

Ideation Phase
Brainstorm & Idea Prioritization Template

Date	22 October 2023
Team ID	NM2023TMID03998
Project Name	Blockchain Based Smart Real Estate Management System
Maximum Marks	4 Marks

Brainstorm & Idea Prioritization:

- **Digital titles and deeds** - Use blockchain to create digital property titles and deeds that are secure, immutable and transparent. This eliminates paperwork and reduces fraud.
- **Smart contracts for transactions** - Use smart contracts to automate processes like property transfers, rent payments, maintenance requests, etc. Contract terms are executed automatically when conditions are met.
- **Rental and lease management** - Smart contracts can be used for rental agreements, security deposits, lease payments, penalties, termination, etc. Automated payments and other actions based on contract terms.
- **Property registration** - A blockchain ledger can store property information like ownership records, valuations, tax details, etc. This provides transparency and eliminates manipulation of records.
- **Fraud prevention** - The immutable ledger prevents document tampering, forgery and fraudulent transactions, ensuring authenticity.
- **Financing and mortgages** - Lenders can verify borrowers' financial credentials via the blockchain. Borrowers can use property as collateral for loans/mortgages registered on the blockchain.
- **Tokenized ownership** - Property titles and deeds can be tokenized, allowing fractional ownership of real estate. This improves liquidity and enables shared ownership.
- **Property transactions** - Sale agreements, payments etc. can be executed and recorded securely on the blockchain. Smart contracts enable automated transfers after conditions are met.
- **Property taxes** - Tax authorities can update property values on the blockchain. Smart contracts can be used to collect taxes and verify tax payments.

Step-1: Problem Statement,Team Gathering And Collaboration

Problem Statement:

The real estate industry today suffers from opaque and complex manual processes that are slow, expensive and prone to errors. Property deeds and titles rely on paper documents that can be forged or manipulated. Transactions involve lengthy paperwork, middlemen and high fees. Records are siloed across stakeholders like governments, brokers, lenders and owners.

This lack of transparency and inefficiency results in fraud, delays and disputes. Buyers face risk of invalid titles while sellers deal with payment defaults. Renters struggle with lease agreements and security deposits. Tax collection is inaccurate and owners incur penalties.

We need an open, secure and integrated platform that brings stakeholders together on a common ledger. Blockchain's decentralized, transparent and immutable capabilities can optimize real estate processes. Smart contracts can automate tedious workflows and enable near real-time transactions. Digital records can prevent document tampering and errors.

The proposed blockchain-based smart real estate management system will:

1. Maintain digital property titles and deeds that are tamper-proof
2. Enable automated transactions like sale, rentals and taxes via smart contracts
3. Provide a shared ledger for stakeholders to record agreements, payments and other details
4. Improve transparency across ownership records, valuations, mortgages and transfers
5. Prevent fraudulent activities through immutable ledger and traceability
6. Reduce paperwork and middlemen via peer-to-peer transactions on the blockchain
7. Lower costs and delays by automating processes and removing duplication

By leveraging blockchain technology, our system will transform legacy real estate processes to be more secure, seamless and efficient. This will benefit property owners, buyers, renters, brokers, lenders and government authorities through reduced fraud, frictionless transactions, improved data accuracy and transparency.

Step 1-Team Gathering And Collaboration:

1. Team Gathering

Mission

Implement an open, tamper-proof ledger to streamline real estate processes, streamline transactions, promote transparency, and reduce fraud, while lowering costs and preventing disputes.

Our customers should:

Register
property

Transfer
ownership

Make
payments

Our business should:

Develop
ledger

Enable
contracts

Verify
transactions

Team Goals

What do we need to do to achieve the mission?

Build
immutable
ledger

Automate
processes

Ensure
transparency

Success Criteria

How can we sense or measure that we are successful?

