

# PROJECT PROPOSAL



<b>Team Name</b>	Syntax
<b>Project name</b>	BlockCreda
<b>Catogery</b>	Social Impact & Sustainability

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# PROBLEM DEFINITION



In Sri Lanka, many government-issued documents such as birth certificates, land deeds, education qualifications, and marriage licenses exist only as physical copies. Citizens face multiple challenges due to the lack of verifiable digital formats for these critical records:

- » Physical documents are vulnerable to damage, loss, or forgery.
- » Government processes and job applications are slowed by manual verification.
- » Rural citizens and marginalized communities face limited access to document recovery or storage services.
- » There is no standardized digital archive or verification system recognized across institutions.
- » Individuals are forced to carry multiple original copies, risking security and privacy.

As the country moves toward digital governance, the absence of a secure digital documentation framework has created an urgent gap in infrastructure.

# SOLUTION



## Product: **BlockCreda** – Blockchain-Powered Certificate Archive

BlockCreda is a decentralized mobile and web application built on the Cardano blockchain that allows users to digitally secure government-issued hard-copy documents. It creates a tamper-proof, verifiable, and privacy-respecting archive of important certificates.

### Key Features:

- » Upload & Encrypt: Users upload scanned copies of certificates, which are encrypted.
- » Blockchain Anchor: Each file is hashed and recorded immutably on the Cardano blockchain.
- » Ownership via Wallets: Users sign and control documents using Cardano wallets (e.g., Lace, Eternl).

Verification: Anyone with the verification link or credential ID can confirm document authenticity—no need for third-party trust.

# PRODUCT OVERVIEW AND UNIQUENESS

While traditional cloud storage can host digital files, BlockCreda uniquely provides:

- » Blockchain immutability to prevent fraud or tampering.
- » Full user control over data access and sharing via wallet identity.
- » A foundation for government integration and secure digital citizen identity.

Unlike centralized databases that can be hacked or manipulated, BlockCreda ensures transparency, trust, and permanence.

# BUSINESS MODEL AND MARKETING PLAN

## Business Model:

### Freemium Access:

Free tier: 3 document uploads + basic verification.

Paid tier: More documents, metadata tracking, export history, etc.

### Government Integration (Phase 2):

Offer back-end APIs for government offices to directly issue digital certificates to citizens via BlockCreda.

### B2B Partnerships:

Sell API access to employers, banks, and universities for automated certificate verification.

## Marketing Plan:

University & Campus Ambassadors to promote early adoption.

Collaboration with CoinCeylon & Intersect Sri Lanka Hub to reach blockchain and developer communities.

Social campaigns around citizen digital rights and document security.

Media features and webinars with local tech influencers and educators.

# TECHNICAL OVERVIEW AND IMPLEMENTATION

## TECHNOLOGIES USED:

**Mesh SDK:** UI and smart contract connection

**Aiken:** Smart contract creation for document hash validation

**Blockfrost API:** For Cardano blockchain interactions and IPFS integration

**Cardano Wallets:** Lace or Eternl for authentication and user document ownership

Week	Activities
Week 1	UI/UX prototyping, wallet login, initial smart contract
Week 2	Document encryption, IPFS hash generation, blockchain anchoring
Week 3	Verification portal, testing, user feedback round
Week 4	GitHub repo setup, final demo video, pitch deck

# USER SCENARIO

Sanjeewa, a government school teacher, is applying for a loan. The bank requires his land deed and birth certificate. He:

- Opens BlockCreda and logs in using his Cardano wallet.

- Uploads a scanned image of both documents.

- Anchors the documents securely to the Cardano blockchain.

- Shares a verification link with the loan officer, who checks the document authenticity instantly—no manual validation required.

This improves speed, trust, and security for both citizens and institutions.

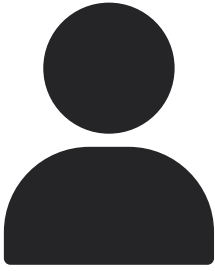


# CONCLUSION

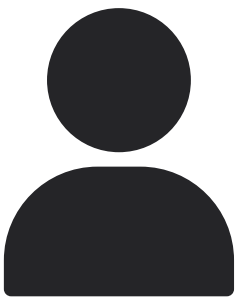
BlockCreda is a powerful step toward modernizing Sri Lanka's public document infrastructure. It transforms vulnerable physical certificates into secure, verifiable digital records using the Cardano blockchain. By giving citizens full control over their documents, it ensures trust, transparency, and resilience in both personal and institutional processes.

**BLOCKCREDA — FROM PAPER TO PROOF.  
EMPOWERING TRUST, DIGITALLY.**

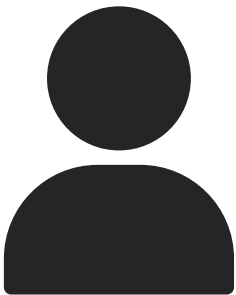
# TEAM MEMBERS



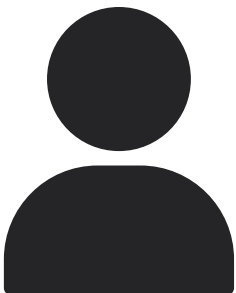
HESHAN PRAMUDITHA DHARMASENA  
pramudithaheshan8@gmail.com



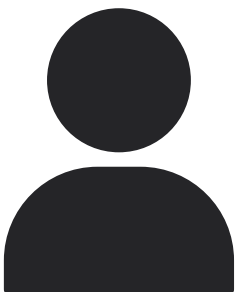
PASINDU KUMARAGE  
pasindukumarage28@gmail.com



PASINDU SURANGA  
pasindusuranga01@gmail.com



RASHMIKA NAMMUNIGE  
rasmikanammunige23@gmail.com



SAJITH LIYANAGAMGE  
sajih672@gmail.com