



Cored 

 **EUROPEAN**
 **BLOCKCHAIN**
 **CONVENTION**

BARCELONA | OCT 25-26, 2023

 **Coreum**

PoC Social App for professionals
with self-sovereign data access

www.cored.in

Problem

“Professional Curricula
is not trustable”



Unverifiable Certificates

They were made for a physical world



Multiple institutions in the world

Various degrees of credibility and quality



Mutable and deletable

Registries can be changed or deleted.

Utopia



“Digital Sovereign Identity”



Verifiable Curricula

Adapted to new Web3 technologies



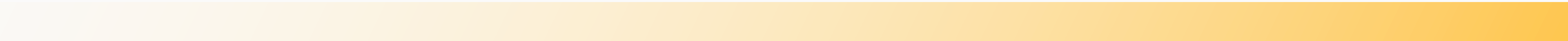
Decentralized

Multiple validators and independent verifiers



Trustable

All changes and modifications can be tracked





Decentralized Top Talent Platform

Sovereign Identity

“Verifiable, Portable”

- Self-Sovereign credentials
Issues by trusted institutions
- Onchain data access control
For Info allowed and onchain DID registry
“CoredIn Contracts” & “Smart NFTs”
- Validators/Verifiers
P2P users

*Future upgrade “Transferable Soul Bound Tokens”

User experience

“Time to manage your
personnel info”

User authentication

Their wallets will be used to authenticate them by signing messages with them

Data traceability

All the information will be traced on-chain within the CoredIn Contract

Information Access

The private information is stored offchain while the access control list is onchain



Why Coreum?

Modular, Fast, Secure and Interoperable

Rust + WASM = <3

Target Market

High Profile Workers and RRHH agents Worldwide



Individual professionals

International Users with Top Professional Skills
concerned about their privacy



Institutions

Multinational Companies and Organizations needing
Quality Data

Size of the Market

B2B2C Business Model

CARG 23%



14.5 Billion

Total Available Market (TAM)

530 M

Service Available Market (SAM)

40 M

Service Obtainable Market (SOM)

Direct Competitors

- LinkedIn (duh!)
- UpWork
- Coursera

Competitive Advantages

- Data privacy with latest SSI tech
- Onchain data monetization
- Information portability



