Organization: **Digital Land Records and Property Dispute Resolution**

CONTEXT

India's land records system is outdated, leading to ownership disputes, encroachments, fraudulent land sales, and inefficient land administration. Many records are still maintained on paper, making them vulnerable to tampering, loss, or manipulation. The lack of a centralized, transparent, and easily accessible system results in prolonged legal battles and uncertainty in property transactions.

To tackle this issue, your team will be responsible for building a secure, transparent, and digital land record management system that prevents disputes, enables quick verification of property ownership, and enhances governance.

CHALLENGE

Solution Design:

Build a Blockchain & AI-powered Land Record Management System that:

- Digitizes and verifies all land records and ownership history.
- Implements blockchain for tamper-proof and transparent record-keeping.
- Uses AI for dispute detection by analyzing ownership patterns and detecting fraudulent registrations.
- Provides real-time access to landowners, buyers, legal authorities, and government officials.
- Integrates GIS mapping to visually identify land boundaries and detect encroachments.
- Automates property transfer & inheritance using smart contracts.
- Offers AI-driven predictive analytics to flag high-risk properties prone to disputes.

IMPORTANT NOTES

- Tamper-proof encryption of records to prevent fraud.
- Adherence to land laws such as the Indian Registration Act, 1908 and Transfer of Property Act, 1882.
- Integration with Aadhaar & PAN to verify landowners.

TECHNOLOGY BASELINE

Assume that end-users will have access to internet connectivity for seamless interaction with the software.

OUTCOME

A functional prototype that enables secure, transparent, and efficient land ownership verification while reducing disputes and fraud. The system should make land transactions seamless, eliminate middlemen, and ensure rightful ownership while enhancing governance in property management.