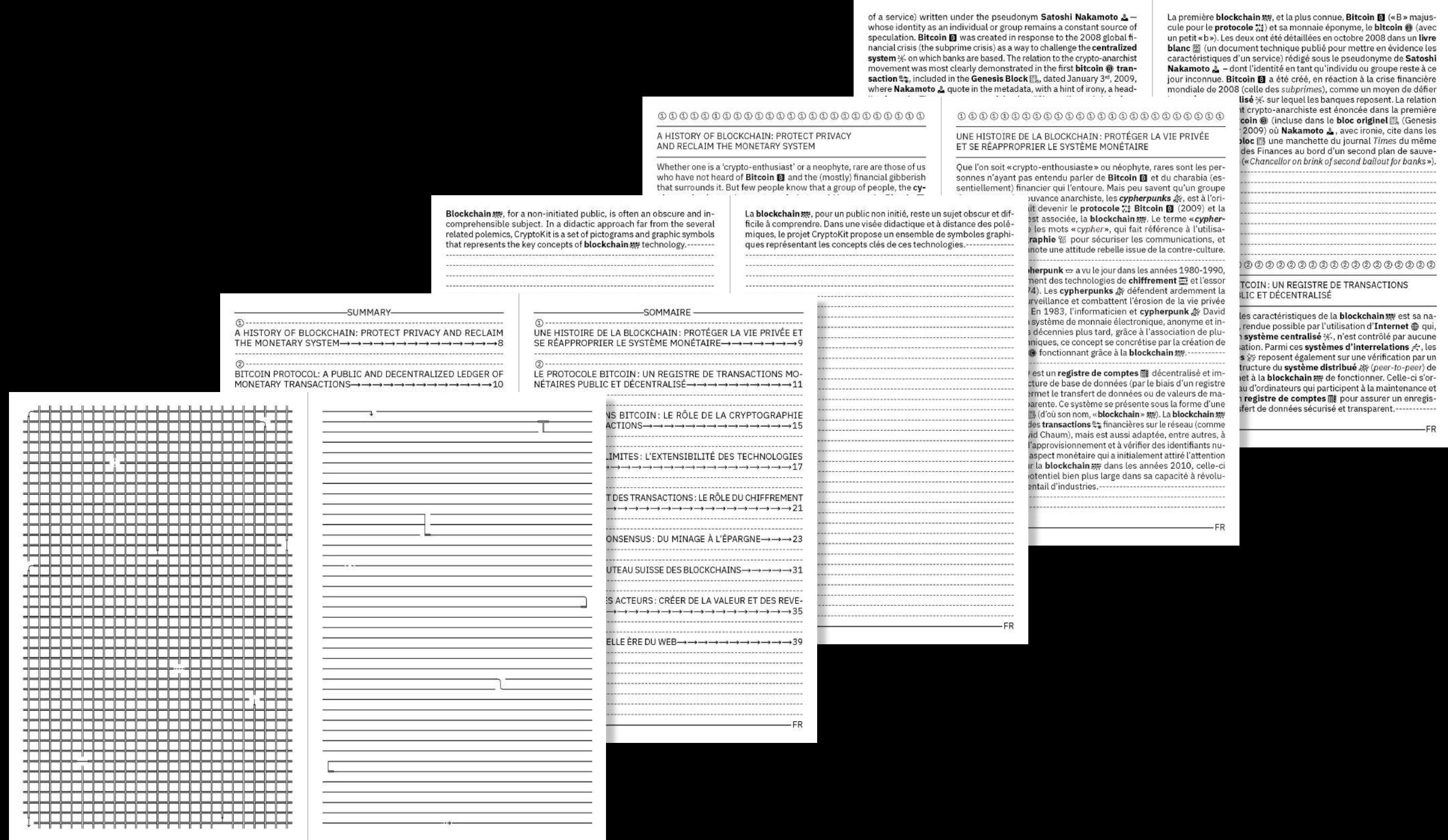
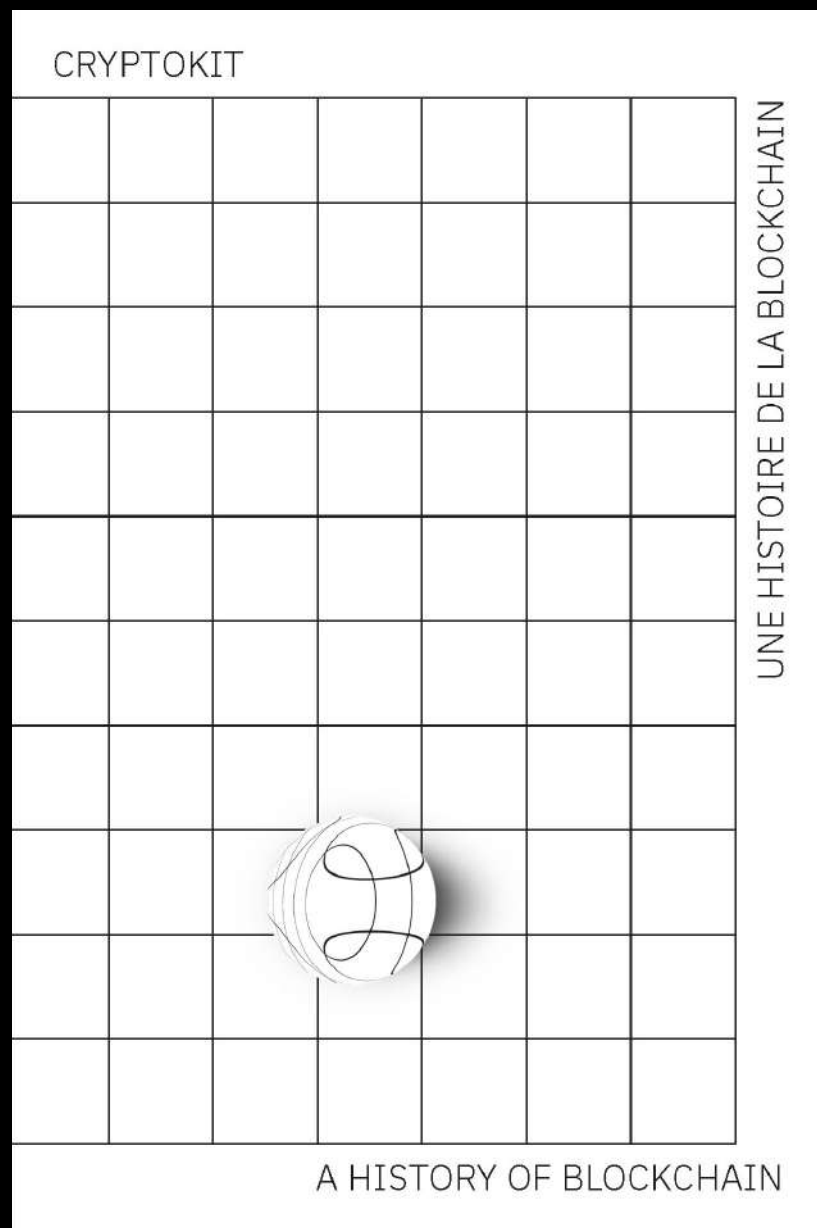
# LIVRET



Du lexical au narratif



# LIVRET



52 pages, impression à la demande, 15,6 × 23,4 cm, 5 USD  
Textes : Chloé Michel, Guillaume Helleu, Anthony Masure (design graphique E+K)



