

PRACTICAL-2

AIM : To perform the system analysis task for your system:

2.1 SRS

2.2 SPMP

2.1 SRS

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1. Introduction:

1.1 Purpose

An integrated solution called Land Records Management System (LRMS) provides data on land records to all organisations and Regional Stations. The system keeps an online record of the total area of the land, information on how it is used (for example, farmland, research areas, buildings, sports fields, parks, and green spaces, as well as vacant land), the date that ownership was acquired, whether it is freehold land or leased, how long the lease is for, when it begins, when it ends, and other details.

1.2 Scope

This product will be used to store and retrieve the land records in more secured way. It will be used for Secured transfer of the property & land registry.

1.3 Overview

Application of Blockchain technology for digitization of land records in more secured way.

1.4 Additional Information

1. Data recorded cannot be altered or deleted.
2. Entire blockchain will be recorded at a particular instance of time.
3. Easily accessible for participants, they can view or add data in the chain.
4. It will be centralized blockchain model (permissioned model).

2. General Description

As the system will work on permissioned model, there are very less chances of unauthorised access and the system will be more synchronized.

3. Functional Requirements :

This section provides the requirement of product. The project will require Node.js, React.js & web3.js and for database MYSQL will be running. Functions are:

Authorization or a sign up page based on Organization and persons involved

Authorization & Validation of person based on DIDs (Decentralized Identifiers)

Issue Land records (Land record submission page)

Availability of land records (Display page, Get land Records and information)

Online Mutation based on Smart contracts (Selling and buying page)

Update of land records (Add new data)

4. Interface Requirements :

The user interface must be highly intuitive or interactive because there will not be limited assistance for the user who will be working with LRMS.

4.1 Hardware Interface

- 4.1.1 System for computerised land records
- 4.1.2 Automated & Automatic mutation
- 4.1.3 System for updating land records
- 4.1.4 Integration between Textual & spatial records
- 4.1.5 Inter-connectivity between Revenue & Registration

4.2 Software Interface

- 4.2.1 Any Window or Linux OS
- 4.2.2 MYSQL must be installed on the system
- 4.2.3 Any latest browser (Google Chrome, Microsoft Edge) for running website

5. Performance Requirements

None

6. Design Constraints

Memory restriction

7. Other non-Functional :

7.1 Security

Land Records will be secured based on hashing , public and private Key cryptography (RSA model), Secured transfer of assets with the help of smart contracts.

7.2 Reliability

The product should be highly reliable.

7.3 Availability

Any Information related to the land will be retrieved easily from the website by the authorized user.

7.4 Maintainability

The website can be modified, updated, fixed, Updated, extended .

7.5 Reusability

It can operate on any PC having Windows or Linux based system.

8. Preliminary Schedule

This must be completed within 1 year.

9. Cost Estimation

Rs.2400000 to Rs. 5000000