



Hedera dApp Days Session 1: Introduction

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With dApp days, you will learn how to build and deploy applications on Hedera!



**Session 1:
Introduction**




**Session 2:
Smart Contracts with
Hedera Tokens**



**Session 3:
Conclusions
and Next Steps**

Get a testnet account! (<https://portal.hedera.com/register>)



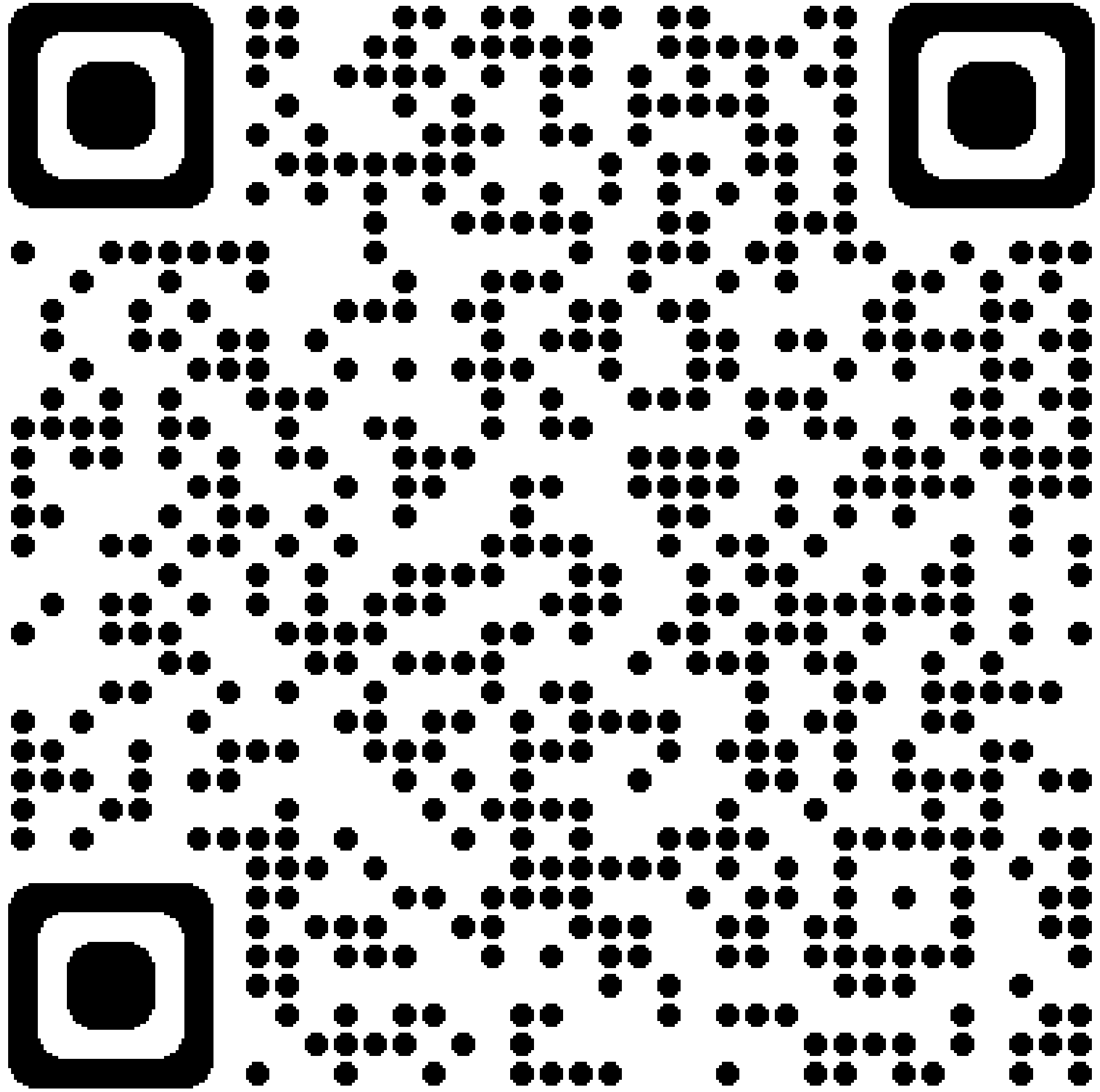
Create a developer Testnet account

Create a developer portal profile to start building decentralized applications.

By creating a Hedera profile you agree to the [Terms Of Service](#).

START BUILDING

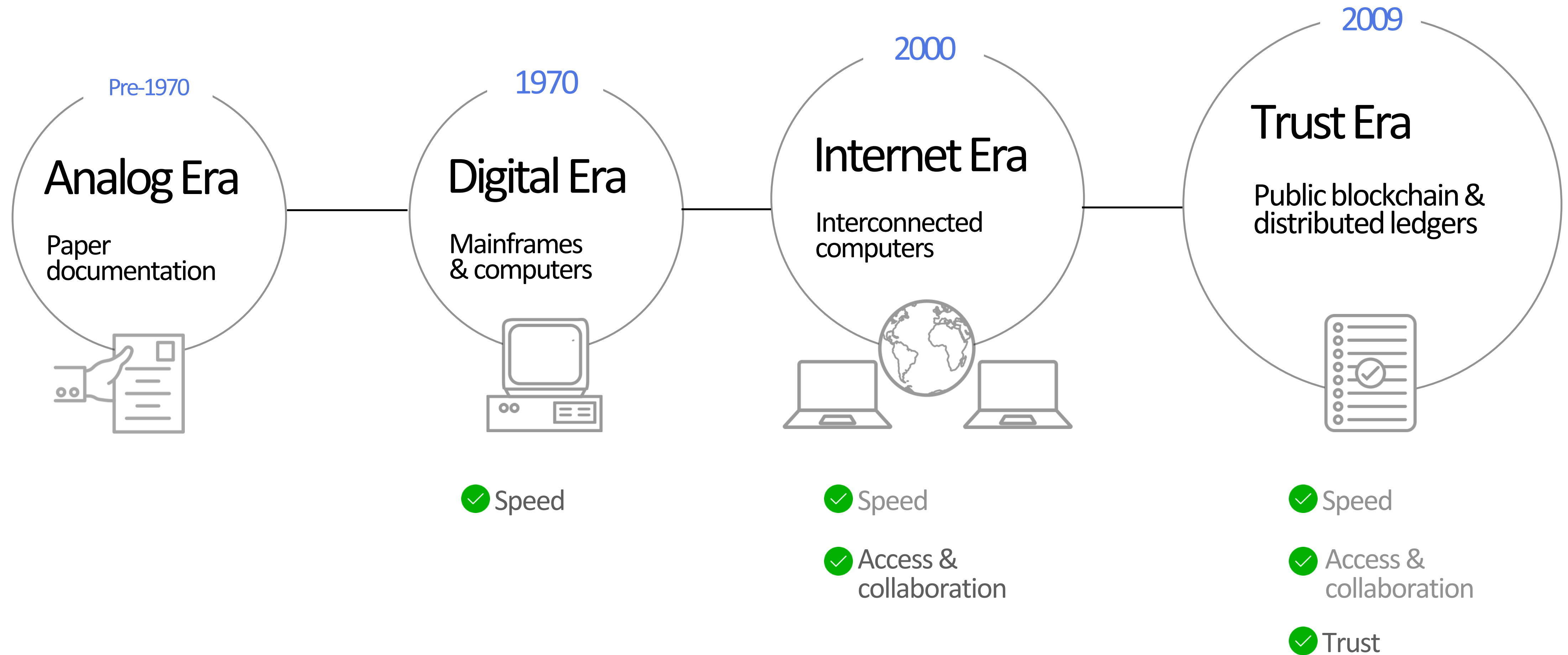
Already have an account? [Log In](#)