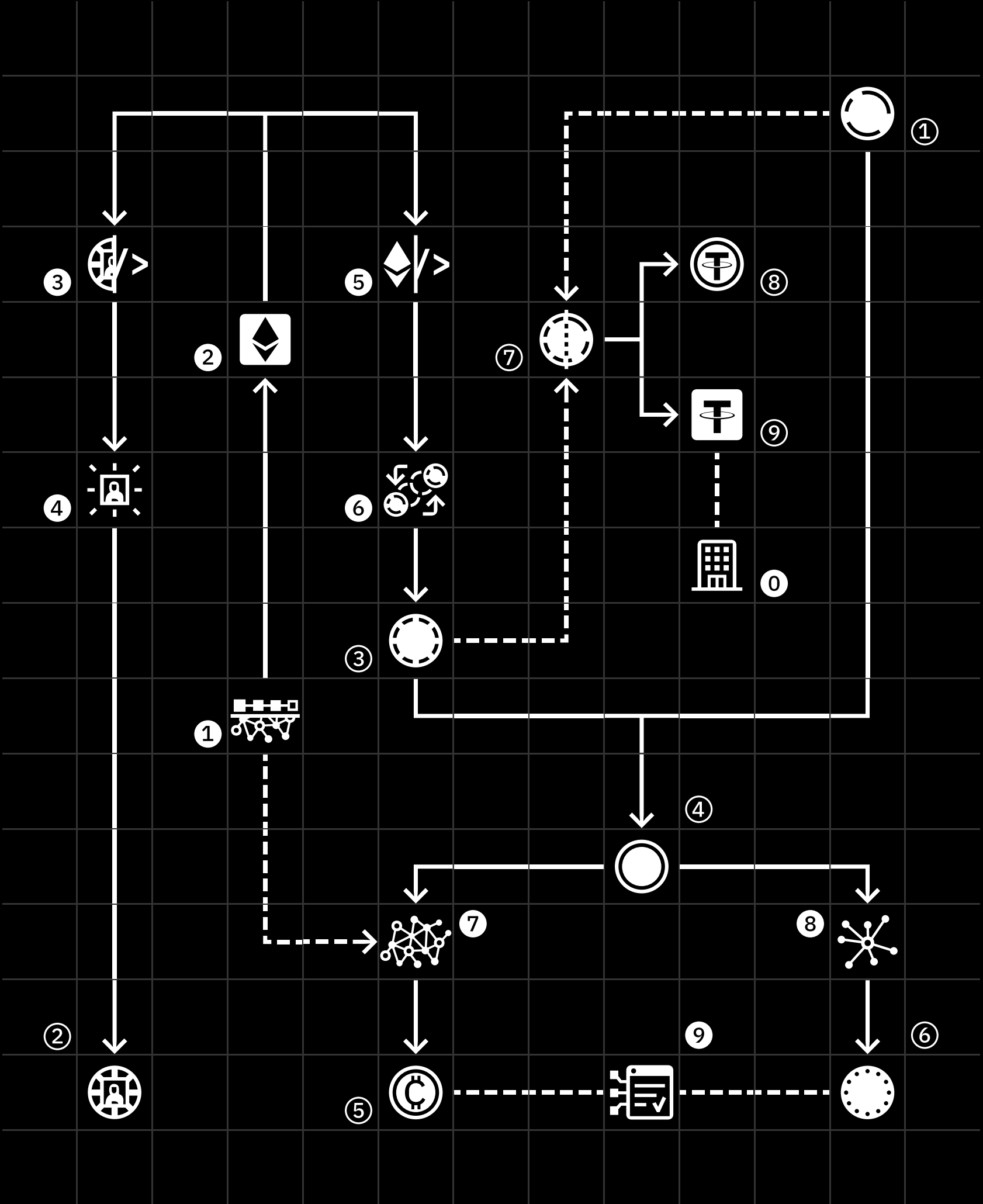






# DIAGRAMMES

# DIAGRAMMES



Du narratif au fonctionnel

# DIAGRAMMES

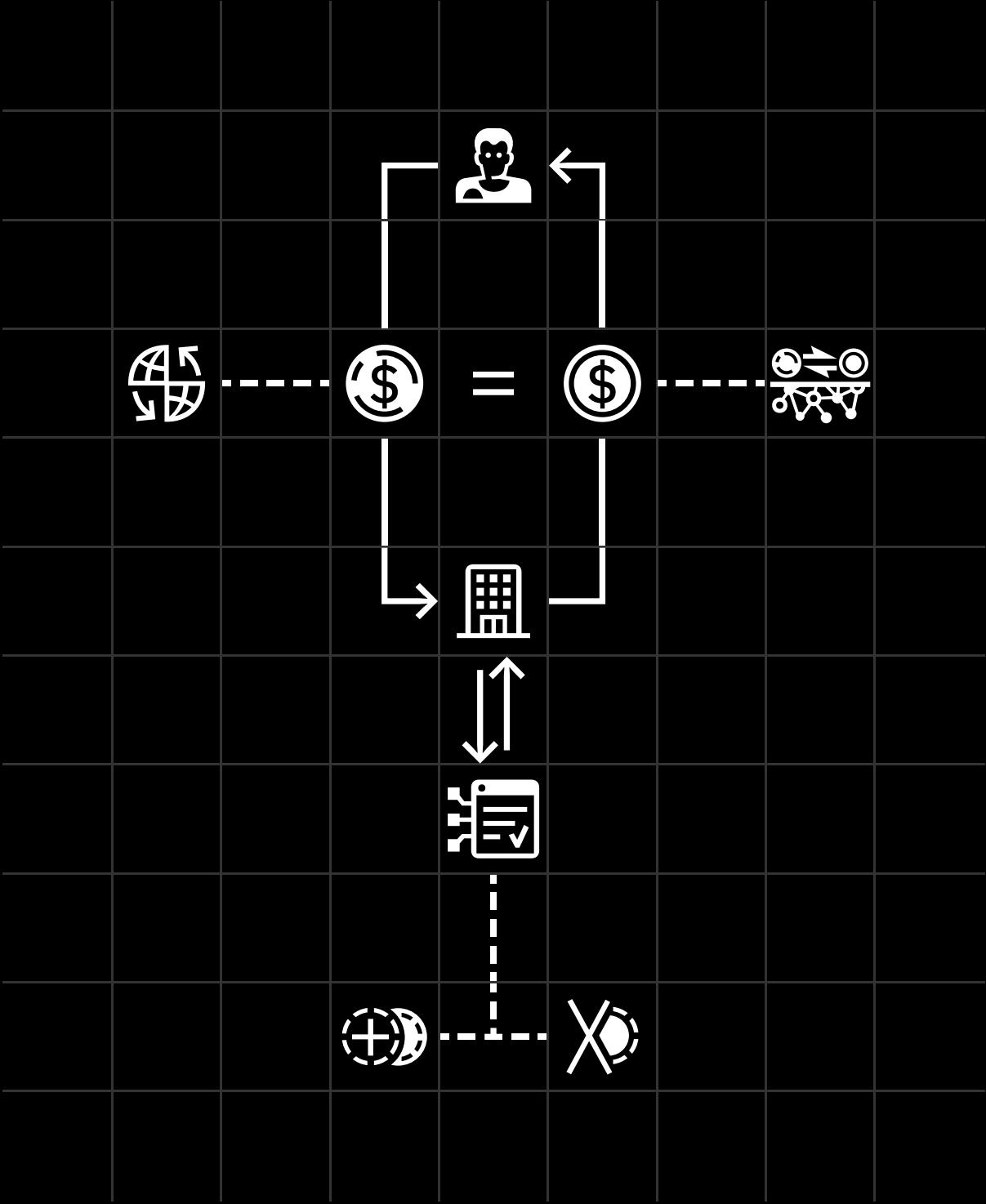
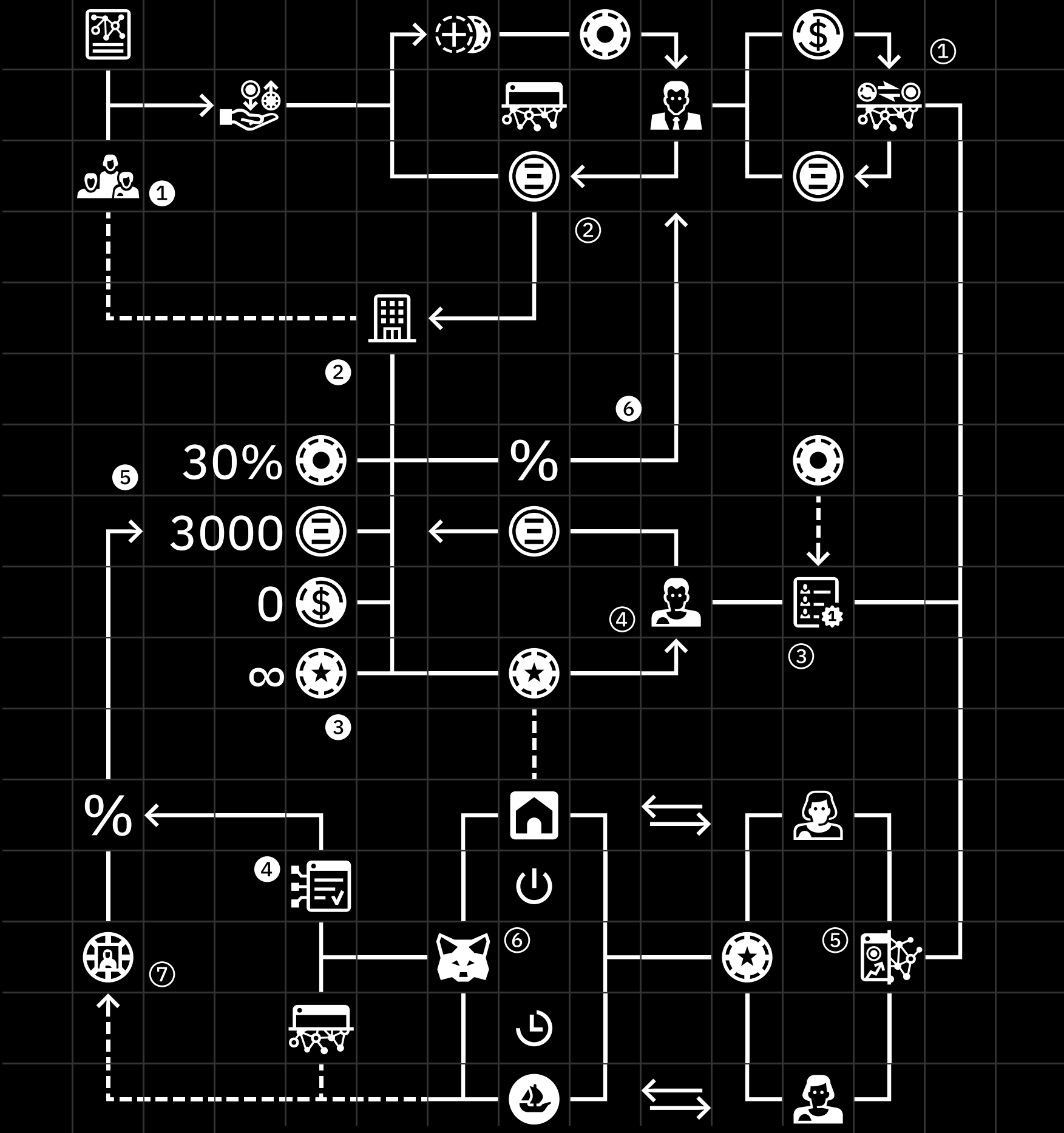


