Mechanics Assistance App Documentation

Introduction

The Mechanics Assistance App is an innovative mobile application designed to connect users with nearby mechanics efficiently. The app provides a platform for users to locate mechanics based on proximity and ratings while allowing mechanics to seamlessly showcase their services and connect with potential customers. The application is specifically developed for iOS devices, combining modern design principles and robust backend infrastructure to ensure a smooth and intuitive user experience.

Objective

The primary objective of the Mechanics Assistance App is to facilitate quick and reliable access to professional mechanics for users in need of vehicle repair and maintenance services. The app bridges the gap between mechanics and users by providing detailed profiles, transparent reviews, and easy navigation.

Features

For Mechanics:

- **Account Creation:** Mechanics can create personalized accounts.
- **Profile Management:** Upload profile pictures and provide detailed service descriptions.
- **Workshop Location:** Add workshop locations, displayed on a map for easy navigation.
- **Contact Information:** Input phone numbers, email addresses, and operating hours for user convenience.

For Users:

- **Account Creation:** Personalized accounts for a tailored experience.
- **Mechanic Search:** Locate nearby mechanics or filter by highest ratings.
- **Mechanic Profiles:** Access detailed profiles, including services, reviews, and ratings.
- **User Reviews:** View authentic ratings and reviews to make informed decisions.

Technologies Used

- **Frontend:** SwiftUI for building an intuitive and user-friendly interface.
- **Backend:** Firebase for secure and efficient data storage and retrieval.

Installation Guide

1. Ensure you have Xcode installed on your macOS device.
2. Clone the project repository using the provided link in the email.
3. Open the project in Xcode.
4. Configure Firebase by downloading the GoogleService-Info.plist file from the Firebase console and adding it to the project.
5. Build and run the application on your iOS device or simulator.

Usage

1. **Mechanics:**
   - Sign up and create an account.
   - Add a profile picture, service descriptions, workshop location, contact details, and operating hours.
2. **Users:**
   - Sign up and create an account.
   - Search for nearby mechanics or browse through the highest-rated ones.
   - View mechanic profiles, read reviews, and access contact information.

Code Structure

- **Frontend:** The app leverages SwiftUI to develop a declarative and visually appealing user interface.
- **Backend:** Firebase handles data storage and management, ensuring secure and efficient communication between users and mechanics.

Future Scope

- **Cross-Platform Availability:** Expand to Android devices for broader accessibility.
- **In-App Booking:** Introduce a feature for users to book appointments directly through the app.
- **Push Notifications:** Notify users of updates, special offers, or service reminders.
- **Enhanced Filtering:** Add advanced filters based on price range, availability, and specific repair needs.

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A screen recording showcasing the app's functionality is attached to the email along with the project link.