Demo



CoredIn - landing page



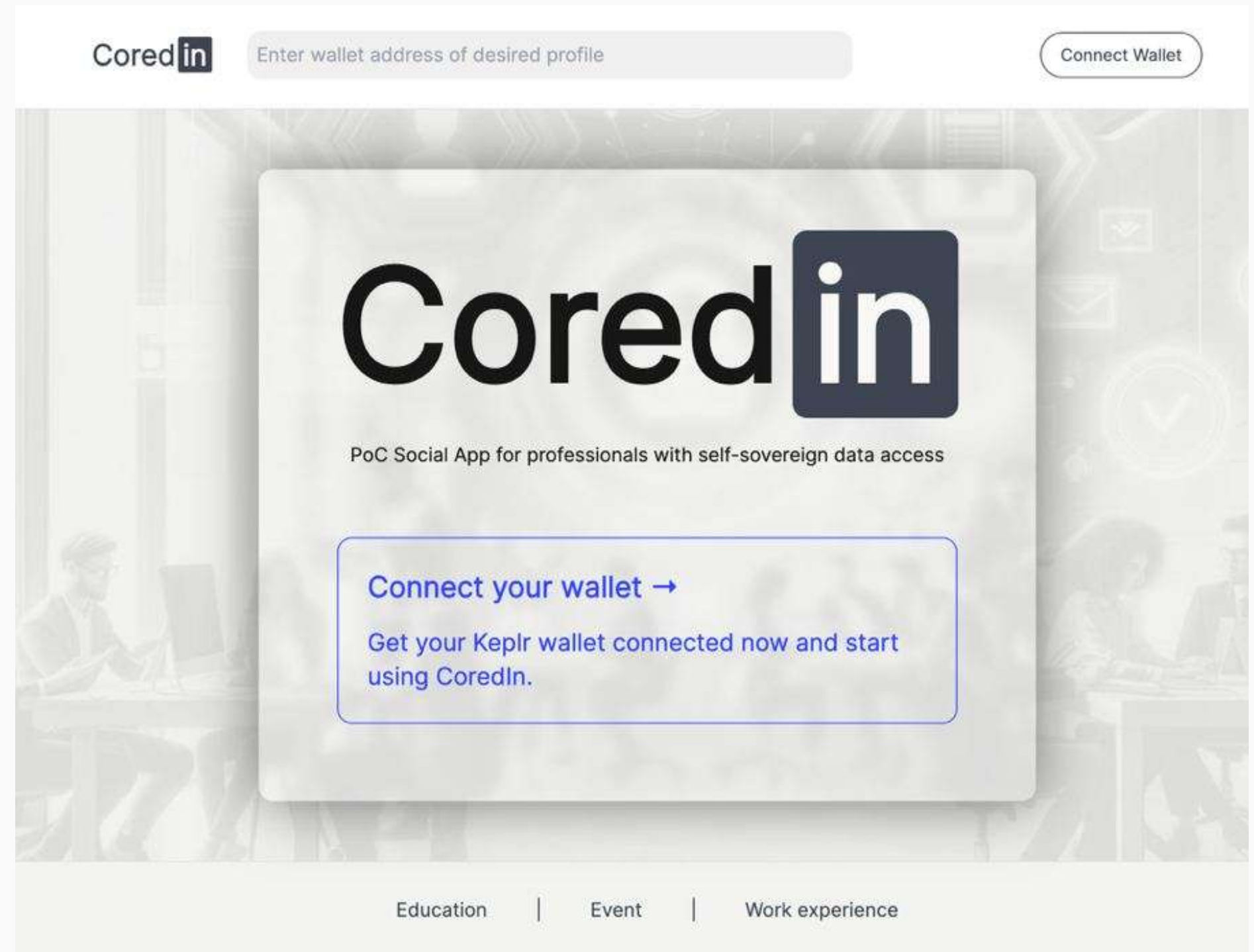
User authentication

Using Coreum-supported wallets
(Keplr, Leap, ...)

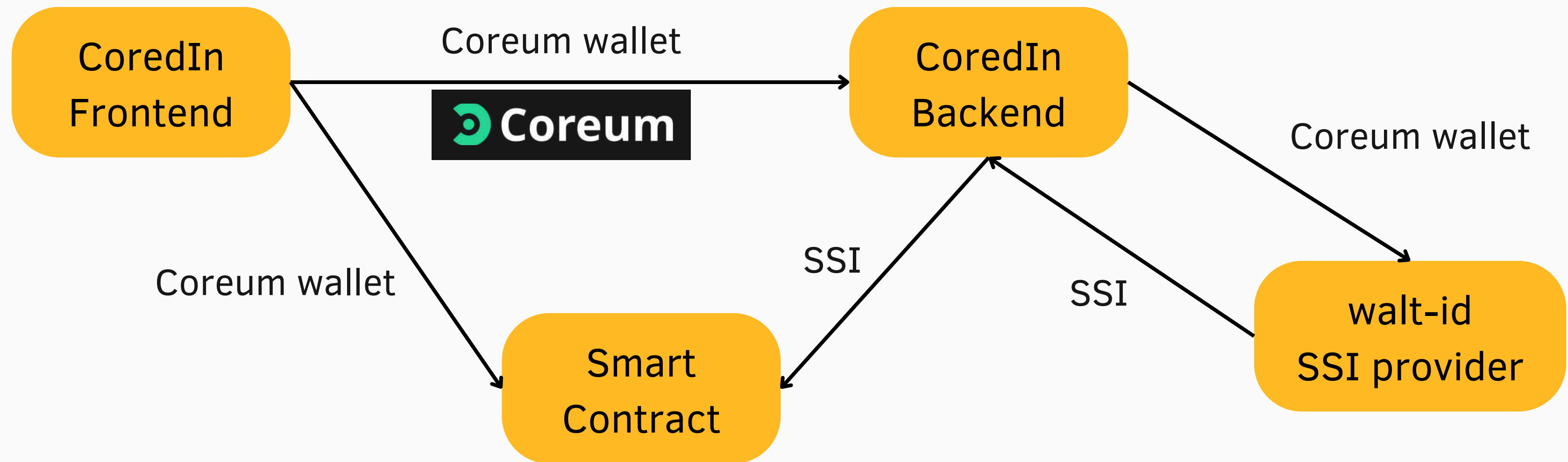
Account types

A connected wallet can be either

- a **user profile** or
- a **certified trusted account**.



Profile registration



Smart contract stores wallet -> SSI mapping when user is registered or updates the info to add SSI.