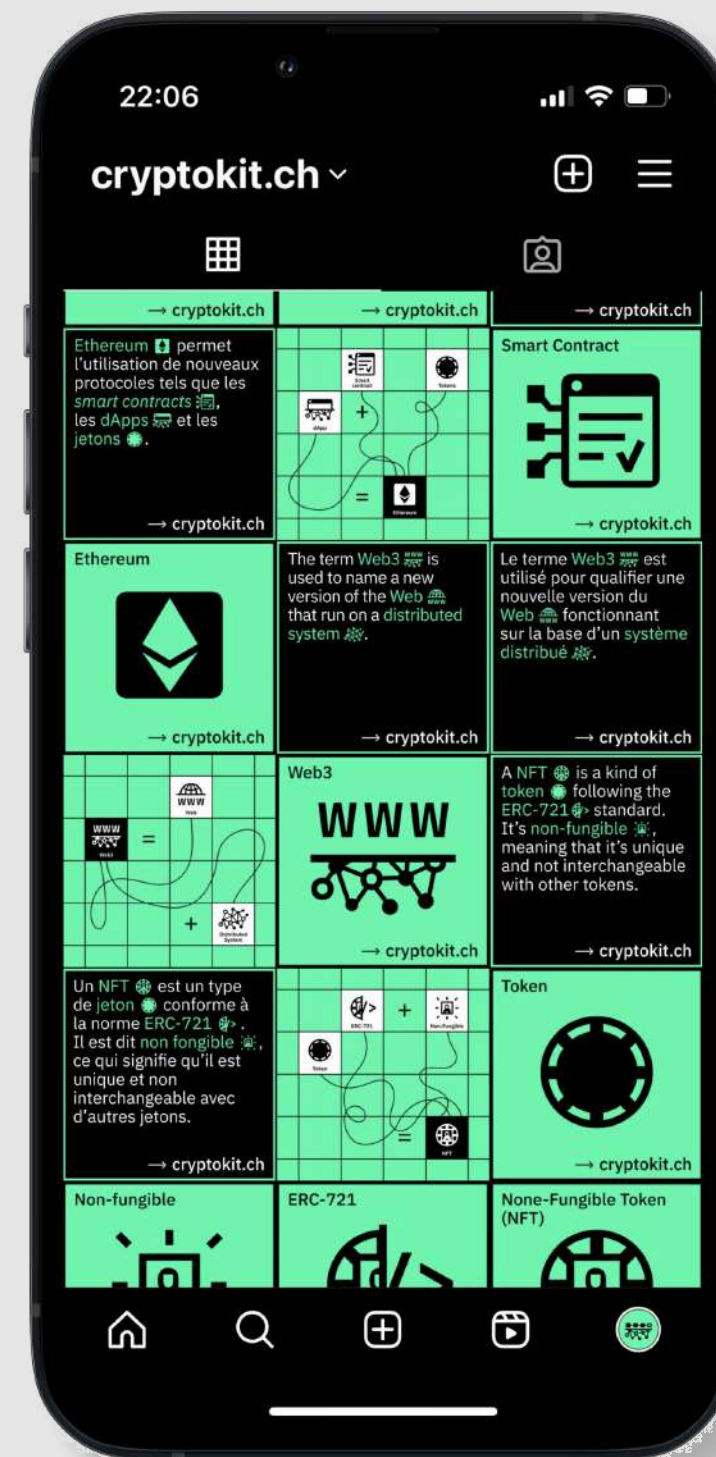
Diagramme d'une ICO

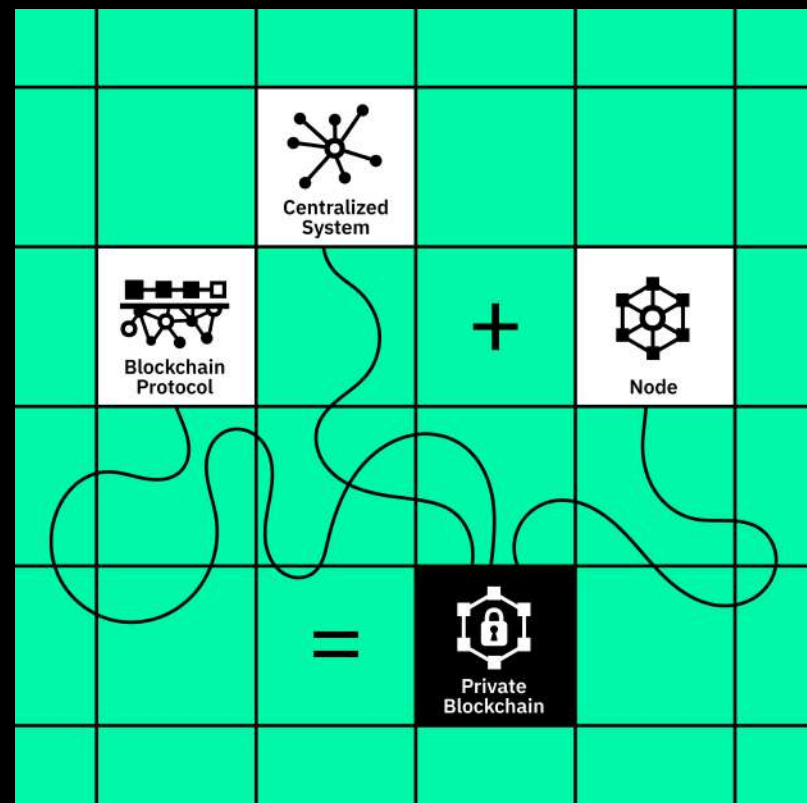


Web3 Art Basel

# COMPTE INSTAGRAM







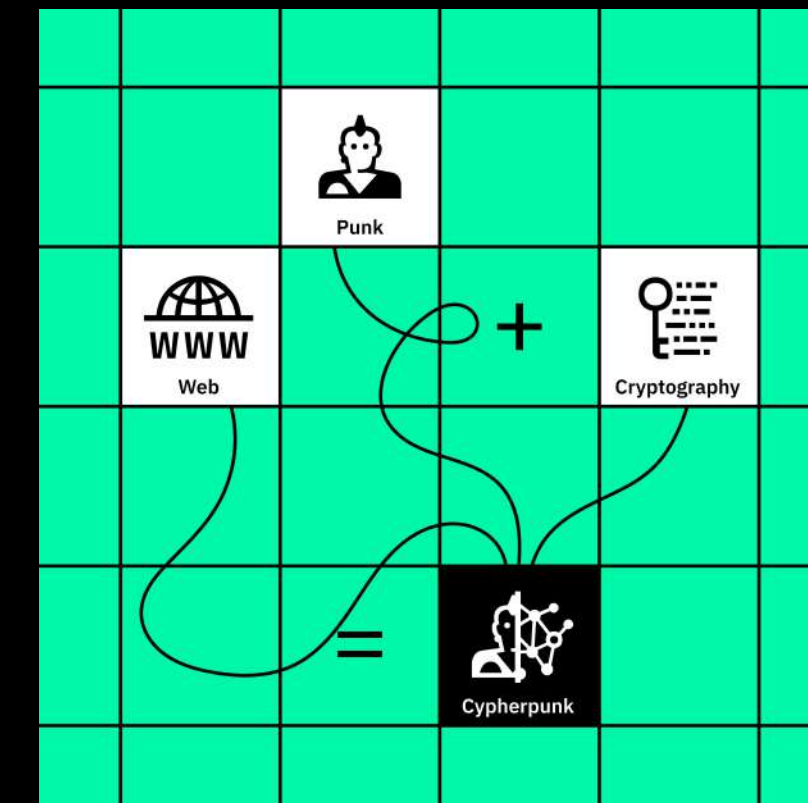
Lightning network ⚡ is a technical update of the Bitcoin ₿ protocol made to solve the scalability 📈 problem of transactions 🔄.

→ [cryptokit.ch](https://cryptokit.ch)

### Metaverse



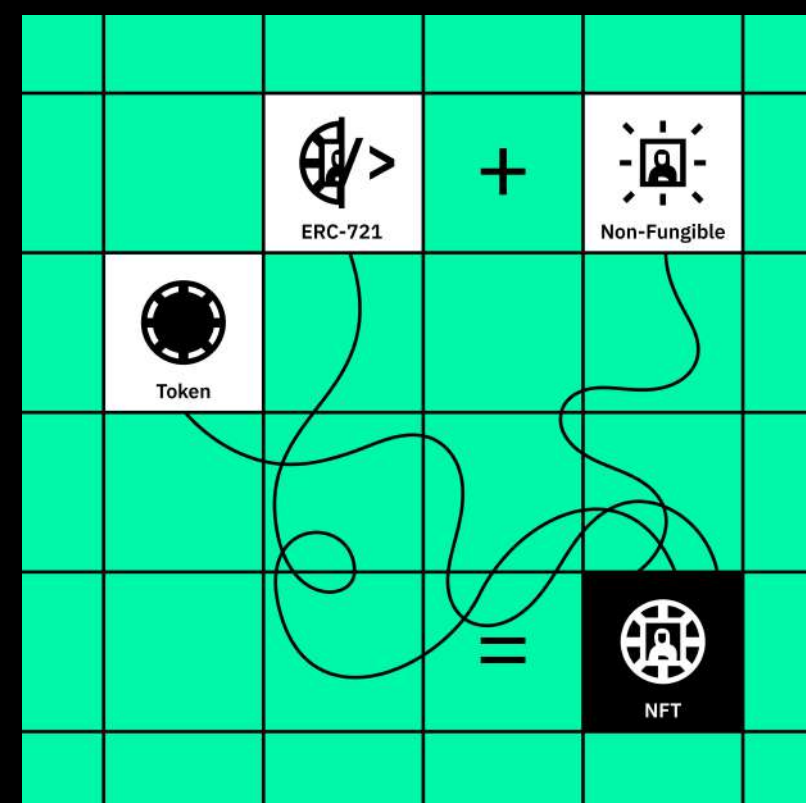
→ [cryptokit.ch](https://cryptokit.ch)



### Satoshi Nakamoto



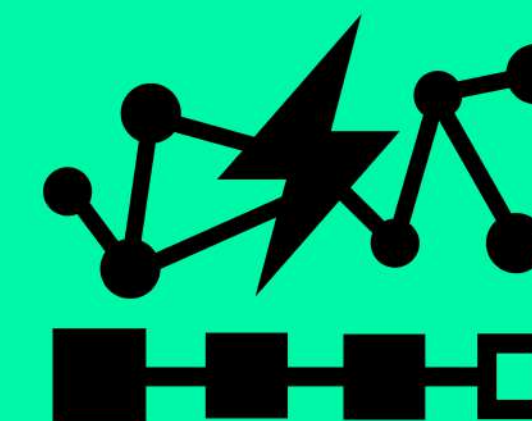
→ [cryptokit.ch](https://cryptokit.ch)



Satoshi Nakamoto ₿ is a cypherpunk 🕸 who is anonymous and is the author of the whitepaper 📄 of Bitcoin ₿ on October 31st, 2008.

→ [cryptokit.ch](https://cryptokit.ch)

### Lightning Network



→ [cryptokit.ch](https://cryptokit.ch)



