PROJECT TITLE:- Uplifting the Farmer through a Connected Ecosystem

Batch Number:117

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Introduction

The agricultural sector has long faced challenges with transparency, efficiency, and market accessibility, leaving farmers without direct avenues to reach consumers and maximize their profits. This project aims to empower farmers by bridging the gap between them and consumers, creating an ecosystem that ensures fairness, trust, and accessibility. By integrating technology with agriculture, this platform provides farmers with tools to manage their products, streamline payments, and access beneficial schemes. This will uplift farmers' livelihoods and foster a sustainable farm-to-consumer relationship, enhancing the overall agricultural economy.

Literature Review

Year	Author/Link	Title	Outcomes
15-16 November 2018	Pranav Shriram; Sunil Mhamane	Android App to Connect Farmers to Retailers and Food Processing Industry	The platform incorporates technology-driven solutions like inventory management and seamless UPI payments, addressing agricultural and marketplace inefficiencies..
16-18 September 2022	L.A. Imalka; K.G.A. Gunawardana; K.M.S.K. Kodithuwakku; H.K.E. Arachchi; S.M.B. Harshanath	Farming Through Technology Driven Solutions For Agriculture Industry Ceylon E-Agro mobile application-find technology based solutions for agricultural problems	This unified platform integrates farmer inventory management, scheme notifications, secure payments, and user interaction for seamless, efficient operations.
16-17 December 2021	R. Ranjana; T. Subha; Pravin Kumar P; Sneka L; Varsha S; Jothishree N	Integrated App for Farmers - Agreliance	Direct payments via UPI reduce intermediary costs, maximizing profits. Future expansions include vehicle renting, fertilizer management, and land leasing.
|30-31 March 2019	Niket Chauhan; M. Krishnakanth; G. Praneeth Kumar; Prerna Jotwani; Utkarsh Tandon;	Crop Shop – An application to maximize profit for farmers	The platform's real-time interactions and secure transactions can be adapted to enhance safety systems, ensuring rapid responses and support.

INPUT DESIGN

The input design is the link between the information system and the user. It comprises the developing specification and procedures for data preparation and those steps are necessary to put transaction data in to a usable form for processing can be achieved by inspecting the computer to read data from a written or printed document or it can occur by having people keying the data directly into the system. The design of input focuses on controlling the amount of input required, controlling the errors, avoiding delay, avoiding extra steps and keeping the process simple. The input is designed in such a way that it provides security and ease of use while retaining privacy. Input Design considered the following things:

