

Farm Machinery Rental App Development Project

Problem Statement:

Develop an intuitive and feature-rich Flutter app for a farm machinery rental platform. The app should facilitate farmers in renting out their farming equipment to other farmers. Key features should include machinery listing, search functionality, detailed equipment information, booking options and a seamless communication interface.

Software Requirements:

Flutter SDK: To build a cross-platform mobile application.

Dart Programming Language: Primary language for Flutter development.

Integrated Development Environment (IDE): Use either Visual Studio Code or IntelliJ IDEA for efficient development.

Version Control System: Employ Git for version control and collaboration.

Flutter Packages:

provider: For state management.

dio: For making HTTP requests to backend services.

firebase_core, firebase_auth: For authentication and user management.

cloud_firestore: To integrate Firestore database for storing equipment and user data.

geolocator: To incorporate location-based services.

image_picker: For uploading images of machinery.

Firebase Account: Set up a Firebase account for cloud-based services.

Database: Utilize Firebase Firestore for storing and retrieving data.

Hardware Requirements:

Computer:

Processor: Intel i5/i7/i9 or equivalent AMD Processor.

Memory: 8 GB RAM minimum, 16 GB or more recommended.

Disk Space: Minimum of 10 GB free disk space, SSD preferred.

Operating System: Windows (7 SP1 or later), macOS (latest version), or Linux.

Mobile Devices (for testing):

iOS: iPhone or iPad running the latest iOS version.

Android: Android phone or tablet with a recent Android version.

Network Connection:

A stable internet connection is essential for downloading dependencies, accessing APIs, and testing network-related functionalities during development and testing phases.