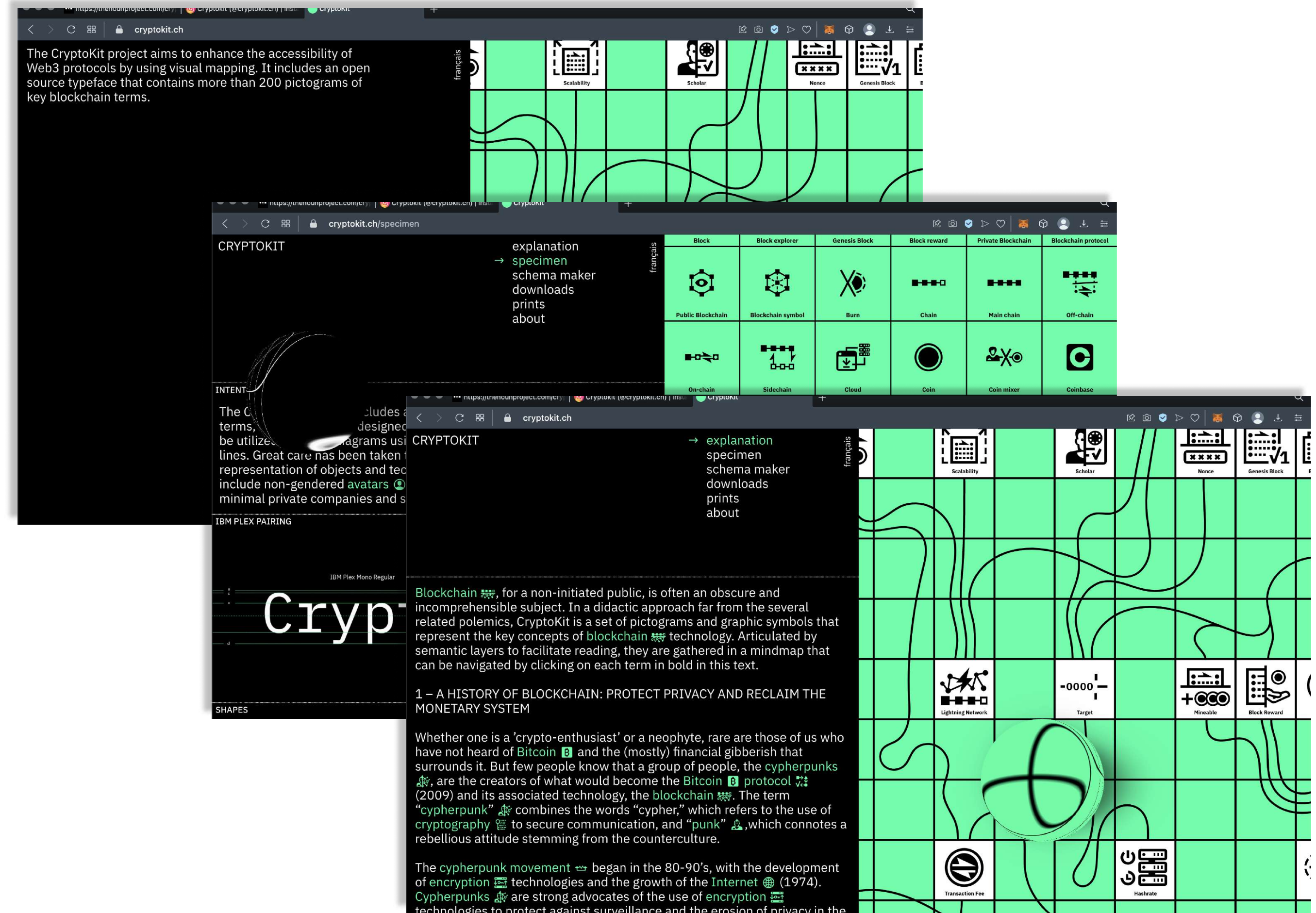
# SITE WEB

SITE WEB

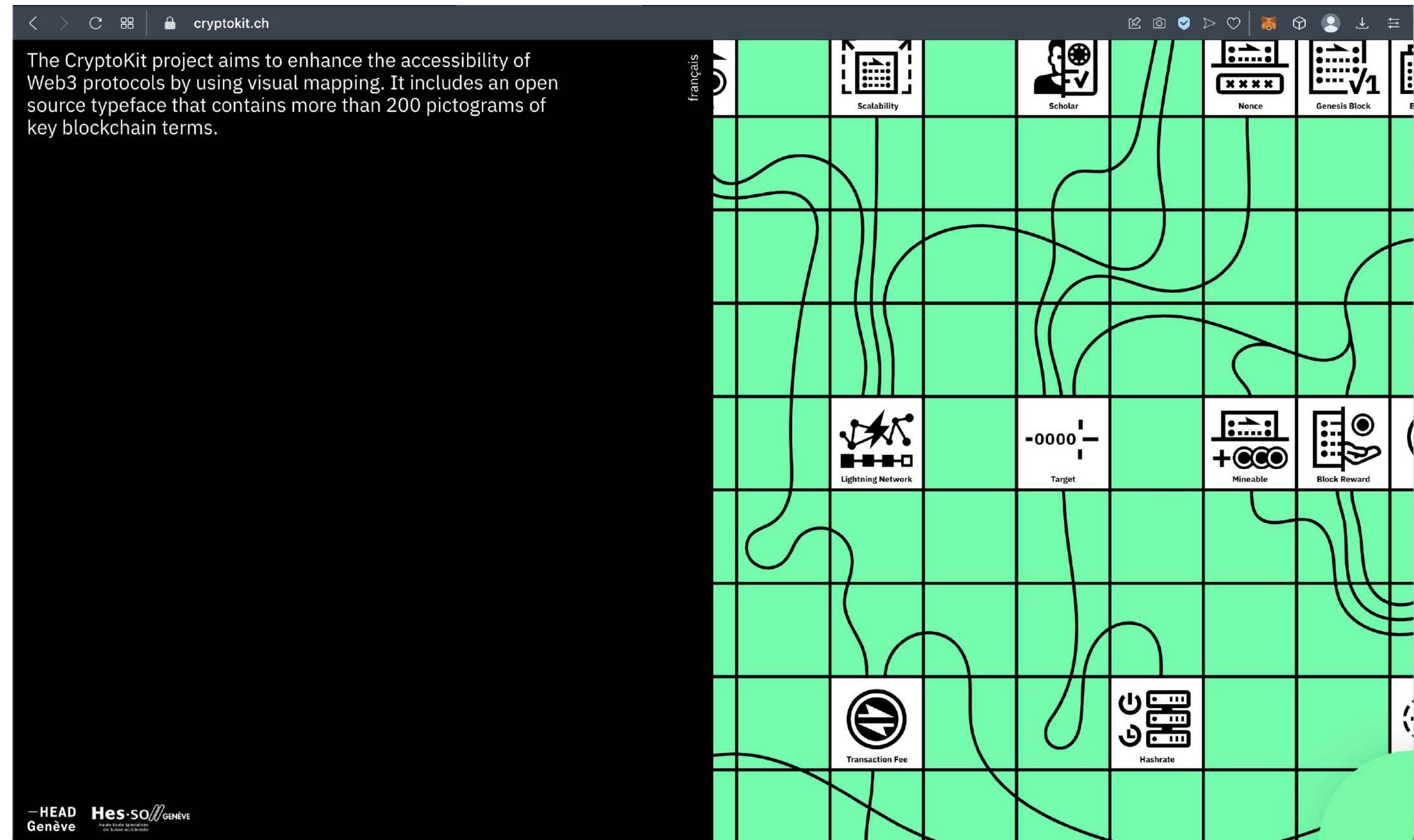
[www.cryptokit.ch](http://www.cryptokit.ch)

# CRYPTOKIT.CH

E+K (webdesign)  
Alexandre Letexier (programmation)



# CRYPTOKIT.CH





The screenshot shows a web browser at cryptokit.ch. The page features a dark sidebar with navigation links: explanation, specimen, schema maker, downloads, prints, and about. A language selector for 'français' is also present. The main content area is a light blue grid with a central 3D brain icon. The grid contains icons for Scalability, Scholar, Nonce, Genesis Block, Lightning Network, Target, Mineable, Block Reward, Transaction Fee, and Hashrate. The text on the page explains that Blockchain is often obscure and incomprehensible, and that CryptoKit is a set of pictograms and graphic symbols representing key concepts. It also introduces the history of blockchain, focusing on privacy and the monetary system, and mentions the cypherpunk movement and Bitcoin.

CRYPTOKIT → explanation  
specimen  
schema maker  
downloads  
prints  
about

français

Blockchain, for a non-initiated public, is often an obscure and incomprehensible subject. In a didactic approach far from the several related polemics, CryptoKit is a set of pictograms and graphic symbols that represent the key concepts of blockchain technology. Articulated by semantic layers to facilitate reading, they are gathered in a mindmap that can be navigated by clicking on each term in bold in this text.

1 – A HISTORY OF BLOCKCHAIN: PROTECT PRIVACY AND RECLAIM THE MONETARY SYSTEM

Whether one is a 'crypto-enthusiast' or a neophyte, rare are those of us who have not heard of Bitcoin and the (mostly) financial gibberish that surrounds it. But few people know that a group of people, the cypherpunks, are the creators of what would become the Bitcoin protocol (2009) and its associated technology, the blockchain. The term "cypherpunk" combines the words "cypher," which refers to the use of cryptography to secure communication, and "punk", which connotes a rebellious attitude stemming from the counterculture.

The cypherpunk movement began in the 80-90's, with the development of encryption technologies and the growth of the Internet (1974). Cypherpunks are strong advocates of the use of encryption technologies to protect against surveillance and the erosion of privacy in the digital age. In 1983, computer scientist and cypherpunk David Chaum proposed an anonymous, untraceable electronic money system. A few



# CRYPTOKIT.CH

cryptokit.ch/specimen

CRYPTOKIT

→ explanation  
specimen  
schema maker  
downloads  
prints  
about

français

INTENT

The Cryptokit includes about 200 pictograms of key blockchain terms, designed to pair with IBM Plex. These symbols can be utilized in diagrams using logical connectors such as arrows and lines. Great care has been taken to avoid any mimetic or illustrative representation of objects and technologies. Other design considerations include non-gendered avatars to align with Web3 anonymity and minimal private companies and services to avoid advertising.

IBM PLEX PAIRING

IBM Plex Mono Regular | Cryptokit

Crypto

SHAPES

Block	Block explorer	Genesis Block	Block reward	Private Blockchain	Blockchain protocol
Public Blockchain	Blockchain symbol	Burn	Chain	Main chain	Off-chain
On-chain	Sidechain	Cloud	Coin	Coin mixer	Coinbase
Company	Confirmation	Consensus	Cryptocurrency	CBDC	Cryptography
Asymmetric cryptography	Cypherpunk	Cypherpunk (left)	Cypherpunk	Decentralized Finance (DeFI)	Register
Database	dApp	DAO	Blockchain	Blockchain	Blockchain
Discord	Dollar	Dollar (CBDC)	Dollar Stablecoin (USDC)	Double Spending	Economy
Blockchain	Blockchain	Blockchain	Blockchain	Blockchain	Blockchain



The screenshot shows the Cryptokit.ch website interface. At the top left, the URL is `cryptokit.ch/schema`. The main header includes the site name "CRYPTOKIT" and a navigation menu with links: "explanation", "specimen", "→ schema maker", "downloads", "prints", and "about". A language selector "français" is visible on the right side of the header.

Below the header is a toolbar with navigation icons (back, forward, search, etc.) and a search bar. The main content area is divided into a left sidebar and a central grid. The sidebar lists various topics categorized by "BITCOIN", "ETHEREUM", "WEB3", "CYBERSPACE", "CRYPTOGRAPHY", and "PROTOCOLS".

The central grid is a 10x10 grid of light blue cells. A large, semi-transparent sphere is positioned in the lower-left quadrant of the grid. The grid contains several icons and symbols, including a globe, a dollar sign, a lightning bolt, a person, a building, a shopping cart, and a crossed-out globe. Dashed lines connect some of these icons, suggesting relationships or flows between them.

At the bottom of the grid, there are controls: "show names", "hide grid", "reset", and "→ export".