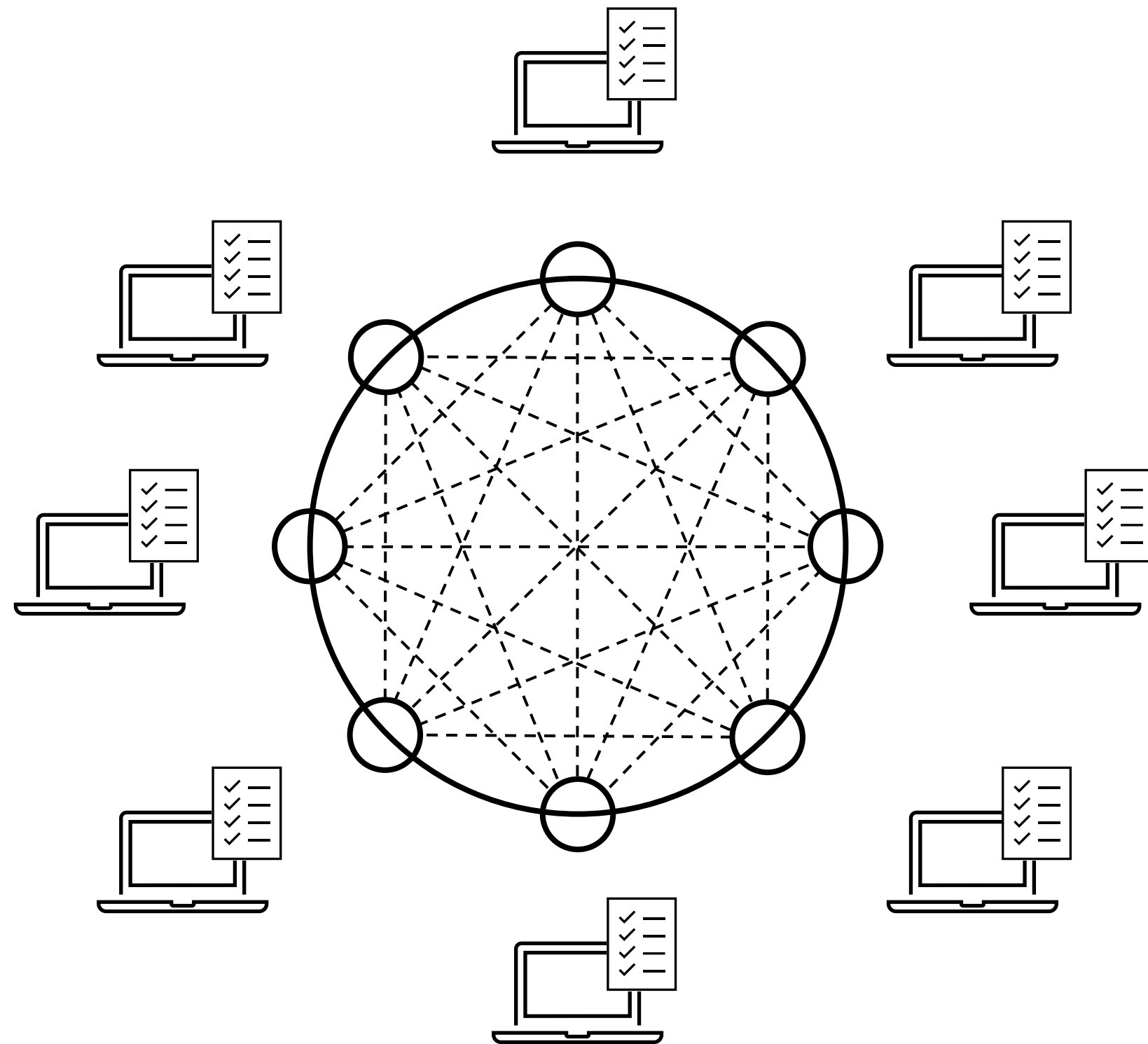
APPLICATION PREVIEW

The web evolves continuously and now it is becoming more decentralized



Distributed ledgers are a key component of Web 3.0 because of their qualities

DISTRIBUTED LEDGER



Entire network records and validates each transaction

CENTRALIZED LEDGER



Single authority verifies, records, and executes transactions

Distributed ledgers are a key component of Web 3.0 because of their qualities

No central point of failure to attack