Credentials

Three basic types

- Degree
- Event Attendance
- Job Experience

Verifiable Credentials == VCs

0 implementations

```
pub enum CredentialEnum {  
    Degree { data: CredentialDegree, vc_hash: String },  
    Employment { data: CredentialEmployment, vc_hash: String },  
    Event { data: CredentialEvent, vc_hash: String }  
}
```

0 implementations | You, 23 hours ago | 1 author (You)

```
pub struct CredentialDegree {  
    pub owner: String, // wallet  
    pub institution_name: String,  
    pub institution_id: String,  
    pub year: u64, // graduation year  
}
```

0 implementations | You, 23 hours ago | 1 author (You)

```
pub struct CredentialEmployment {  
    pub owner: String, // wallet  
    pub institution_name: String,  
    pub institution_id: String,  
    pub start_year: Option<u64>,  
    pub end_year: Option<u64>,  
}
```

0 implementations | You, 23 hours ago | 1 author (You)

```
pub struct CredentialEvent {  
    pub owner: String, // wallet  
    pub event_name: String,  
    pub organizer_id: String,  
    pub year: Option<u64>,  
}
```

Issuing credentials

Who can issue?

Trusted accounts (institutions, event organizers, etc.) can issue verifiable on-chain records. Enforced by the contract.