# COURS ET CONFÉRENCES


# SLIDES DE COURS

ANTICIPER L'AVENIR DES MÉTIERS DE LA CRÉATION

## CYPHERPUNK

A cypherpunk is an individual who is an advocate of the use of strong cryptography in order to protect privacy, freedom and data security with a view of open censorship and surveillance.

HEAD - GENÈVE HES-SO




ANTICIPER L'AVENIR DES MÉTIERS DE LA CRÉATION

## FROM WEB 1.0 TO WEB3

Over the years, Web 2.0 has aggregated values and data. For the first time since 30 years of Web history, we could deeply change business models.

HEAD - GENÈVE HES-SO



ANTICIPER L'AVENIR DES MÉTIERS DE LA CRÉATION

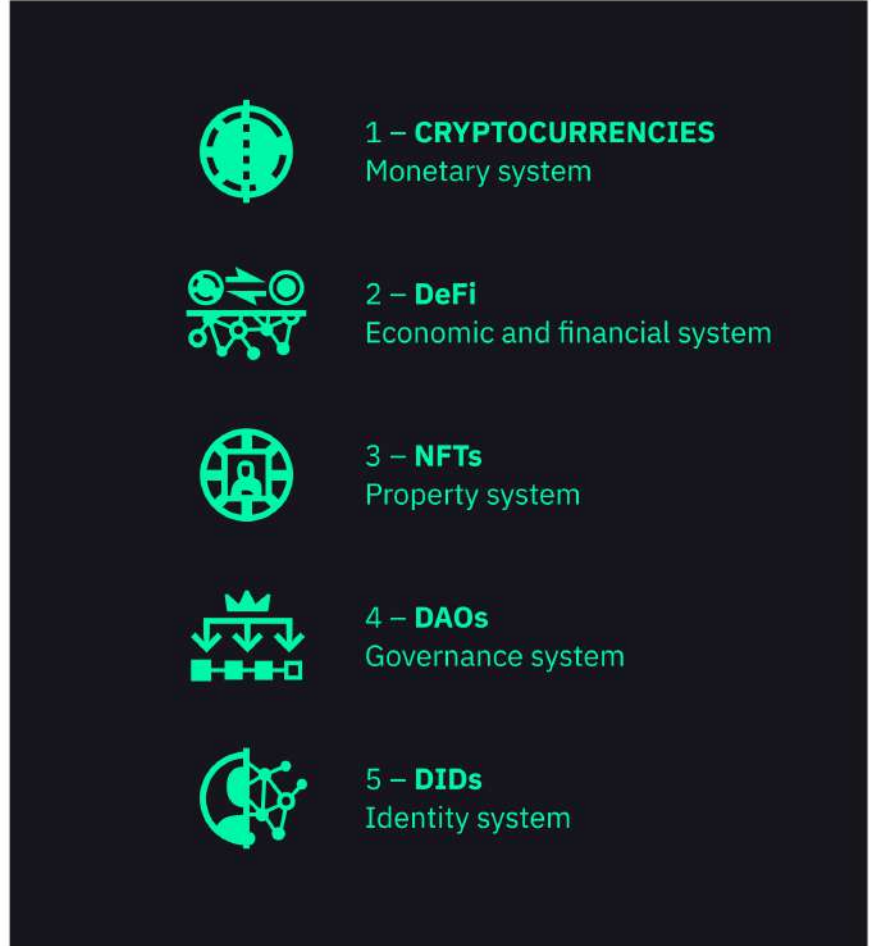
## WEB3 ROADMAP

Web3 offers a **ALL-IN-ONE** ecosystem: a monetary system (*Cryptocurrencies*) within an economic system (*DeFi*) to trade digital assets (*NFT*). All this is managed by governance (*DAO*) and digital identity (*DID*).

HEAD - GENÈVE HES-SO

ANTICIPER L'AVENIR DES MÉTIERS DE LA CRÉATION

## Web 1.0: CONSUME Economy of Information



- 1 - **CRYPTOCURRENCIES**  
Monetary system
- 2 - **DeFi**  
Economic and financial system
- 3 - **NFTs**  
Property system
- 4 - **DAOs**  
Governance system
- 5 - **DIDs**  
Identity system