Reliant on strong cryptography to prove data integrity and tamper resistance

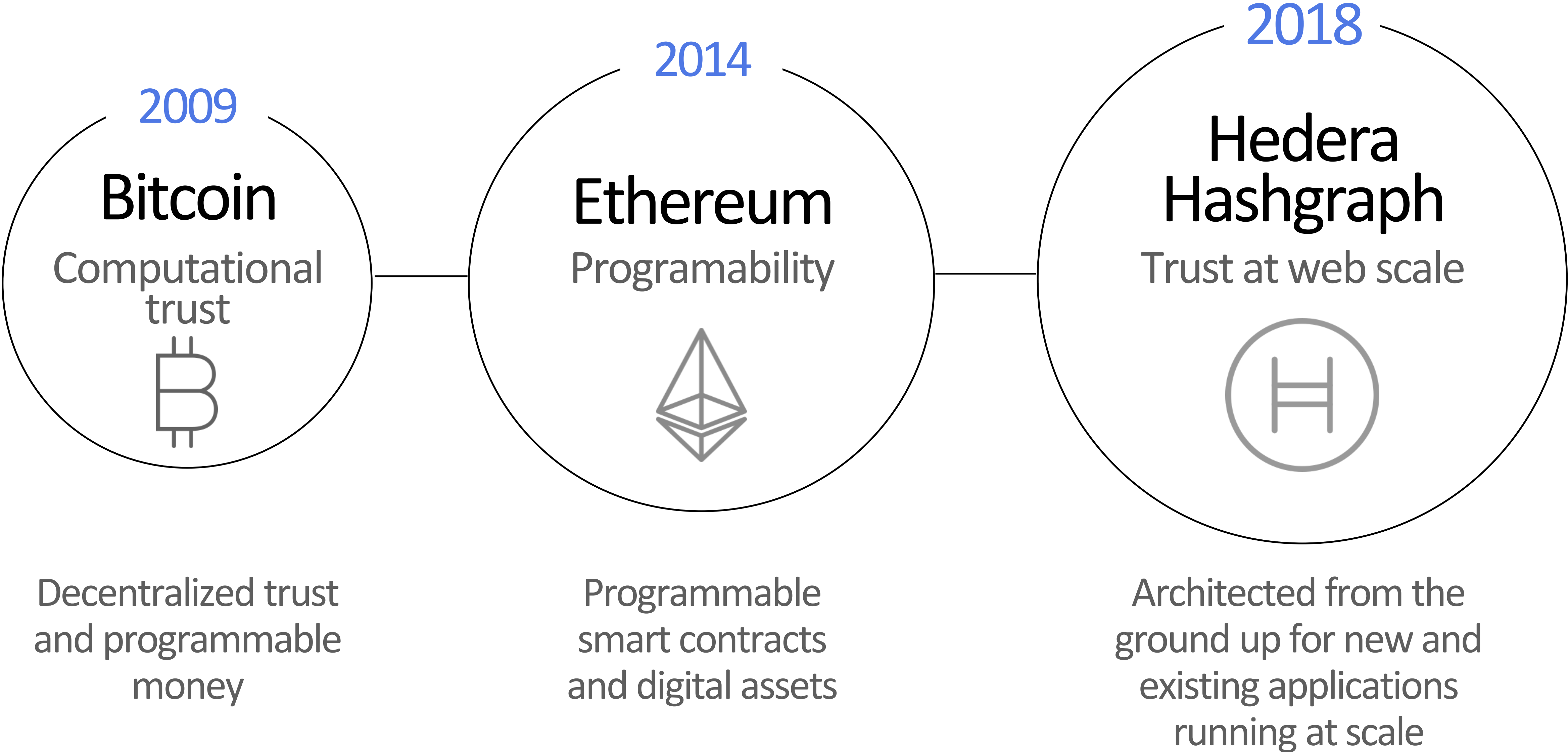


Rules for the ledger are determined by a governing concept of some sort




Require a consensus mechanism to determine the rules for adding new transactions to the state of the ledger



Hedera is a third-generation public distributed ledger



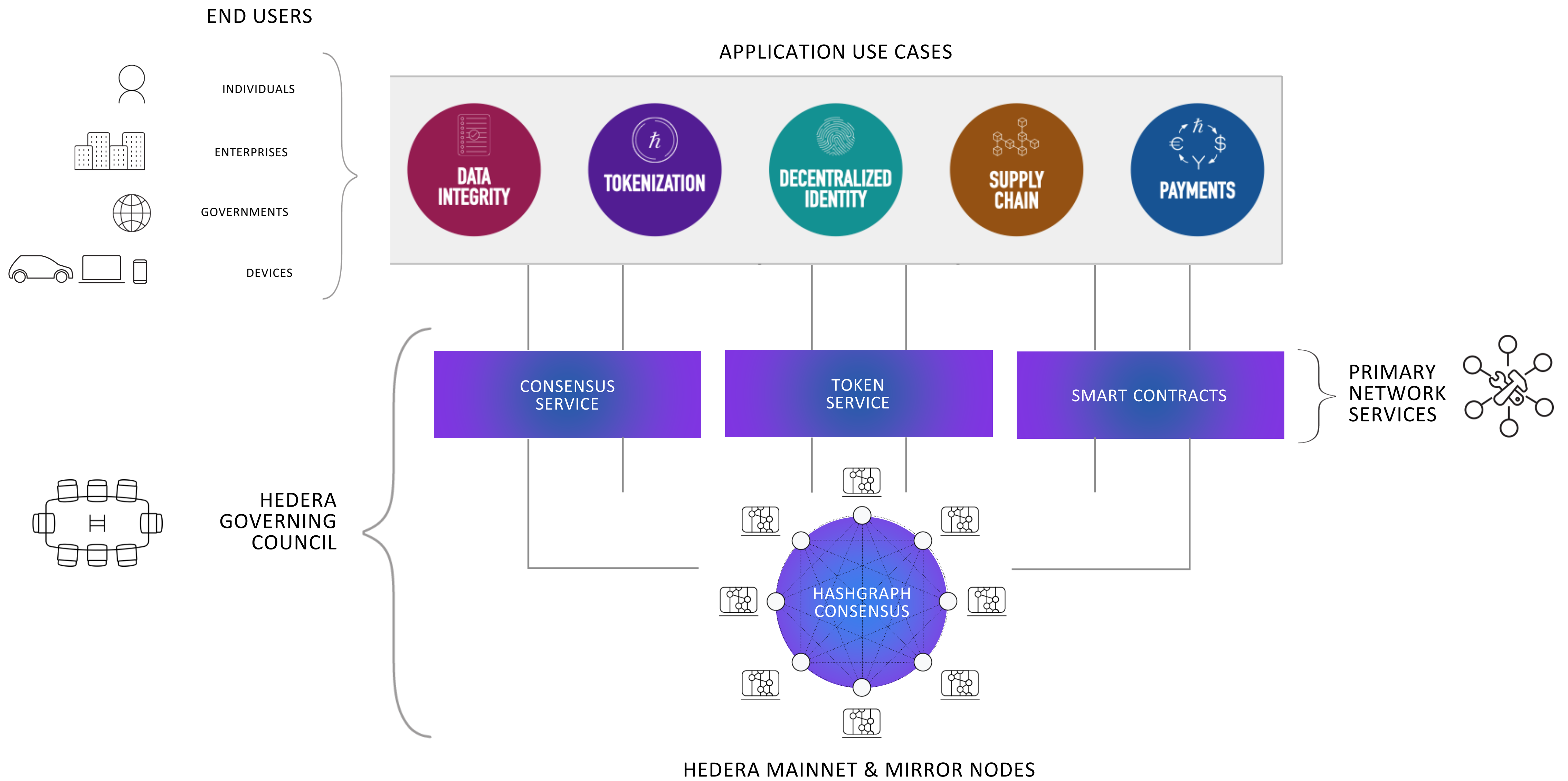
Hedera is a third-generation public distributed ledger