Increased
transaction
speed and
efficiency

Reduced fraud
through
transparency
and trust

Step-2: Brainstorm, Idea Listing and Grouping

2. Brainstorm 🧠 & Idea Listing 🐣

To achieve our goals we need a
Blockchain Developer 🧑‍💻

Their top 3 responsibilities are:



Lechu
Blockchain Developer

Ask me about:



To work at my best, I expect others to:



To achieve our goals we need a
Product Manager 🧑‍💻

Their top 3 responsibilities are:

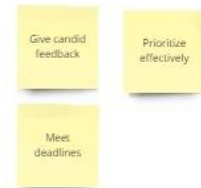


Jeffrey
Product Manager

Ask me about:



To work at my best, I expect others to:



To achieve our goals we need a
Business Analyst 🧑‍💻

Their top 3 responsibilities are:



Jessi
Business Analyst

Ask me about:

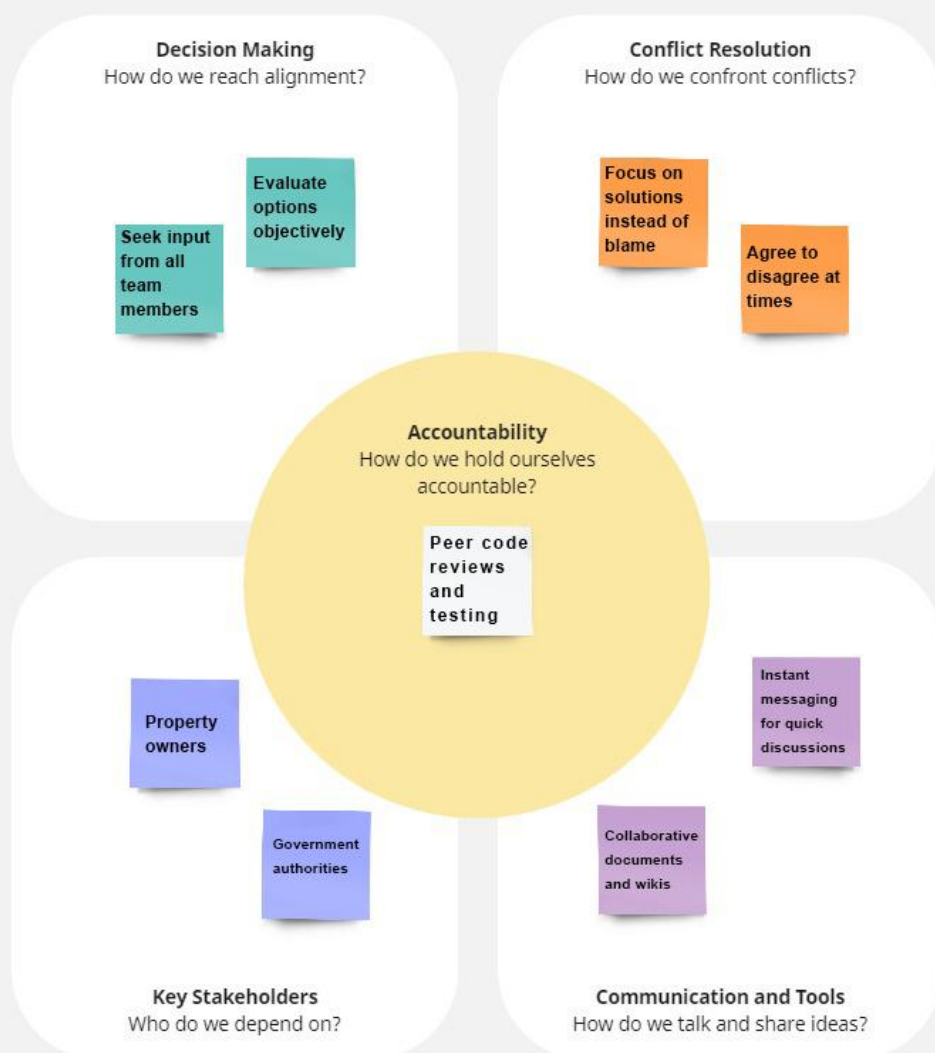


To work at my best, I expect others to:



Grouping

3. Grouping



Step-3: Idea Prioritization

