

All India Developers Challenge Submission - NEXBIT

PROJECT NAME: CLAIM

THE PROBLEM

Right now, if someone has an idea, protecting it officially through patents is hard:

- **Too Slow & Expensive:** Patents take months or years and cost a lot of money.
- **No Easy Proof:** Proving you had the idea first is difficult unless you've kept strong records.
- **Ideas Get Stolen:** If you don't protect your idea early, someone else might take credit.
- **Not for Everyone:** Many small businesses or individuals can't afford the process or don't know where to begin.

CLAIM solves these problems by making the process faster, transparent, and available to anyone with an internet connection and a wallet.

SOLUTION

CLAIM – Decentralized Idea Proof Platform

CLAIM allows any user to:

- Upload a description and file (e.g., PDF) of their idea
- Connect a wallet like MetaMask for identity
- Mint a unique **NFT (Non-Fungible Token)** that proves the idea was theirs — with a **timestamp**
- Store the document in **decentralized storage (IPFS)**
- View and share their proof publicly

This provides **quick, tamper-proof, and transparent proof** that the idea existed — helping defend against future disputes or infringements.

IMPORTANT

1. Not a Patent Filing or Legal Substitute

CLAIM is **not a replacement** for filing an official patent with any government authority such as:

- **The Indian Patent Office (IPO)**
- **WIPO (World Intellectual Property Organization)**

Using CLAIM **does not grant legal ownership or patent rights** under Indian law or international law.

It simply provides a **timestamped record** of your idea on a public blockchain, which can serve as supporting evidence, but **cannot be used as a legal patent certificate**.

2. Purpose of the Platform

CLAIM helps users:

- Record their ideas securely and publicly
- Prove when they first created something
- Share ideas while maintaining original authorship record

This can **support in disputes**, collaborations, or licensing discussions

TECH STACK

Layer	Technology Used	Why It's Used
Frontend	React.js + Ethers.js	Smooth user experience, wallet connection
Backend	Django + Django REST Framework	Handles user data, logic, and API requests
Blockchain	Polygon Mumbai Testnet	Free, fast, and public blockchain
Smart Contracts	Solidity + OpenZeppelin	NFT creation, timestamping, and storage
Storage	IPFS (via Web3.Storage)	Permanent, decentralized file storage
Wallet Login	MetaMask / WalletConnect	Easy, secure, passwordless authentication
Hosting	Netlify (Frontend), Render (Backend)	Scalable and free tiers for development

Implementation Plan

1. Design User Flow

- Map the flow: submission → connect wallet → upload → mint proof → view NFT

2. Frontend Development

- Build UI using React
- Connect MetaMask / WalletConnect
- Add file upload interface and view history

3. Smart Contract Development

- Write and test contracts on Polygon testnet
- Store NFT metadata and IPFS file hash
- Add optional basic license terms

4. IPFS Storage Integration

- Upload PDFs and supporting files to IPFS
- Store resulting hash on-chain for verification

5. Backend/API

- Django handles user submissions, verification, metadata processing, etc.
- Simple database for off-chain records (if needed)

6. Testing & Feedback

- Internal testing of the flow
- Get user feedback and improve UX and error handling

7. Documentation

- Onboarding guide
- Disclaimer on legal limits
- Developer guide for open-source contributions

Future Scalability

1. Multi-Chain Support

- Let users choose Ethereum, Casper, or enterprise blockchains
Adapt to different jurisdictions and gas cost concerns

2. AI-powered Prior Art Search

- Help users scan the web to check if similar ideas already exist
- Reduce accidental overlaps and strengthen IP originality

3. Advanced Licensing Automation

- Smart contracts to manage royalty payments, access rights, and licensing terms
- Enable monetization of IP through peer-to-peer deals

4. LegalTech Integrations

- Connect with law firms or patent offices as part of their proof submission
- Offer export-ready documentation for patent filing

5. DAO & Community Features

- Create collaborative IP pools managed by voting
- Enable shared ownership and collective decision-making

6. Universal Identity & Interoperability

- Use **DIDs (Decentralized Identifiers)** and **verifiable credentials** for better authentication
- Integrate across platforms for seamless user access