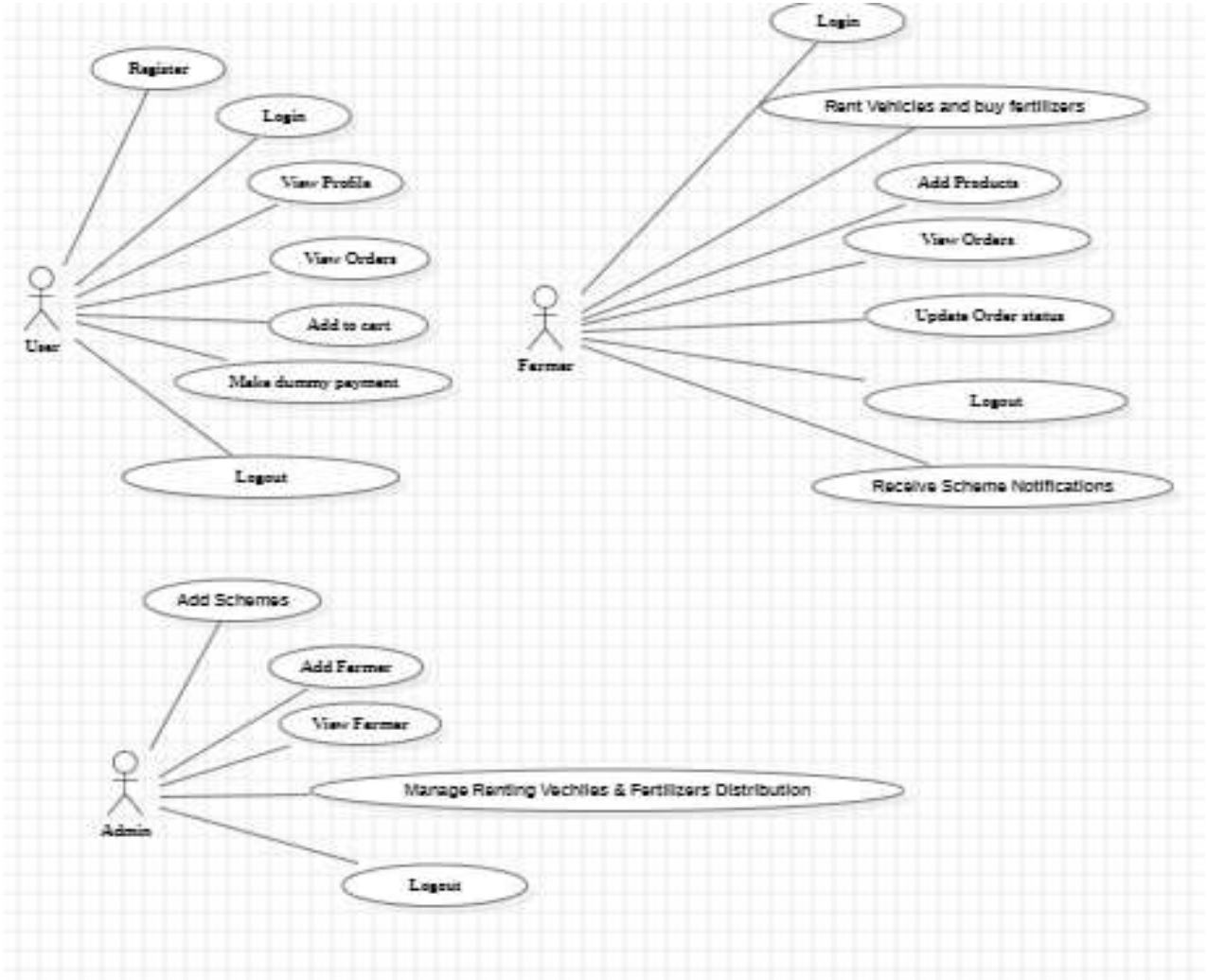
Objectives

1. Input Design is the process of converting a user-oriented description of the input into a computer-based system. This design is important to avoid errors in the data input process and show the correct direction to the management for getting correct information from the computerized system.

2. It is achieved by creating user-friendly screens for the data entry to handle large volumes of data. The goal of designing input is to make data entry easier and to be free from errors. The data entry screen is designed in such a way that all the data manipulations can be performed. It also provides record viewing facilities.

3. When the data is entered it will check for its validity. Data can be entered with the help of screens. Appropriate messages are provided when needed so that the user will not be in maize of instant. Thus the objective of input design is to create an input layout that is easy to follow

USE CASE DIAGRAM



Timeline of Project

Review	Start Date	End date
Review 0	9/12/2024	9/18/2024
Review 1	9/24/2024	9/27/2024
Review 2	10/15/2024	10/21/2024
Review 3	11/19/2024	11/22/2024
viva voce	12/17/2024	12/20/2024

