Blockchain Based Web Framework for Property Registration

Group No. 1

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Project Guide and Coguide
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Introduction

- Problem Identified :

  - The Involvement of middlemen and brokers.

  - The increasing number of fraud cases.

  - Time Delays and lack of digital protection.

  - Tax and registration charges.

- Solution Proposed :

  - Blockchain based Platform using Hyperledger Fabric.

  - Migrate existing data to smart contract.

  - Storing sensitive data and documents' hash in Smart Contract (and decentralized storage).

  - Charges in the form of transaction fees for each operation and Direct buying and selling, without middleman.

Objectives

- To make process faster and bring transparency with use of blockchain.

- To Reduce the fraud cases.

- To reduce extra charges.

- To develop a Web Application, which will directly connect user to the blockchain.

Technological Stack

- Backend – Hyperledger fabric, NodeJS
- Frontend - React.js, CSS, JavaScript
- Database - IPFS Storage
- Server Side Frameworks - Express.js

Review Suggestions

- To change the technology from Ethereum to Hyperledger fabric.
- To add a Government Entity in the process.
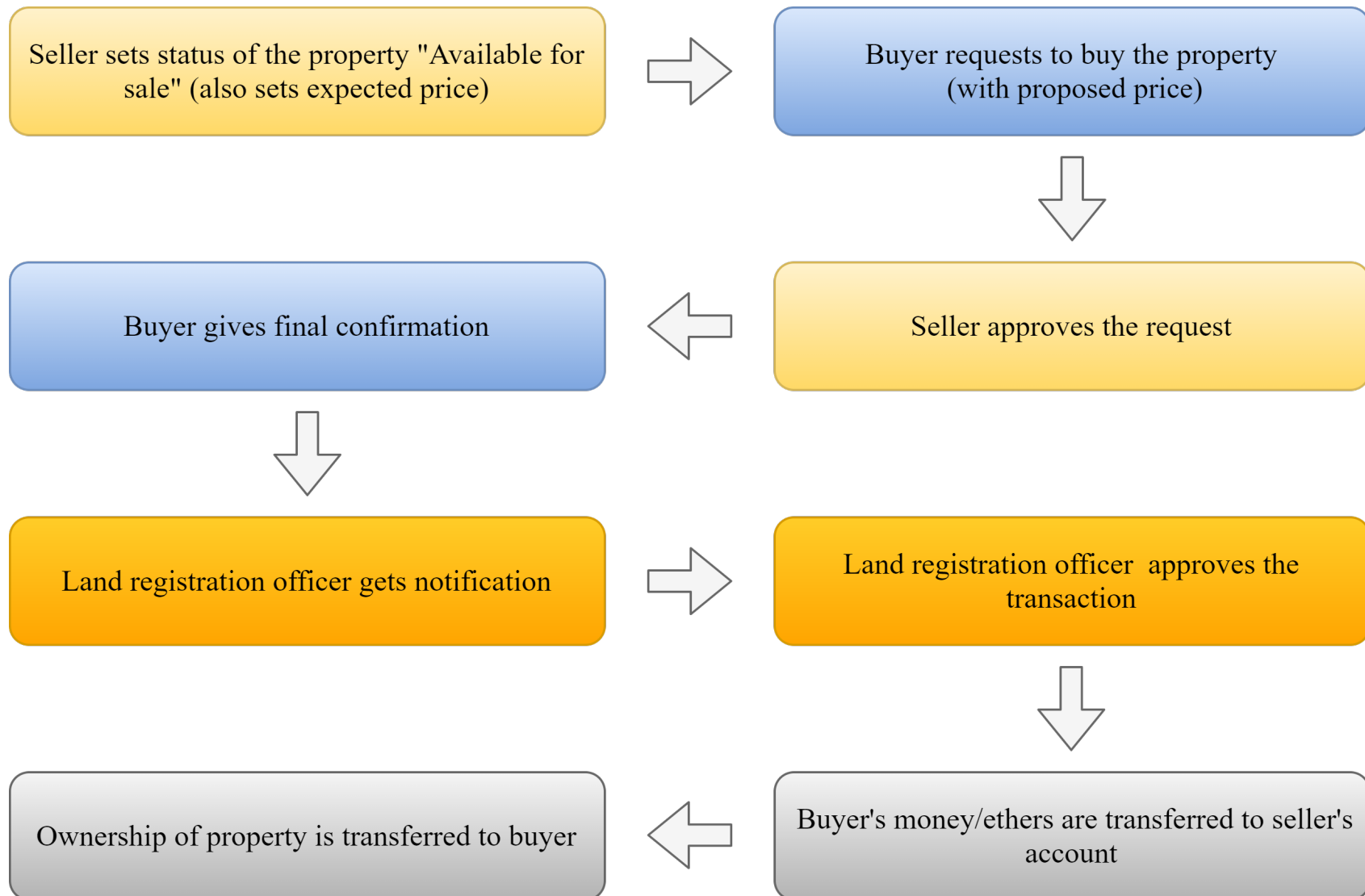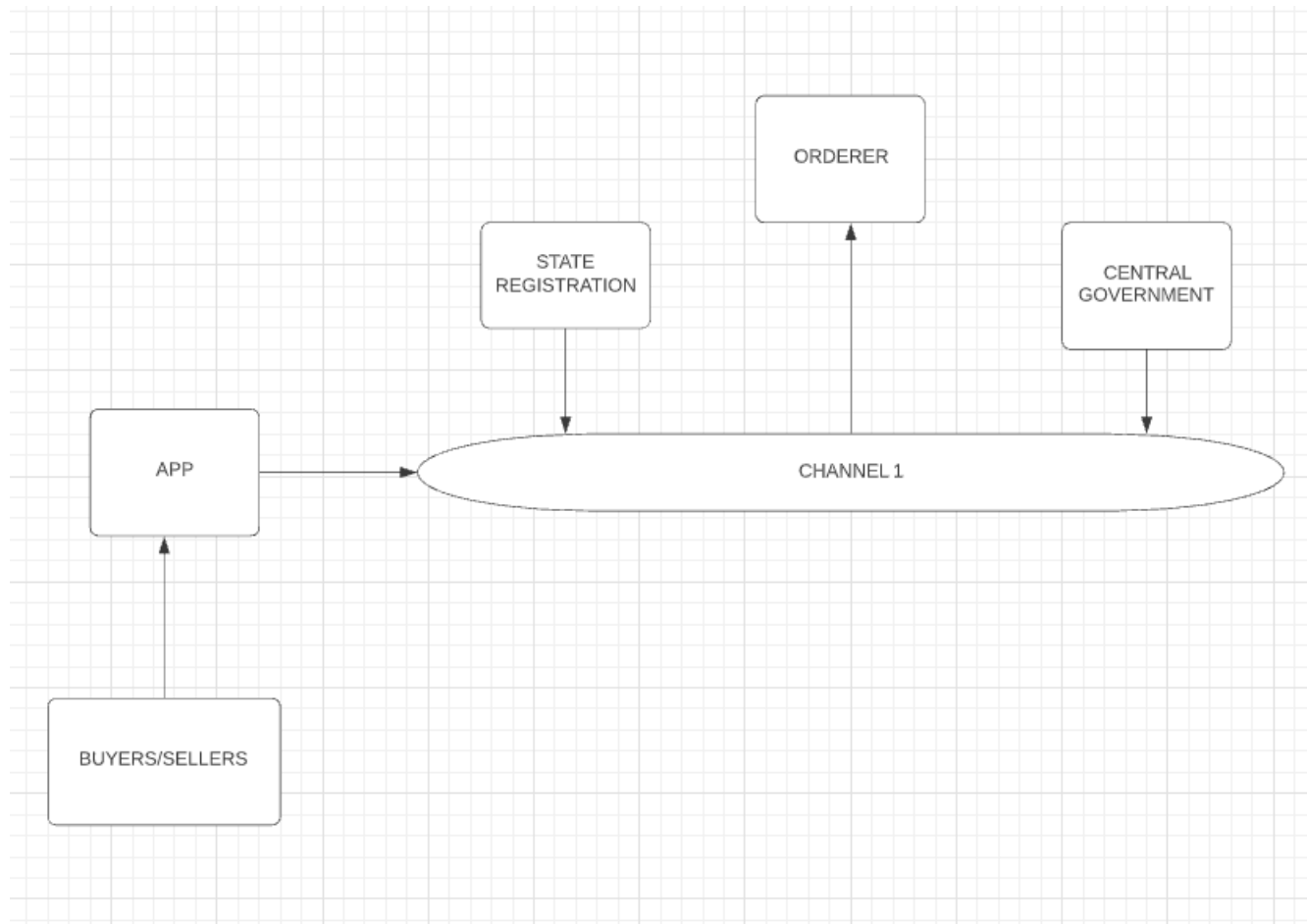
Proposed System Architecture

Figure 6.2: New system (After migration), each step is function of smart contract.

Prototype Design Demonstration

Implementation Status

- Basic functionalities of smart contract are done
- Working on remaining functionlities

Status of Paper Draft & Targeted Conference

- Targeted Conferences
  - IEEE 2021 International Conference on Advances in Computing, Communication and Control, 3rd and 4th December 2021
  - IEEE International Conference on Computational Intelligence and Computing Applications, 26th and 27th November 2021

Thank You...!!