	1ST GENERATION	2ND GENERATION	3RD GENERATION
	 Bitcoin Blockchain	 Ethereum Blockchain	 Hedera™ Hashgraph
TRANSACTIONS PER SECOND	3+ TPS	12+ TPS	10,000+ TPS
AVERAGE TRANSACTION FEE	\$22.57 USD	\$19.55 USD	\$0.0001 USD
AVERAGE TRANSACTION CONFIRMATION	10-60 MINUTES	10-20 SECONDS	3-5 SECONDS (W/ FINALITY)

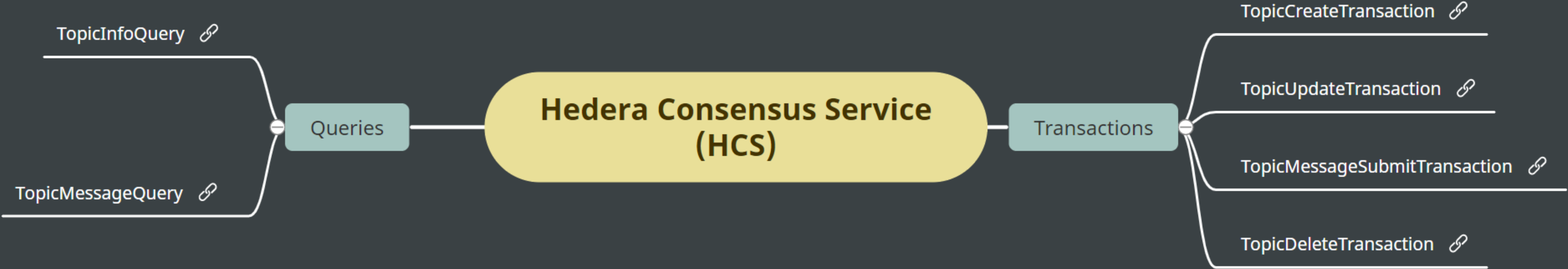
• Cryptocurrency transactions. For Hedera, range shown for transactions not requiring a transaction record, but can receive a transaction receipt.

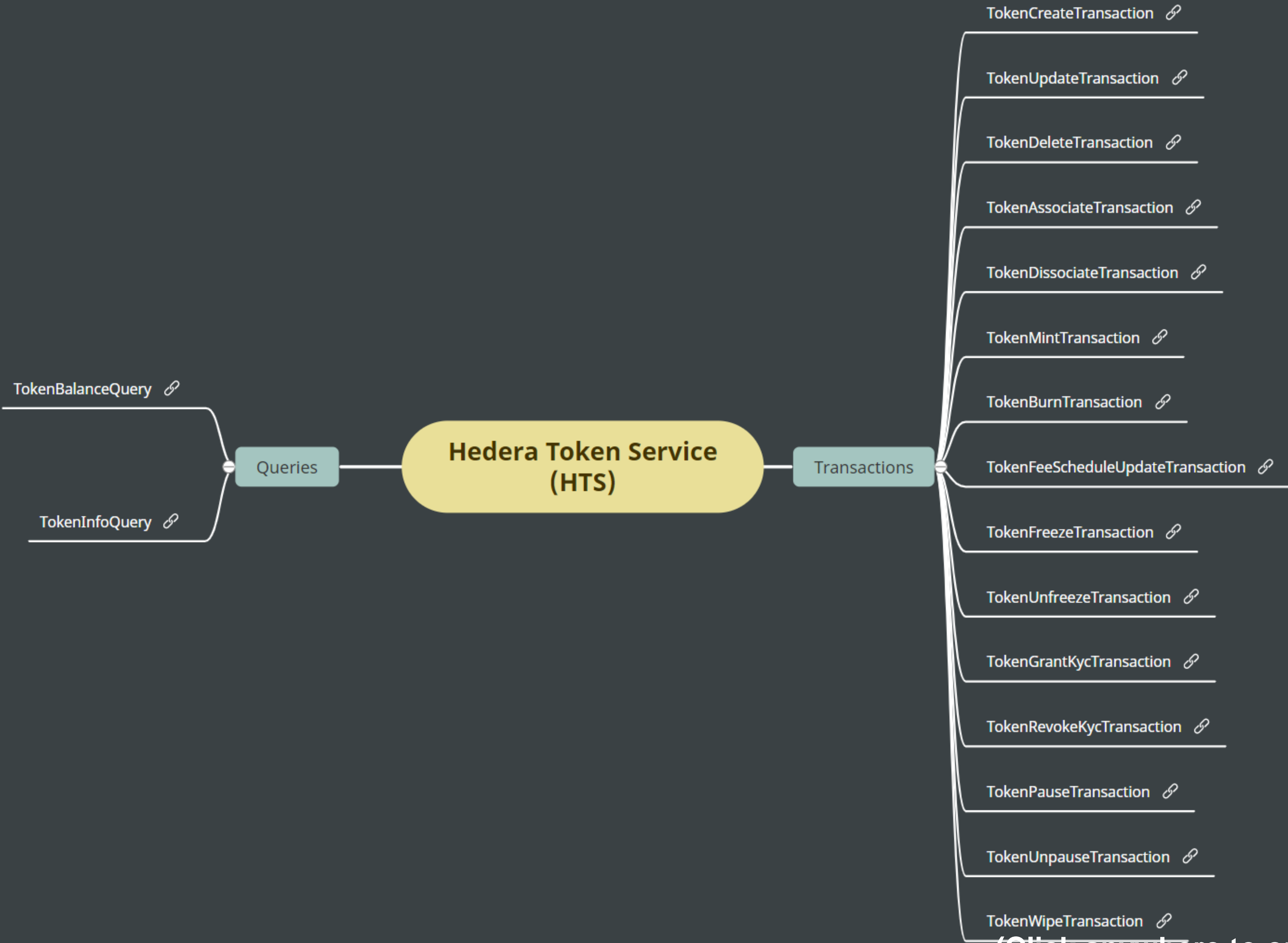
• Avg. Bitcoin tx fee from 6/26/20 - 9/24/20 from <https://blockchair.com/bitcoin/charts/average-transaction-fee-usd?interval=3m>

