SOFTWARE REQUIREMENTS SPECIFICATION (SRS)

For

REAL ESTATE MARKETPLACE MANAGEMENT

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1. INTRODUCTION	
1.1 PURPOSE	The purpose of this document is to create an online platform for those people who want to build their dream house or buy a flat to bring all the necessary elements like plots, flats, engineers, architects, brick kilns companies, workers, construction companies, home decorators companies all on one platform.
1.2 DOCUMENT CONVENTIONS	This document uses some conventions such as Database, Distributed Database, Entity Relationship.
1.3 INTENDED AUDIENCE	This project is an attempt to bring people from all professions involved in real estate on one platform. When any one needs people of any profession like developers, civil engineers, architects, carpenters, painters, or need any product like bricks, paint, cement, home decoration materials etc. they can easily get through this system and can communicate through our chatting system. This Project is useful for every person who wants to build a home or decorate their home.
1.4 PROJECT SCOPE	The purpose of this online system is to create a platform to easily find people of all professions involved in real estate and customers can easily access all the materials and people of all professions they need for their new house or to decorate their house. We will have a large database server that will support all company information, service provider information and their services or products. This online system has a user registration and authentication system, Document management system, communication system etc. On the other hand, customers can provide feedback or reviews of services and products. Above all, we hope to provide a comfortable customer experience with the best cost available.
1.5 REFERENCES	1. https://krazytech.com/projects 2. Fundamentals of database systems by ramez elmarsi and shamkant b.navathe
2. OVERALL DESCRIPTION	
2.1 PRODUCT PERSPECTIVE	A distributed database system stores the following information. Service Providers Details: This includes service provider id, name, address and phone number, type of work, fees etc. Product Seller Details: This includes seller id, name, address and phone number, products information etc. Customer Details: This includes customer id, name, address and phone number. This information may be used to maintain systems and records for any emergency or other information.
2.2 PRODUCT FEATURES	The major features of this system is a large database system and Entity-relationship. Other key features are property listings, Equipment and Inventory Management, Communication

<table>
<tr><td></td><td colspan="2">and Collaboration, User registration and authentication, safety management, best product suggestions , Resource allocation etc.</td></tr>
<tr><td>2.3 USER CLASSES AND FEATURES</td><td colspan="2">Users of the system should be able to retrieve the required information from the database. The system will support three types of user privileges: Customer, Service Provider, Product Seller. Customers will have access to customer functions and Service Providers & Sellers will have access to their dashboard management functions.
Customers Functions:
Registration and account management
Get access of required information
Browsing and searching
Shopping cart and checkout
Payment and order management
Product reviews and ratings
Customer support
Product Seller Function:
Product management
Order management
Inventory management
User management
Marketing and promotions
Delivery and Logistics Staff
Order fulfillment
Get customer review and rating
Service Provider Function:
Registration and account management
Dashboard management
Inventory management
Marketing and promotions
Get review and rating</td></tr>
<tr><td>2.4 OPERATING ENVIRONMENT</td><td colspan="2">The operating environment for this system is as listed below.
Distributed database
Operating system: Android, IOS, Windows
Database: Firebase
Platform: Flutter/ Dart</td></tr>
<tr><td>2.5 DESIGN AND IMPLEMENTATION CONSTRAINTS</td><td colspan="2">The global schema, fragmentation schema, and allocation schema.
SQL commands for the above queries/applications
Property Information Accuracy
Implement the database at least using a centralized database management system.</td></tr>
<tr><td colspan="3">3. SYSTEM FEATURES</td></tr>
<tr><td>3.1 FUNCTIONAL REQUIREMENTS</td><td>3.1.1 User Registration</td><td>Users can create accounts and provide necessary personal information.</td></tr>
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	and Authentication	• Users can log in securely using their credentials. • Password reset functionality is available.
	3.1.2 Listing and Search	• Property owners or administrators can add and manage property listings. • Users can search and browse property and product listings based on criteria such as location, price range, property type etc. • Detailed information, including description, photos, floor plans, and virtual tours, is displayed.
	3.1.3 Communication and Notifications	• Customers can communicate with service providers, product sellers or property sellers through messaging or chat functionality. • Email or push notifications are sent to users for important updates, such as lease renewals, maintenance requests, or payment reminders.
	3.1.4 Document Management	• Product-related documents can be stored, accessed, and organized. • Version control and document sharing capabilities are available.
4. EXTERNAL INTERFACE REQUIREMENTS		
4.1 USER INTERFACES		• The app should have a user-friendly and intuitive interface. • It should be compatible with various devices and screen sizes, including desktops, laptops, tablets, and smartphones. • The User Interface should follow established design guidelines and provide a consistent user experience.
4.2 HARDWARE INTERFACES		• Android/ IOS Device or Computer • Internet-Connectivity • GPS
4.3 SOFTWARE INTERFACES		• Application Programming Interfaces • Web Services • Messaging Services • Mapping and Geolocation Services • Operating System/ Browser
4.4 COMMUNICATION INTERFACES		• Messaging Interface • Push Notifications • Real-Time Communication
5. NONFUNCTIONAL REQUIREMENTS		
5.1 PERFORMANCE	The system should be highly responsive and perform efficiently, even with a large number of concurrent users or extensive data. It should have minimal loading times, quick search results, and smooth navigation between screens.	

5.2 SECURITY	• This system should implement security measures, including encryption, secure data storage, and secure user authentication. • Access to sensitive information and functionality should be restricted based on user roles and permissions.
5.3 USABILITY	• The system should have an intuitive and user-friendly interface. • Proper navigation, clear labels, and contextual help should be provided to aid users in using the app effectively.
5.4 DATA INTEGRITY AND CONFIDENTIALITY	• The system must ensure the accuracy, consistency and integrity of the data stored. • It should prevent data corruption or unauthorized modification. • It must comply with relevant data protection regulations and maintain the confidentiality of user information.
5.5 PERFORMANCE MONITORING	• The app should include performance monitoring and logging capabilities to track system performance, identify bottlenecks, and optimize resource utilization. • It will provide administrators with relevant performance metrics and logs for troubleshooting and system optimization.
5.6 MAINTAINABILITY	• The app should be designed and developed in a modular and maintainable manner. • It should have clean code, proper documentation and well-defined architecture to facilitate future improvements, bug fixes and system updates.