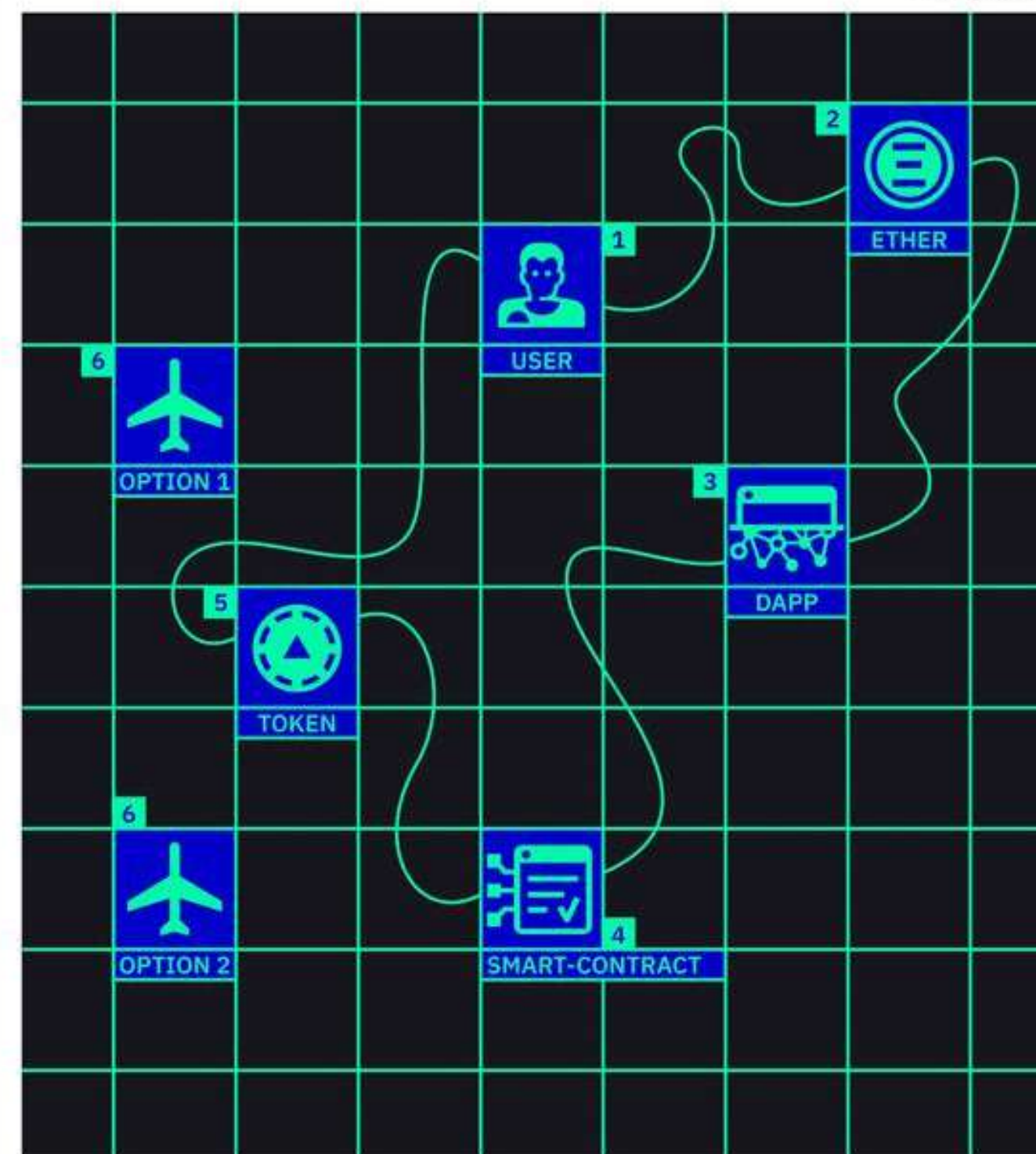
GUILLAUME HELLEU

Cours transversal Bachelor  
HES-SO Genève, 2022-2023

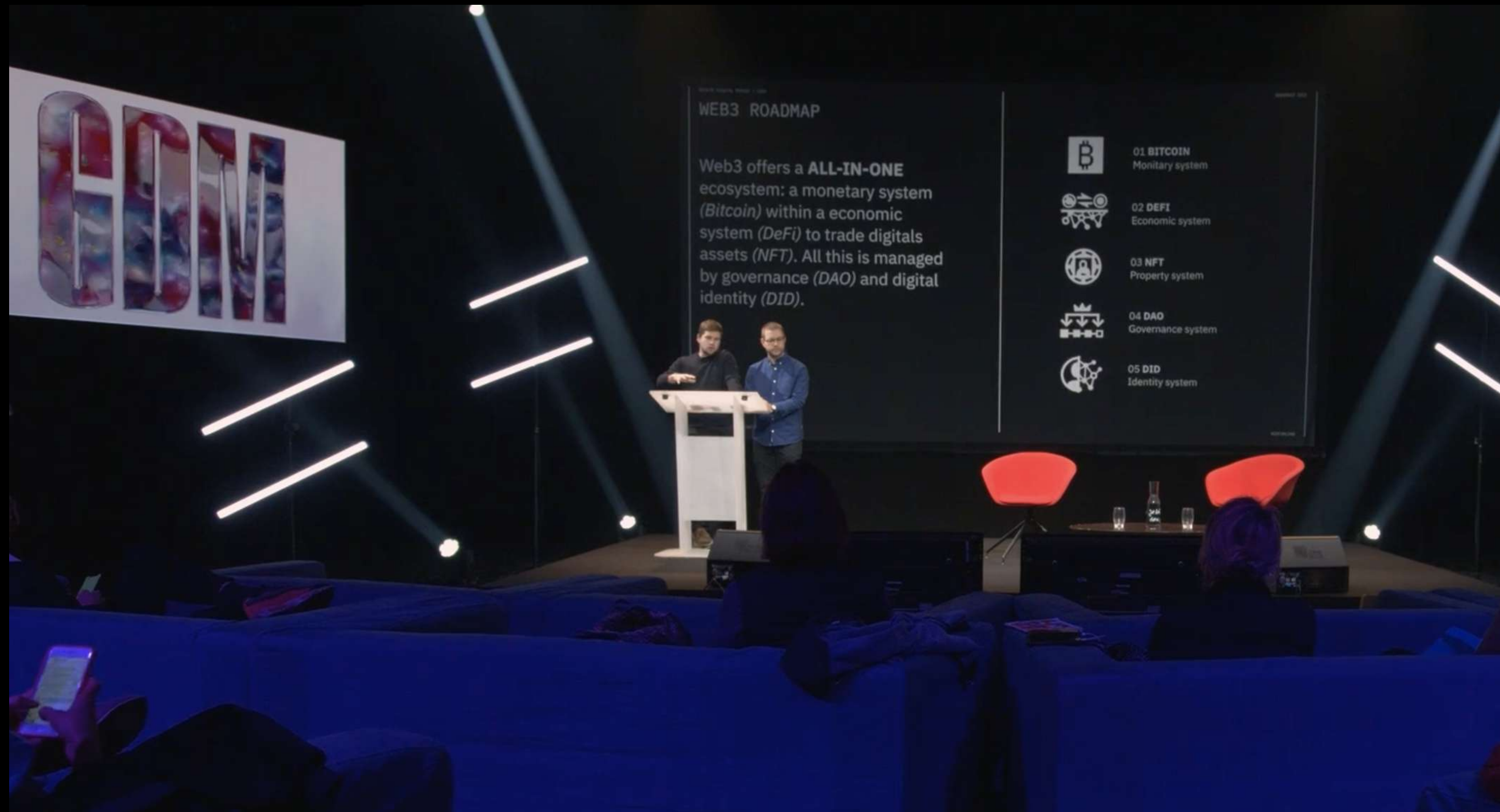


## WEB3 PROTOCOL

The user [1] will send ethers [2] to the decentralized application (dApp) of the airline [3] which will record the transaction in a smart contract [4] and create a token-ticket [5]. Two scenarios are possible [6].