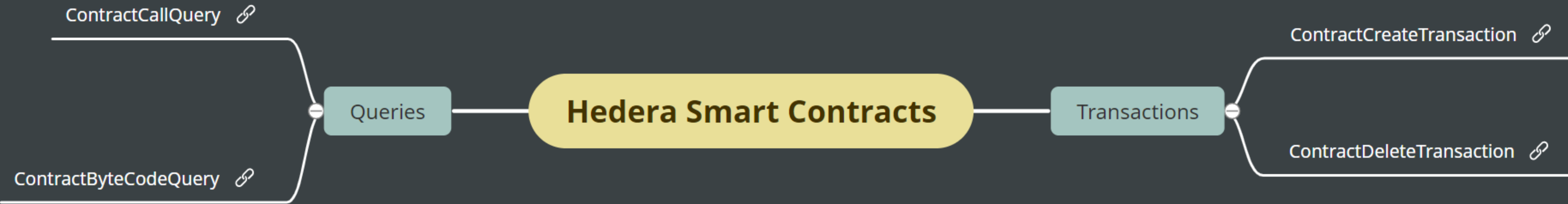
• Avg. Ethereum tx fee from 6/26/20 - 9/24/20 from <https://blockchair.com/ethereum/charts/average-transaction-fee-usd?interval=3m>









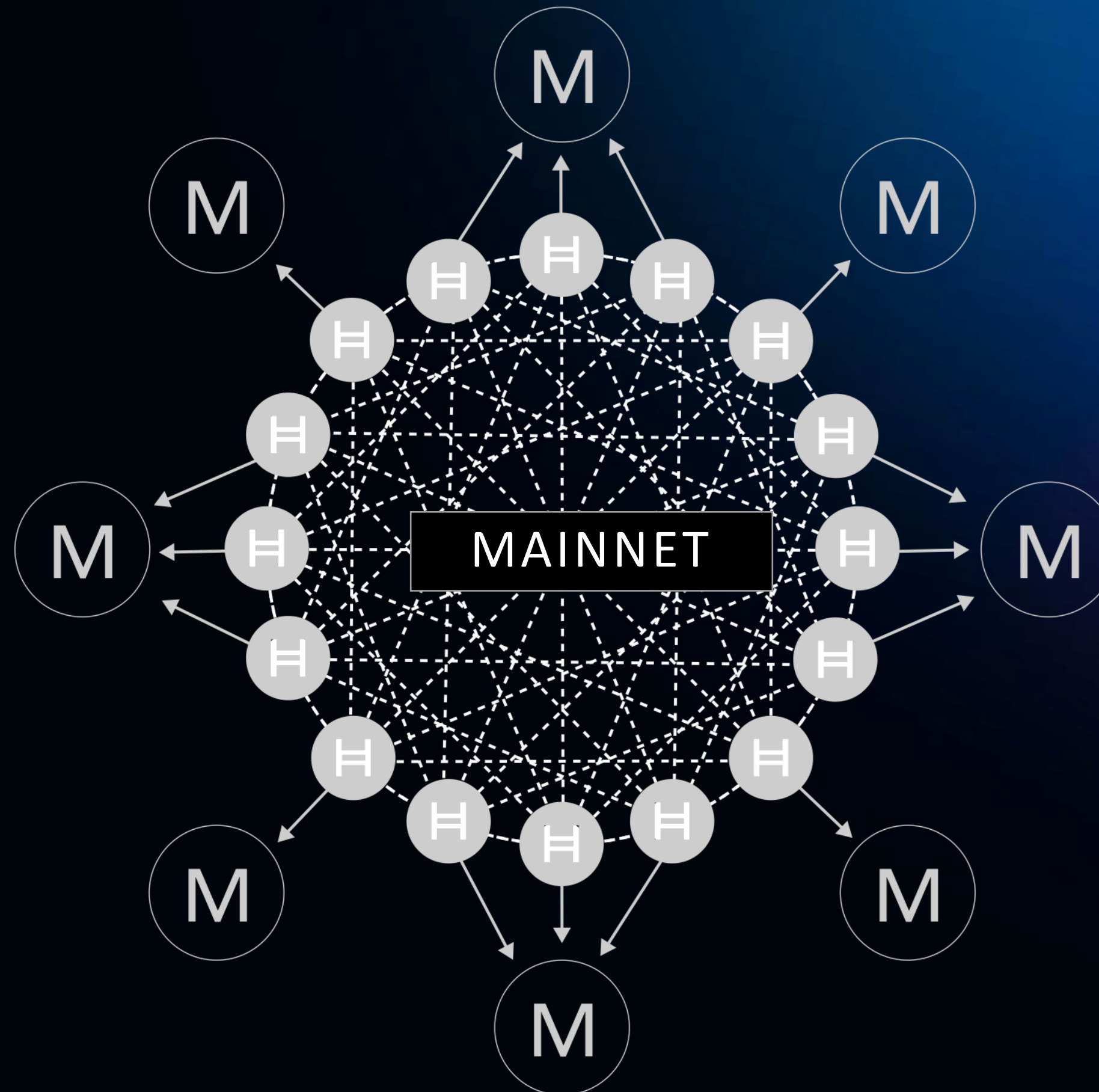


HEDERA MAINNET & MIRRORNET



MAINNET

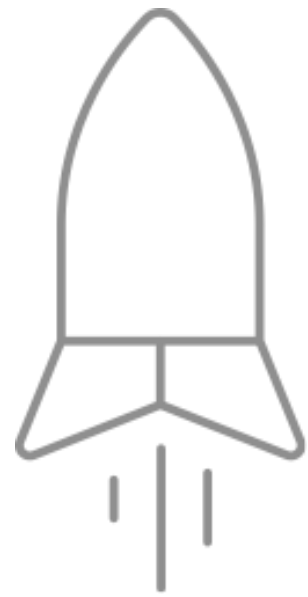
- Can submit HAPI (Hedera API) transactions to the Hedera network
- Contributes to consensus on transactions
- Creates events on the Hedera network
- Requires HBAR cryptocurrency payment for transactions & queries



MIRRORNET

- Maintains a history of some or all the Hedera network state and ledger of transactions
- Value-added services (managed read-only node, etc.)
- Enables analytical insight into an application's state / transactions
- Publish and subscribe capabilities

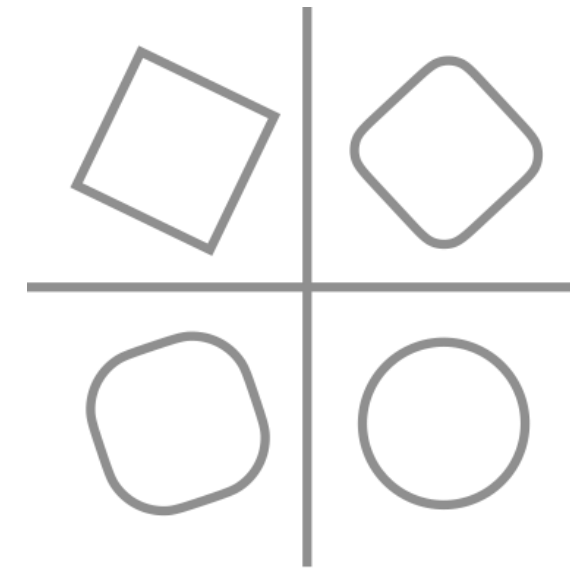
Hedera helps you meet strict requirements in the following areas...



