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**MAZ Realty**

mazrealty.live

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# “Chapter One”

# 1.1 OVERVIEW

MAZ Realty is a mobile application that helps users in buying, selling, renting, or managing properties. These applications provide a convenient and user-friendly interface for real estate professionals and individuals looking for properties.

# 1.2 Objectives

Project Activities to Achieve Purpose

Market Research and Analysis (Week 1-2):

Conduct thorough market research to identify target demographics, user preferences, and competitors in the real estate app market.

Analyze market trends, user behaviour, and emerging technologies to inform the development of MAZ Realty.

Define Project Scope and Requirements (Week 3-4):

Collaborate with stakeholders to define project goals, objectives, and success criteria.

Identify specific features, functionalities, and user stories required to meet the needs of real estate professionals and individuals.

Design and Prototyping (Week 5-6):

Develop wireframes, user interface designs, and interactive prototypes for the MAZ Realty mobile application.

Incorporate user feedback and iterate on designs to ensure intuitive navigation, aesthetic appeal, and seamless user experience.

Backend Development (Week 7-10):

Set up the backend infrastructure using Node.js and Express.js for server-side logic and API development.

Integrate MongoDB database for storing user data, property listings, subscriptions, and other relevant information.

Frontend Development (Week 11-14):

Implement frontend components using Flutter and Dart to create a cross-platform mobile application for iOS and Android devices.

Integrate user authentication, property search functionality, user profile management, and subscription services into the front end.

Payment Integration (Week 15-16):

Integrate the Stripe API for handling subscription payments, one-time payments, and payment processing within the MAZ Realty application.

Implement secure payment flows, handle payment confirmation, and ensure PCI compliance to safeguard user financial information.

Testing and Quality Assurance (Week 17-18):

Conduct comprehensive testing of the MAZ Realty application to identify and address any bugs, errors, or usability issues.

Perform functional testing, user acceptance testing, and compatibility testing across various devices and platforms.

# 1.3 Purpose

The purpose of MAZ Realty is to revolutionize the real estate industry by providing a mobile application that facilitates seamless property transactions for both real estate professionals and individuals. The overarching goals of MAZ Realty are:

Enhanced Accessibility: To provide users with convenient access to a wide range of property listings, enabling them to easily search, browse, and find properties that meet their specific requirements and preferences.

Streamlined Transactions: To simplify and streamline the process of buying, selling, renting, or managing properties by offering intuitive features and functionalities within the MAZ Realty application.

Empowered Decision-Making: To empower users with comprehensive property information, including detailed descriptions, photos, videos, virtual tours, and real-time notifications, facilitating informed decision-making throughout the property transaction process.

Improved User Experience: To deliver a user-friendly and intuitive interface that enhances the overall user experience, promotes engagement, and fosters trust and satisfaction among MAZ Realty users.

Market Disruption: To disrupt the traditional real estate market by leveraging technology, data analytics, and innovative solutions to address pain points and inefficiencies in property transactions.

Business Growth: To drive business growth and success by attracting a large user base, generating revenue through subscription services and advertising, and establishing MAZ Realty as a leading player in the real estate technology sector.

Customer Satisfaction: To prioritize customer satisfaction and loyalty by continuously refining and enhancing the MAZ Realty application based on user feedback, market trends, and technological advancements.

By fulfilling these purposes, MAZ Realty aims to become the go-to platform for individuals and professionals involved in property transactions, revolutionizing the way real estate is bought, sold, rented, and managed in the digital age.

# “Chapter Two”

competitors features

# “Chapter Three”

Requirements and diagrams

# Requirement

* **Function Requirement:**

1. **User Registration and Authentication:**

* Users should be able to create an account and log in securely.
* User authentication should be implemented to ensure authorised access to user-specific features and data.

1. **Property Listings:**

* Users should be able to view a list of available properties for sale or rent.
* Each property listing should display relevant details such as price, location, property type, number of bedrooms/bathrooms, and square footage.
* Users should be able to filter and sort property listings based on various criteria, such as price range, property type, location, etc.

1. **Property Details:**

* Users should be able to view detailed information about a specific property, including additional photos, property features, amenities, and contact information for the seller/agent.
* Users should have the option to save or bookmark properties for future reference.

1. **Property Search:**

* Users should be able to perform advanced searches based on specific criteria, such as property type, price range, location, number of bedrooms/bathrooms, etc.

1. **User Interaction:**

* Users should be able to contact sellers/agents for inquiries about a property.

1. **Property Price Prediction:**

* Users can predict the price of the property they want by providing details about it.
* **Non-Functional Requirements:**

1. **Security:**

* User passwords should be securely stored using encryption techniques.
* User authentication and authorization should be implemented to ensure data privacy and prevent unauthorised access.
* User inputs and data should be validated and sanitised to prevent security vulnerabilities.

1. **Usability:**

* The user interface should be intuitive, visually appealing, and easy to navigate.
* The application should be responsive and compatible with different devices and screen sizes.

1. **Maintainability:**

* The codebase should be well-organized, modular, and adhere to coding best practices.
* Proper documentation should be provided to aid in future maintenance and enhancements.

1. **Performance:**

* The system should handle a large volume of concurrent users and property data without significant degradation in response times.
* Property search and listing retrieval should be fast and efficient

**More About Project**

We'll use a client/server architecture, where a single server is deployed on a cloud provider and serves HTTP traffic from public endpoints.

1. **Client Side:**

* We'll use **Flutter.**

1. **Server Side:**

* We’ll use **Node.js** with **Express** framework and **typescript**.
* We’ll use **MongoDB** as the main database and **Redis** for caching.

1. **Cloud:**

* We’ll use **Render** during development.
* On production, we’ll use **DigitalOcean.**

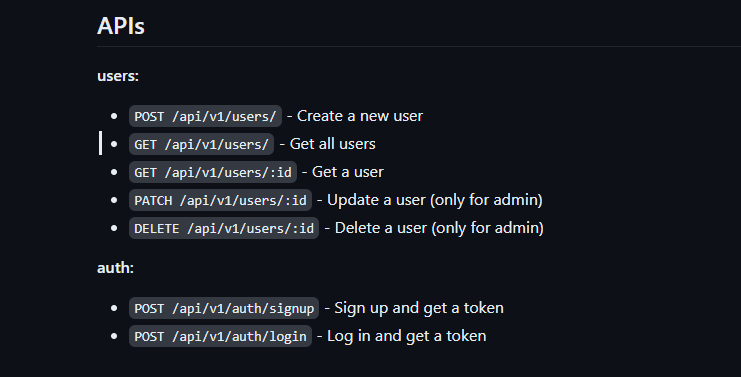
**Team Member:**

* **Mohamed Hamdy Shebl**
* **Mohamed Nashaat Monir**
* **Mohamed Shaaban Zakaria**
* **Ali Hamada El-badry**
* **Ziad Ashraf**

# “Chapter Four”

Implementation. And test (optional).

1. **Backend code:** [**Server**](https://github.com/Adosh74/Graduation-Project)
2. **Public development URL:** [**https://mazrealty.onrender.com/**](https://mazrealty.onrender.com/)

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