Education

Send a request to issue proof of obtained degree at a university

First name

Igor

Last name

Peric

University

Harvard

Graduation year

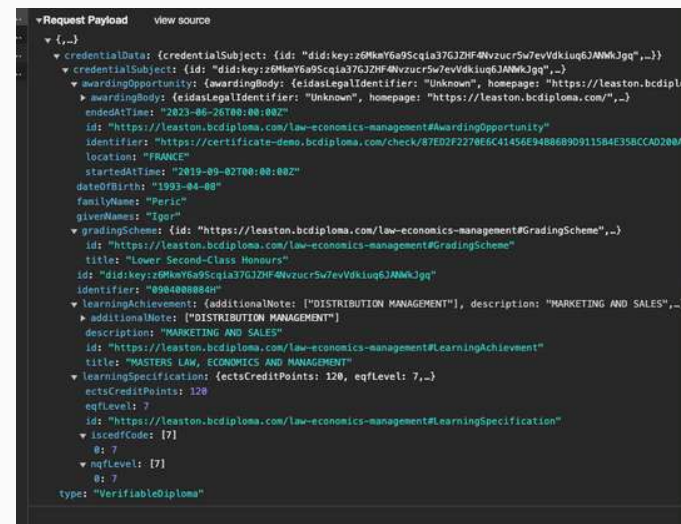
2023

Issue credential

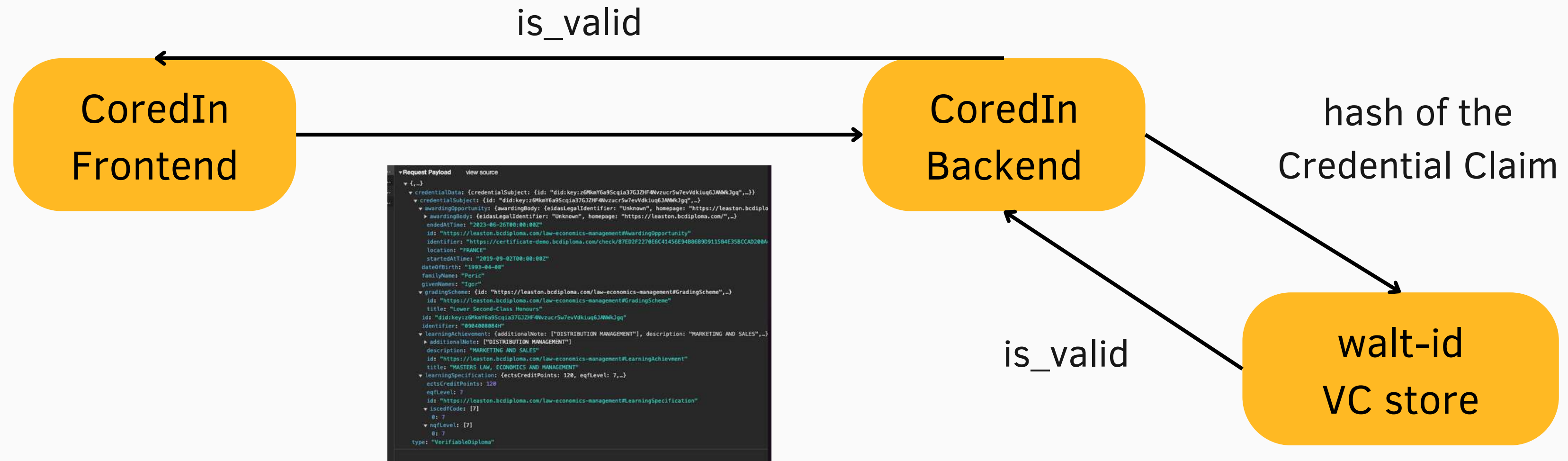
Request Payload

[view source](#)

```
{...}
  credentialData: {credentialSubject: {id: "did:key:z6MkmY6a9Scqia37GJZHF4Nvzucr5w7evVdkiuq6JANWkJgq",...}}
  credentialSubject: {id: "did:key:z6MkmY6a9Scqia37GJZHF4Nvzucr5w7evVdkiuq6JANWkJgq",...}
    awardingOpportunity: {awardingBody: {eidasLegalIdentifier: "Unknown", homepage: "https://leaston.bcdiplo
      ▶ awardingBody: {eidasLegalIdentifier: "Unknown", homepage: "https://leaston.bcdiploma.com/",...}
        endedAtTime: "2023-06-26T00:00:00Z"
        id: "https://leaston.bcdiploma.com/law-economics-management#AwardingOpportunity"
        identifier: "https://certificate-demo.bcdiploma.com/check/87ED2F2270E6C41456E94B86B9D9115B4E35BCCAD200A
        location: "FRANCE"
        startedAtTime: "2019-09-02T00:00:00Z"
        dateOfBirth: "1993-04-08"
        familyName: "Peric"
        givenNames: "Igor"
    ▶ gradingScheme: {id: "https://leaston.bcdiploma.com/law-economics-management#GradingScheme",...}
      id: "https://leaston.bcdiploma.com/law-economics-management#GradingScheme"
      title: "Lower Second-Class Honours"
      id: "did:key:z6MkmY6a9Scqia37GJZHF4Nvzucr5w7evVdkiuq6JANWkJgq"
      identifier: "0904008084H"
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      description: "MARKETING AND SALES"
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      title: "MASTERS LAW, ECONOMICS AND MANAGEMENT"
    ▶ learningSpecification: {ectsCreditPoints: 120, eqfLevel: 7,...}
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      eqfLevel: 7
      id: "https://leaston.bcdiploma.com/law-economics-management#LearningSpecification"
    ▶ iscedfCode: [7]
      0: 7
    ▶ nqfLevel: [7]
      0: 7
  type: "VerifiableDiploma"
```



Verifying credentials



Backend is stateless.

Only reads and writes to the VC store.

Subscriptions <3 NFT



Monetization method

To get access to a user's profile you have to mint a **Soul Bound Token (SBT)**.

Coreum's native NFTs

Used **AssetNFT** with "NONTRANSFERABLE" flag to effectively create an SBT.

A new NFT collection (class ID) is created each time user connects the wallet for the first time.

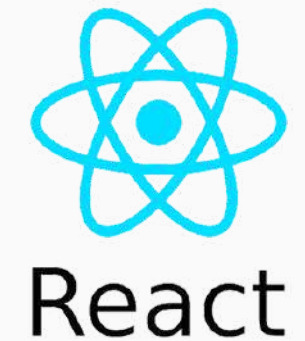
Tech stack



Frontend

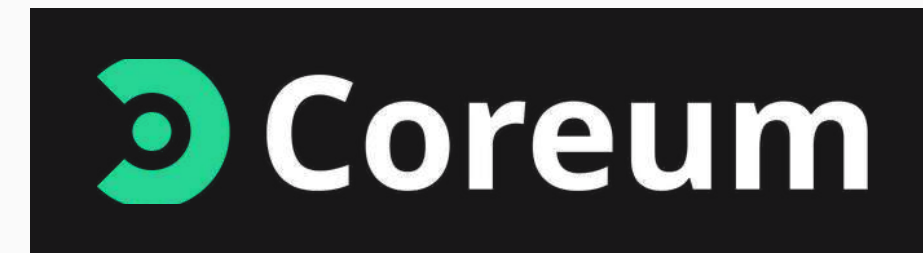
Built from scratch as a React.JS and Tailwind CSS frameworks. Talks to backend and deployed smart contract on testnet.

The logo for Next.js, with the word "NEXT" in a bold, black, sans-serif font and ".js" in a smaller font.



Backend

Built from scratch in NestJS. Main purpose is to interact with self-hosted SSI provider (wallet-kit container, in our case).



Smart Contract

Started working from the **cw-namespace** example from Coreum's GitHub. Used **AssetNFT** to implement **Soul Bound Token**.



Roadmap

OCTOBER 2023

DECEMBER 2023

MARCH 2024

JANUARY 2025



STEP 1

Demo-ready MVP
[Hackaton]

STEP 2

Coreum Grant
Wave 3 Winners

STEP 3

Production-ready
MVP + first users

STEP 4

Institutional
integration

The Team



DIEGO MILLA
CEO



RUBEN TE WIERIK
CTO



**MARGARITA
VARETCKAIA**
CMO



NATALIA DAVTYAN
Frontend developer
Code reviewer



IGOR PERIC
Smart Contract
Developer



ISABEL BENEDÍ
Business Developer

Thank you!

 www.cored.in