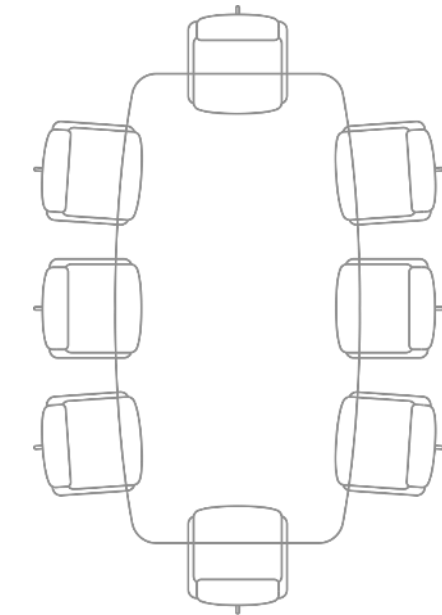
Performance



Security

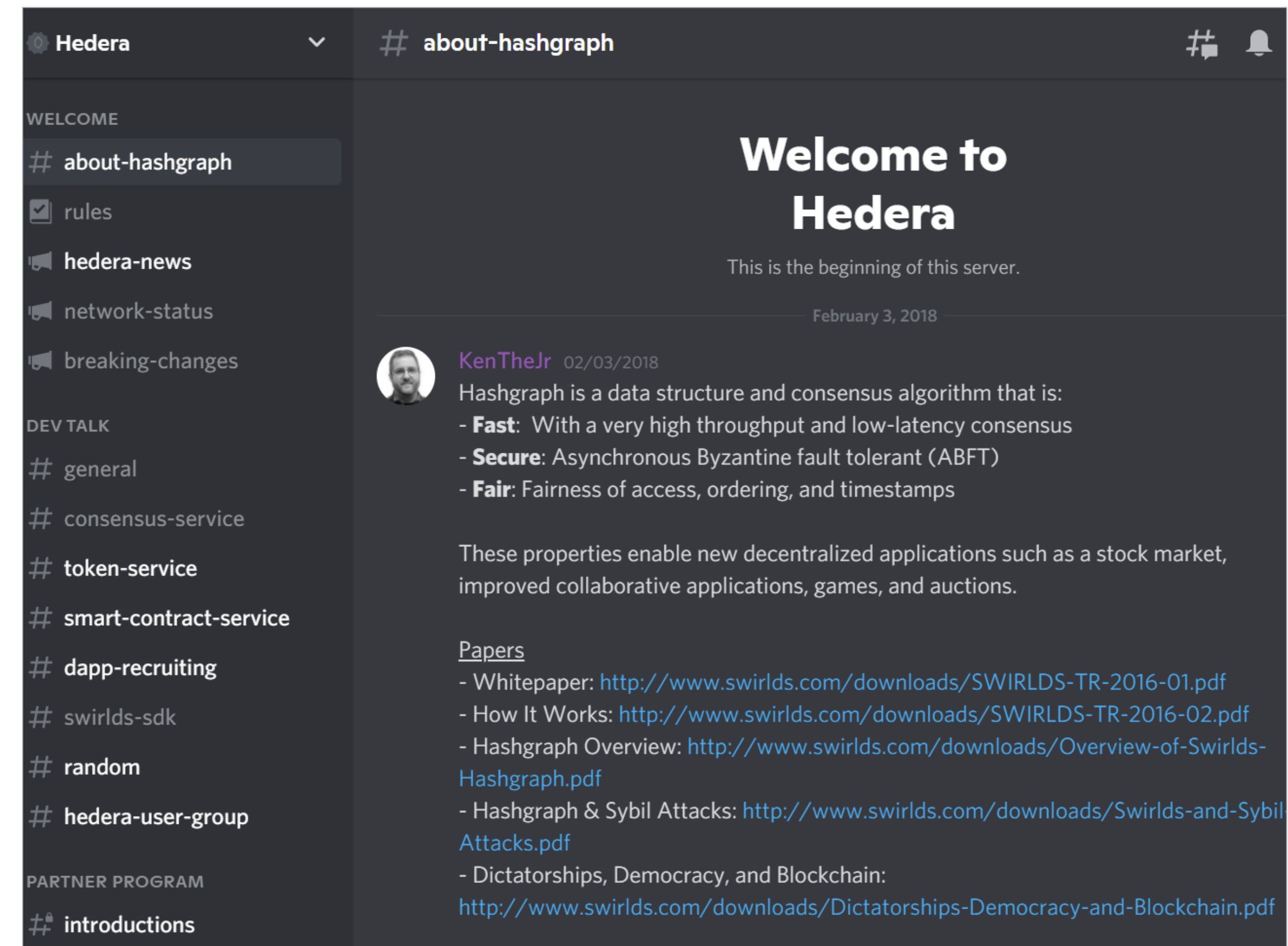
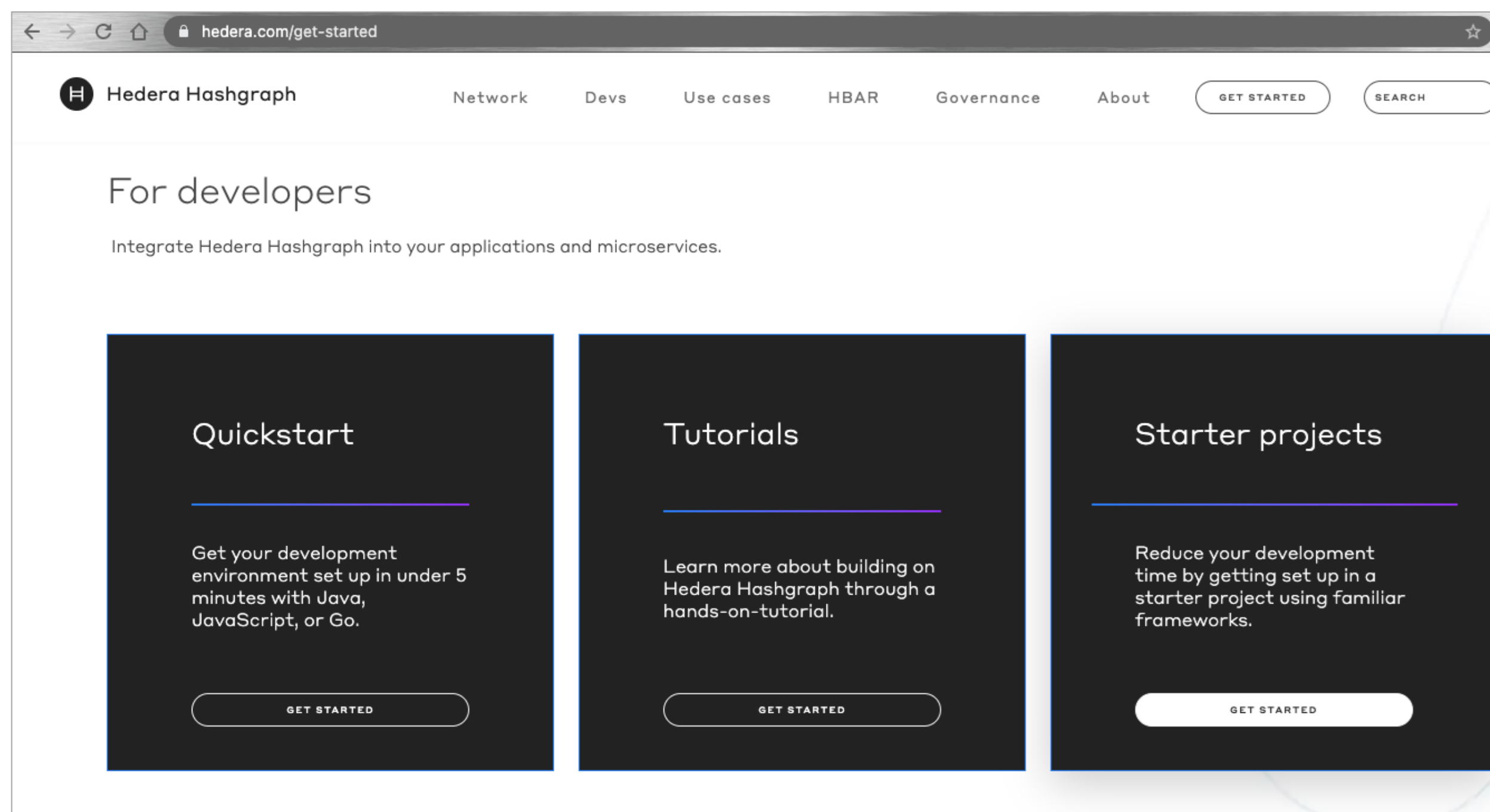


