

# AGRARYANS: Farm Equipment Rental System/Based on Agriculture

CHELLA ASHOK KUMAR<sup>1</sup>, Dr. M. SARAVANAMUTHU<sup>2</sup>

<sup>1</sup>PG Research Scholar, Dept. of Computer Applications, Madanapalle Institute Of Technology And Science, Andhra Pradesh, India

<sup>2</sup>Asst. Professor, Dept. of Computer Applications, Madanapalle Institute Of Technology And Science, Andhra Pradesh, India

\*\*\*

**Abstract** - This study is based on the concept of equipment rental. The E-commerce website has been improved as part of this project to bridge the gap between the farmer and the vendor on a lease basis. Only the user has access to the main programme after going through the login procedure; only the user may pick and book resources. This paper is jam-packed with information about the products. Farmers will benefit from this paper. The main goal of this website is to manage a variety of agricultural machinery, including Harvester, JCB, Tractor, Pickup, Rotor, and other agricultural machinery. End users will find the proposed system simple to use. The vendor and farmer can change their previous information on the internet.

**Key Words:** Hiring, Equipments, E-Commerce, Rental duration, Charges, etc

## 1. INTRODUCTION

Farmers nowadays do not have the financial means to purchase implements. However, for farmers, the instruments are critical. As a result, we created a single website. We are attempting to provide the farmer or user with a solution that allows them to rent the goods by the hour. The farmer must create an account on this website. Following that, the farmer or user must enter a username and password. The farmer may now examine the equipment that is available as well as the renting process. Extensive services that ensure that equipment is delivered on time and when it is needed, with little resource waste. Our website includes a section for each farmer and dealer to submit a unique ID, as well as registered equipment.

- PhonePe
- Google pay
- Paytm

## 2. LITERATURE REVIEW

Previously, when a farmer required equipment, he went to a hardware store, where he found all types of equipment. In a hardware store, each piece of equipment will cost more. However, not every farmer has enough money to purchase all of the equipment needed for farming.

## 2.1 Disadvantages

- ✓ It can be exhausting and time-consuming.
- ✓ Sometimes taking more time.

## 3. PROPOSED SYSTEM

This web-based rental system for form equipment was extremely user-friendly. This website contains complete and up-to-date equipment data. Users can access the website by entering their user name and password. Users can access this website at any time. We are primarily designing this article for disadvantaged farmers. They are unable to purchase all types of equipment as a result of this. As a result, we are attempting to provide a low-cost rental service.

### 3.1 Front-End Development

HTML and CSS were used to create the front page. The language used to create application web pages is called hypertext tagging language. The page is a static HTML document that is stored on a web server. Cascading Style Sheets were used to accomplish this (CSS). CSS is a style sheet language that describes a document's appearance and format. Class files are related to these CSS files. On web pages, we're employing DJANGO FRAME WORK for this project.

### 3.2 Back-End Development

For the retrospective procedure in this paper, we employ PYTHON technology. We sometimes need to do many operations while using Python logics. Back-end backup support is provided via the Database Management System. A database management system is software that allows an administrator to create a website, as well as add, delete, change, and update tables. Tables can carry a variety of data, such as total numbers, changeable characters, and so on. We choose SQL SERVER to host the site in our application.

A database management system is SQL SERVER. The main reason is that the SQL SERVER development project has released its source code under the General Public License (GNU), which is an open source web application.

### 3.3 Database Design

Website design is one of the most significant and difficult undertakings. When a seller or farmer registers on the site, the information they provide is saved on the site. The website stores products with copyright, descriptions, and images. In addition, any installed goods that the administrator reviews will be updated on the website. As a result, the system is inextricably linked to the website.