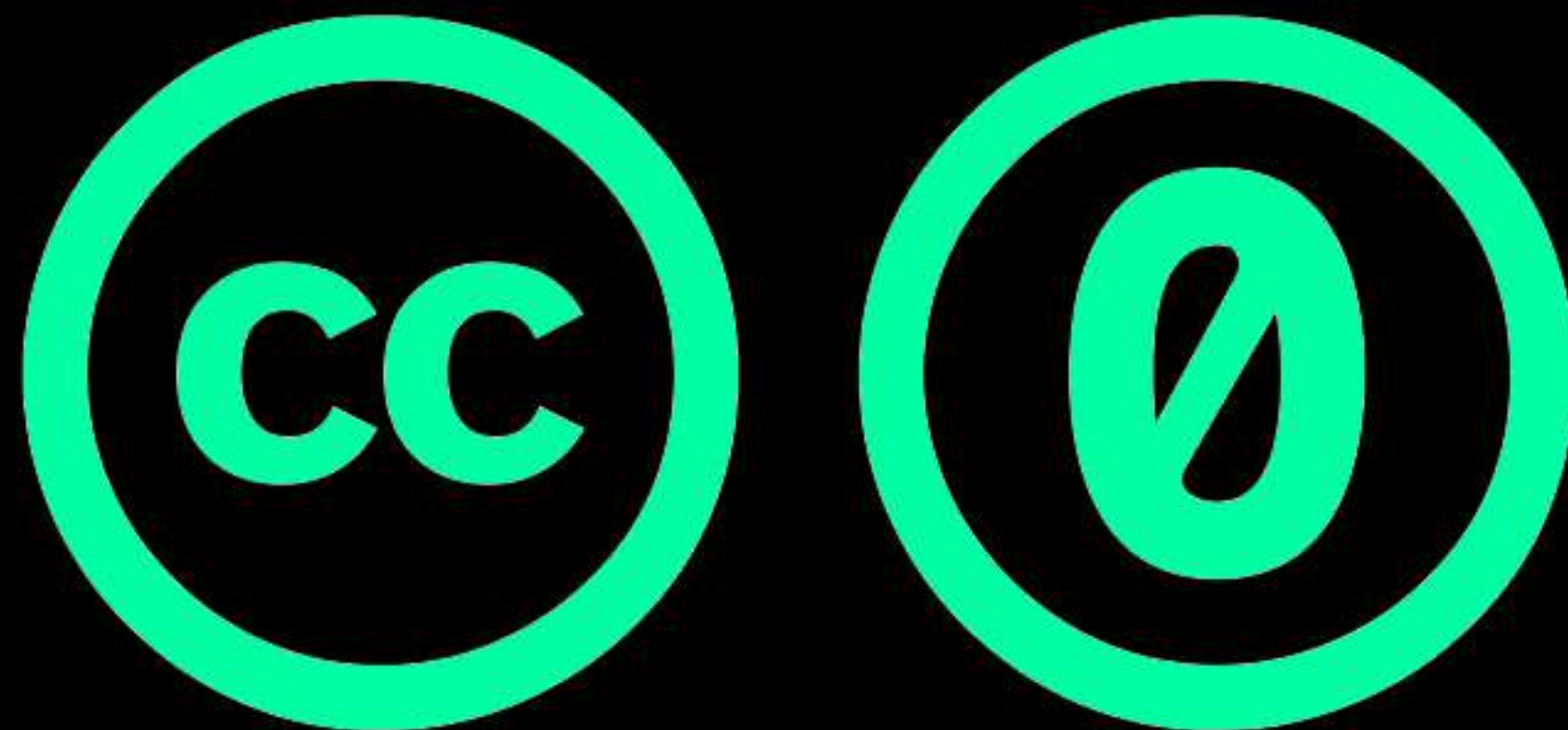




Festival du Film International de Genève (GIFF)  
Geneva Digital Market, 2022

# LICENCE(S) LIBRE(S)

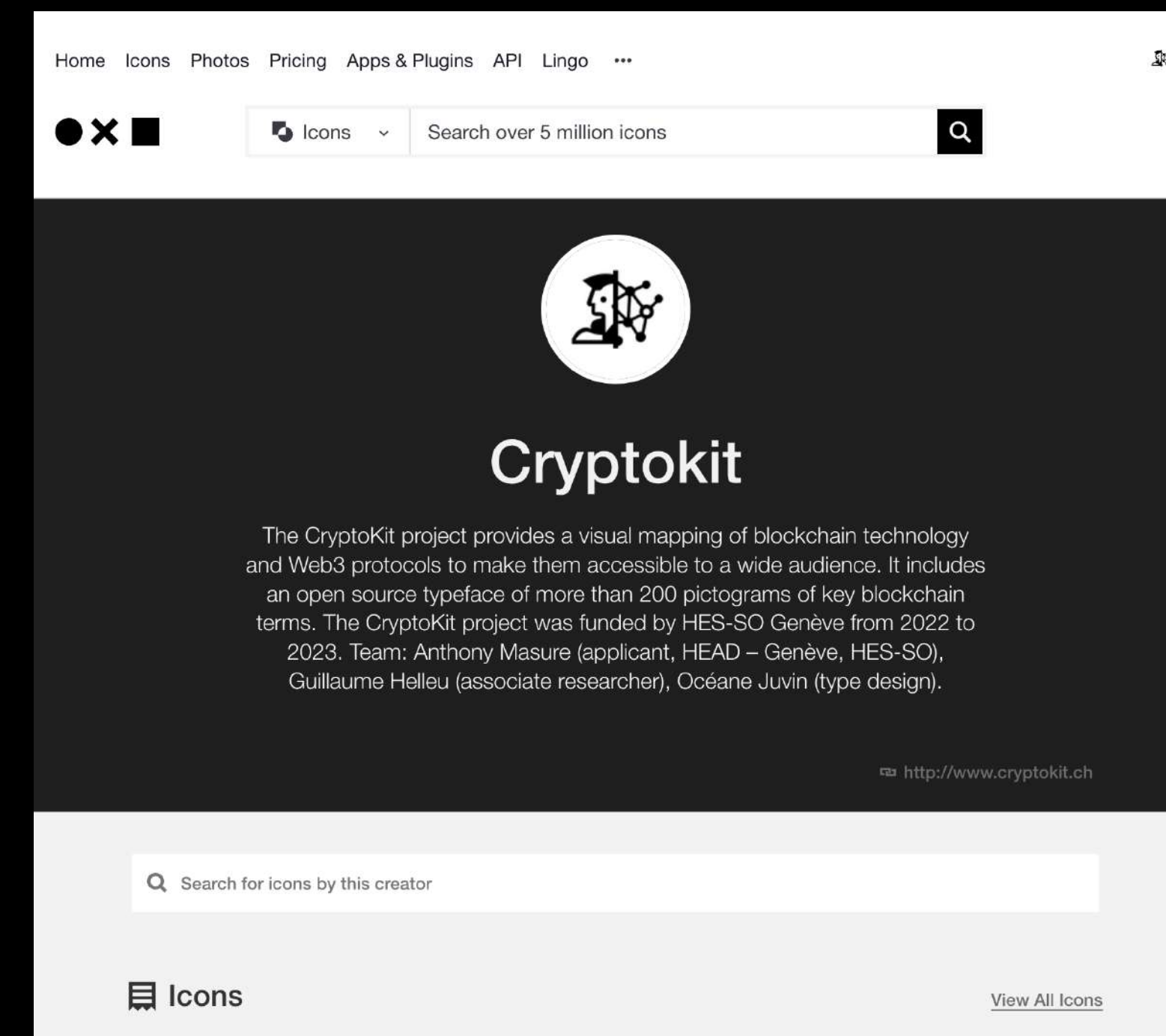
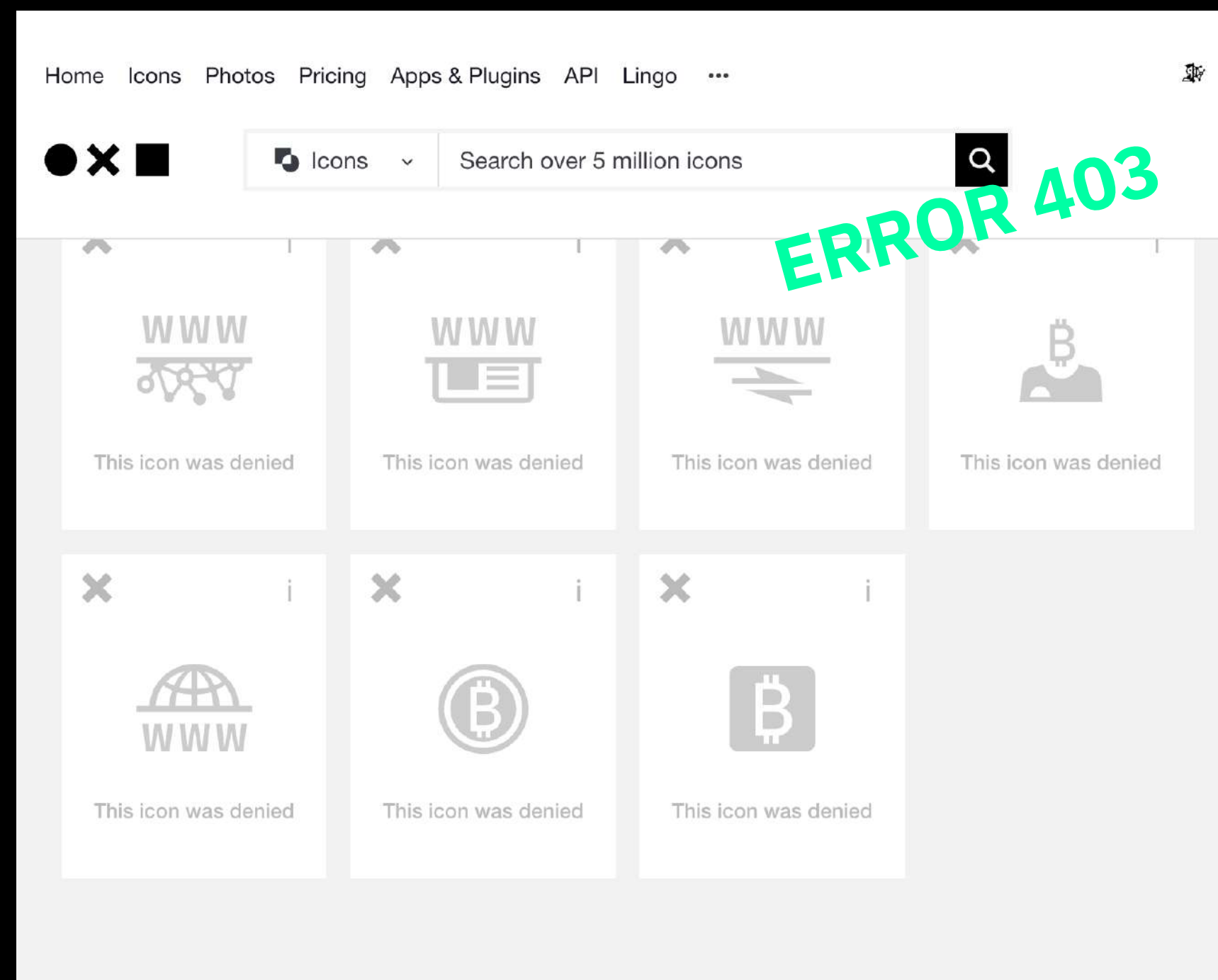
# DE L'OPEN SOURCE AU CC 0 « AUCUN DROIT RÉSERVÉ »



Textes et schémas : CC 0  
Fichier de police de caractère (OTF) : SIL OFL



# THENOUNPROJECT.COM



Les pictogrammes avec du texte sont refusés



04

# CONCLUSION

## SUITES (POSSIBLES) DU PROJET

Ranger tous les fichiers pour les archiver sur GitHub et dans un dépôt scientifique (*open data*)

Valoriser le projet : communiqué de presse et vidéo

Diffuser le kit (écoles, entreprises, presse)

Suivre ses usages et *forks*

Étendre le *glyphset*

Envisager une traduction en hébreu et en chinois

Méthodologie à répliquer sur les intelligences artificielles



Poster sérigraphié d'un glyphe de référence pour chaque système d'écriture du monde. ANRT Nancy, 2019 (2e édition)

# REMERCIEMENTS

**Thomas Huot-Marchand** (ANRT Nancy)

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**Saul Pandelakis** (Université Toulouse – Jean Jaurès)

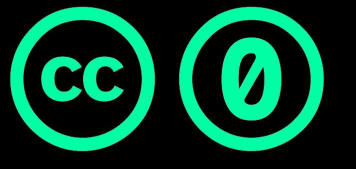
**Véronique Marrier** (Cnap)

**Paul van der Laan & Mike Abbink** (Bold Monday / IBM)

**Jean-Pierre Greff** (HEAD – Genève)







[www.cryptokit.ch](http://www.cryptokit.ch)  
[@cryptokit.ch](https://twitter.com/cryptokit.ch)

[@anthonymasure](https://twitter.com/anthonymasure)  
[@helleuguillaume](https://twitter.com/helleuguillaume)  
[@ohp.ju](https://twitter.com/ohp.ju)