Stability



Governance

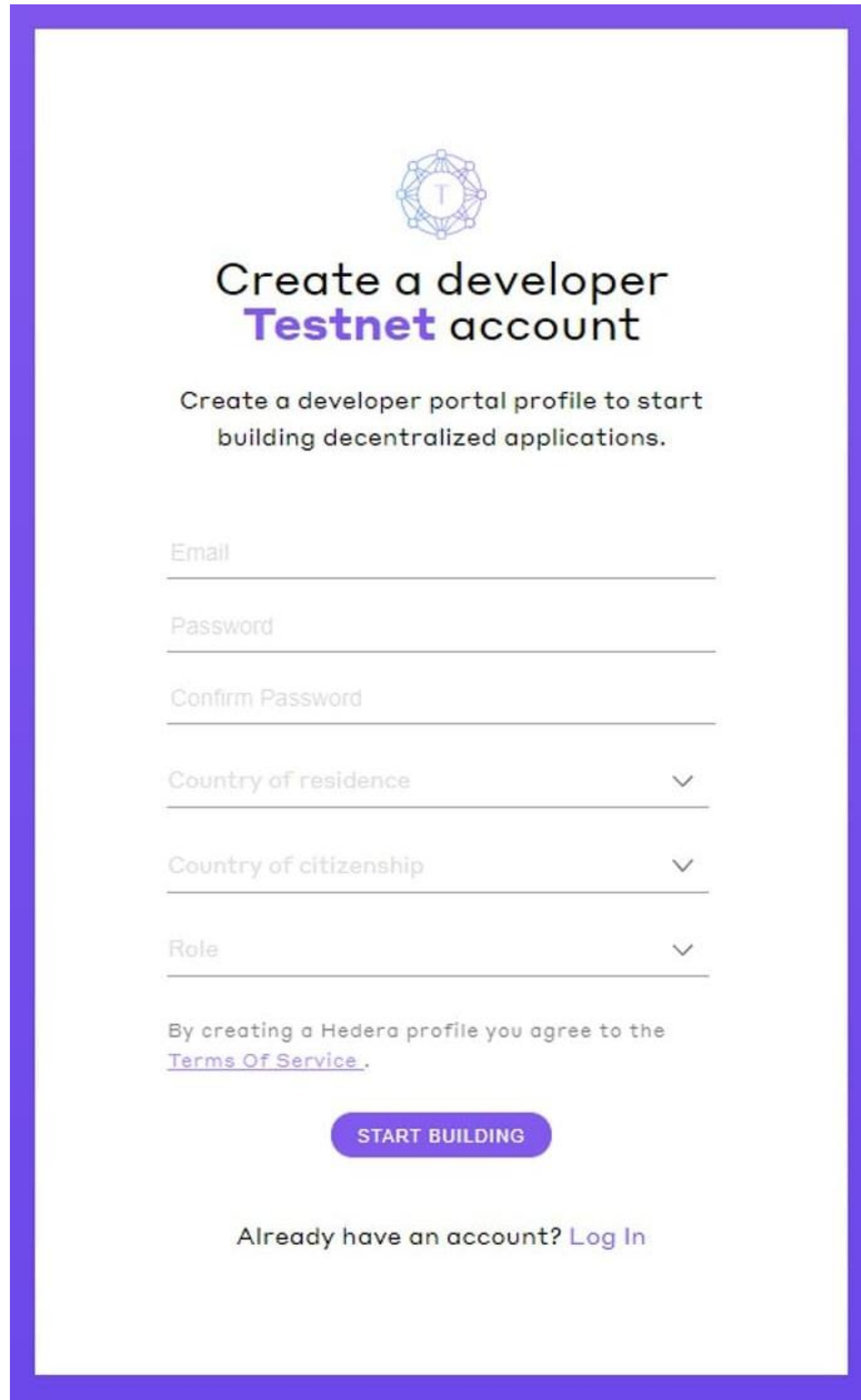
Continue learning with tutorials and with others on Discord



hedera.com/get-started

[Join the Developer Discord](#)