Expected Outcomes

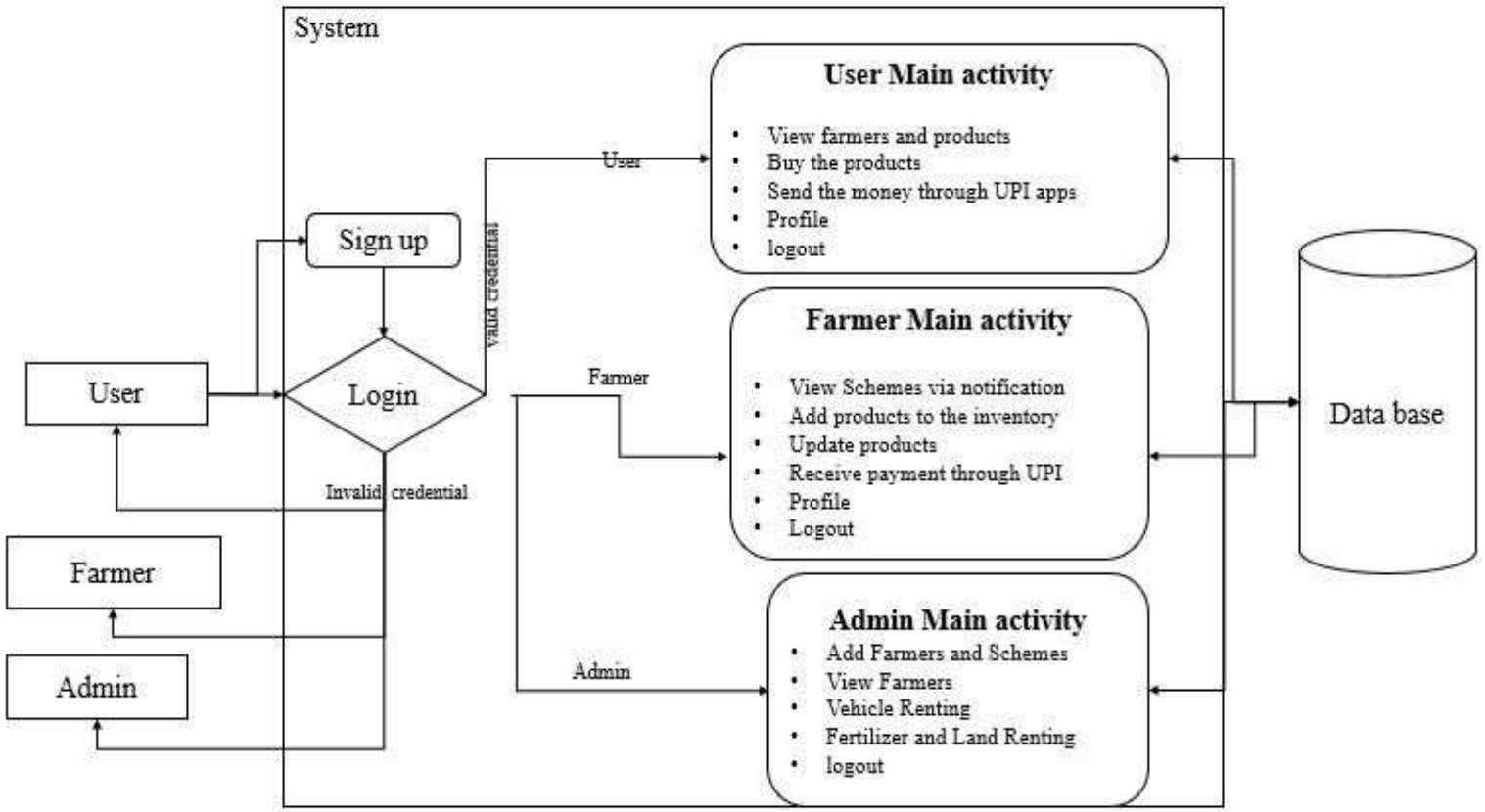


Figure: work Flow of Proposed system

Features

- **Application framework** enabling reuse and replacement of components
- **Dalvik virtual machine** optimized for mobile devices
- **Integrated browser** based on the open-source Web Kit engine
- **Optimized graphics** powered by a custom 2D graphics library; 3D graphics based on the OpenGL ES 1.0 specification (hardware acceleration optional)
- **SQLite** for structured data storage
- **Media support** for common audio, video, and still image formats (MPEG4, H.264, MP3, AAC, AMR, JPG, PNG, GIF)
- **GSM Telephony** (hardware dependent)
- **Bluetooth, EDGE, 3G, and WIFI** (hardware dependent)
- **Camera, GPS, compass, and accelerometer** (hardware dependent)
- **Rich development environment** including a device emulator, tools for debugging, memory and performance profiling, and a plugin for the Eclipse IDE

References

- [1] Pranav Shriram; Sunil Mhamane | Android App to Connect Farmers to Retailers and Food Processing Industry | 15-16 November 2018
- [2] L.A. Imalka; K.G.A. Gunawardana; K.M.S.K. Kodithuwakku; H.K.E. Arachchi; S.M.B. Harshanath | Farming Through Technology Driven Solutions For Agriculture Industry Ceylon E-Agro mobile application-find technology based solutions for agricultural problems | 16-18 September 2022
- [3] R. Ranjana; T. Subha; Pravin Kumar P; Sneka L; Varsha S; Jothishree N | Integrated App for Farmers - Agreliance | 16-17 December 2021
- [4] Niket Chauhan; M. Krishnakanth; G. Praneeth Kumar; Prerna Jotwani; Utkarsh Tandon; | Crop Shop – An application to maximize profit for farmers | 30-31 March 2019
- [5] Aina Marie Joseph; Nurfauza Jali; Amelia Jati Robert Jupit; Suriati Khartini Jali | eMarket for Local Farmers | 23-25 November 2021

Thank You