Learn more and start building web 3, but first [get a testnet account!](https://portal.hedera.com/register)

A screenshot of the Hedera Testnet registration form, enclosed in a purple border. The form has a white background and features the Hedera logo at the top. The title "Create a developer Testnet account" is prominently displayed, with "Testnet" in purple. Below the title, a subtitle reads "Create a developer portal profile to start building decentralized applications." The form contains several input fields: "Email", "Password", "Confirm Password", "Country of residence", "Country of citizenship", and "Role". Each field is represented by a light gray placeholder text and a horizontal line. The "Country" fields have a small downward arrow on the right. Below the input fields, there is a line of text stating "By creating a Hedera profile you agree to the Terms Of Service." with "Terms Of Service" as a clickable link. At the bottom of the form is a purple button with the text "START BUILDING" in white. Below the button, there is a link that says "Already have an account? Log In".

Create a developer
Testnet account

Create a developer portal profile to start building decentralized applications.

Email

Password

Confirm Password

Country of residence

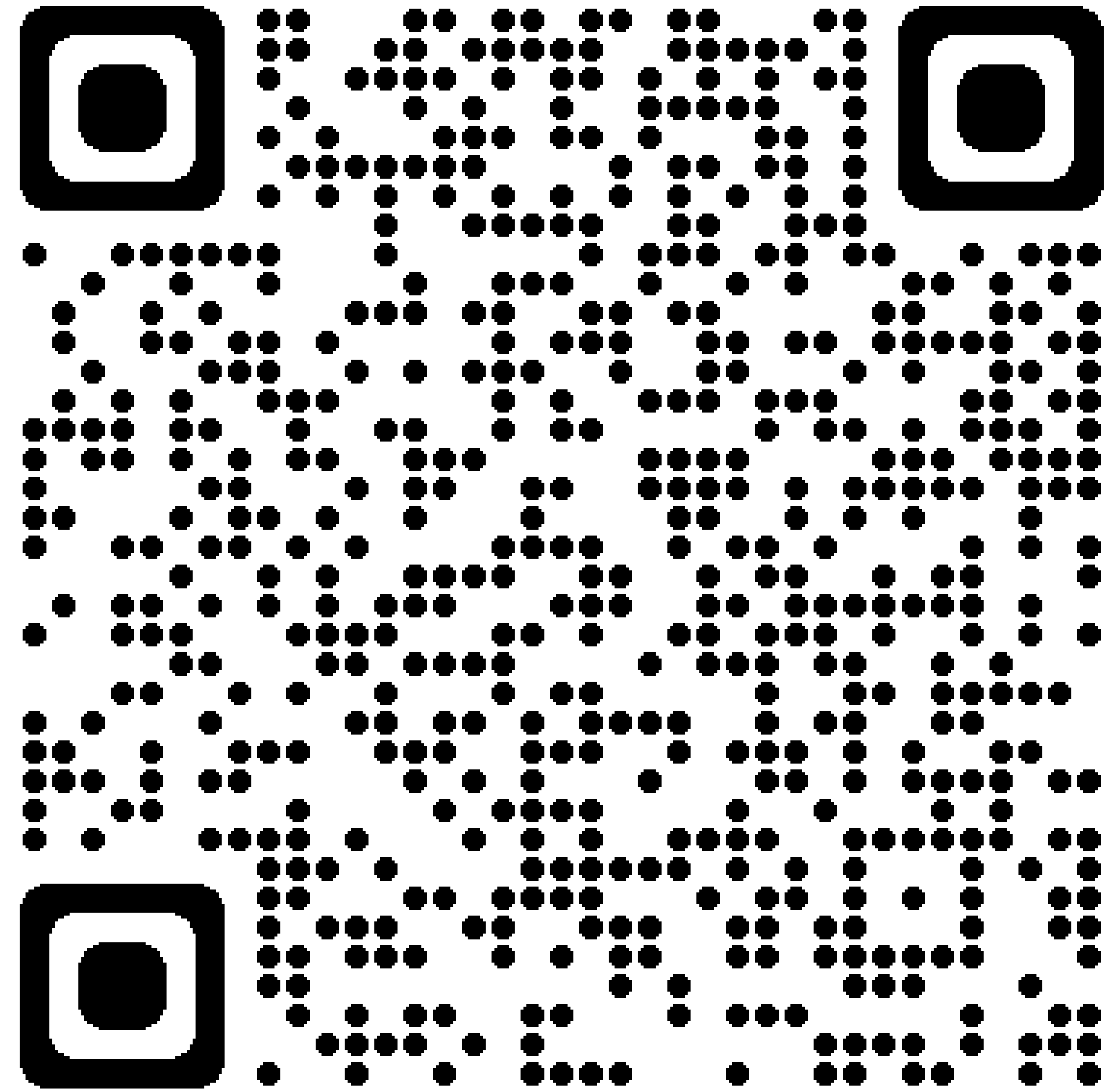
Country of citizenship

Role

By creating a Hedera profile you agree to the [Terms Of Service](#).

START BUILDING

Already have an account? [Log In](#)



<https://portal.hedera.com/register>

Try documentation examples and tutorials

<https://docs.hedera.com/guides/getting-started/try-examples>

Try Examples!

Tokens

Create and Transfer Your First NFT

Create and Transfer Your First Fungible Token

Topics

Submit Your First Message

Smart Contracts

Deploy Your First Smart Contract

Scheduled Transaction

Schedule Your First Transaction

<https://docs.hedera.com/guides/resources/tutorials>

Tutorials

Here are the articles in this section:

Get Started with Hedera NFTs

Deploy Smart Contracts on Hedera

Get Event Information from Hedera Smart Contracts

Look Up Transaction History Using Mirror Nodes

Set up a message queue with the Hedera Consens...




Run the JavaScript Hedera Consensus Service Ch...

Get Started with the Hedera Consensus Service Fabric Plugin

←
Resources - Previous
Demo Applications

Next
Get Started with Hedera NFTs
→

Last modified 1mo ago

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Hedera™ Hashgraph

THE TRUST LAYER OF THE INTERNET



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