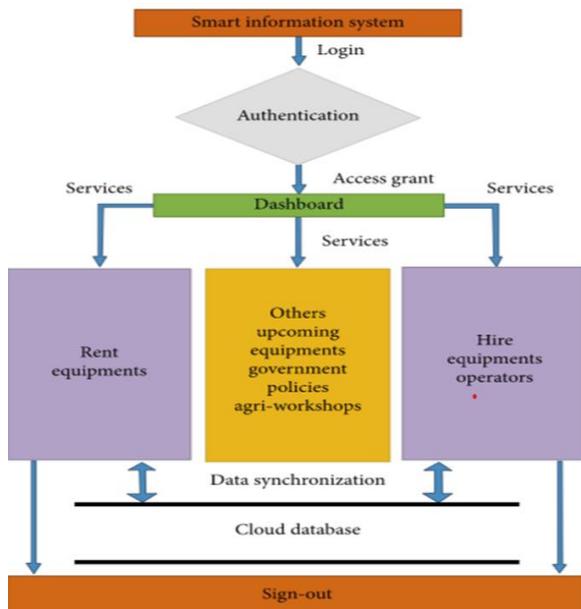


Fig-1 System Architecture

### 3.4 Advantages

- ✓ Use anywhere
- ✓ Low cost rent basis

### 4. Modules

This system is designed (or) developed for the help of the administrators and the marriage parties who wants to register and to get the marriage certificates properly and quickly. This application has the following Modules.

- Admin Module
- User Module
- Equipment Details

#### 4.1 Admin

- Admin login with the valid username and password.
- After that he can add and view Categories, Products, Service Providers. When adding Service Providers, the administrator must specify their location.

- Admin can also have the access to view the feedback from the user about service provider and he can also block him.

#### 4.2 User

- The user must be registered and login with their Email and Password.
- After logging, the user will select the Category and Service and send a query to the Service Provider.
- After the query is sent, the user will wait for the service provider solution and if he satisfies that is okay if not he can give feedback to admin.

#### 4.3 Equipment Details

Every working field the equipments are playing major role. Same in agriculture field also the equipments are very important that's why we are providing all kind of equipments with low rent price for the poor farmers.

### 5. SCREENSHOTS

After executing the above proposed system, we got the following results.

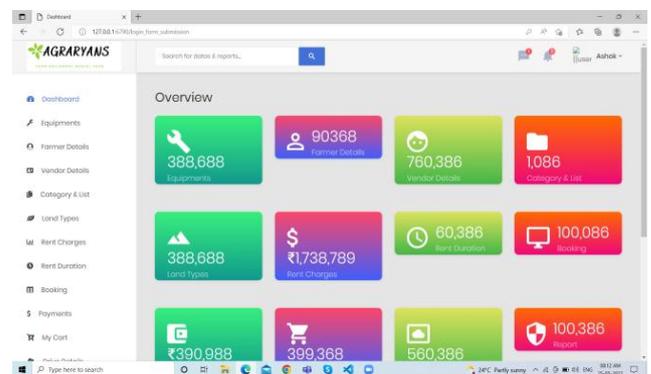


Fig 5.1: Dashboard Screenshot

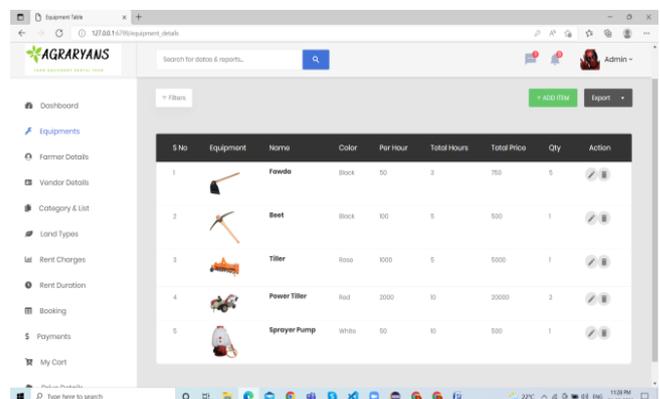


Fig 5.2: Equipment Details

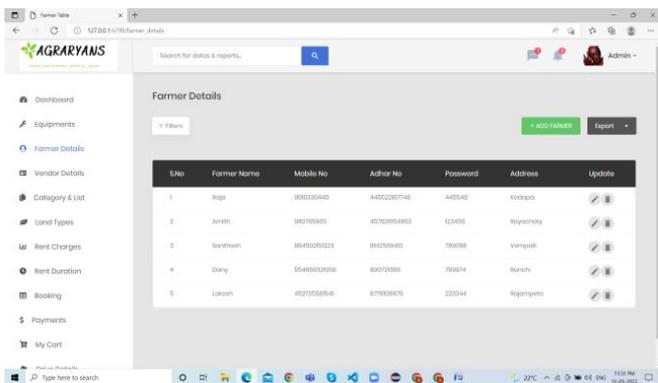


Fig 5.3: Farmer Details

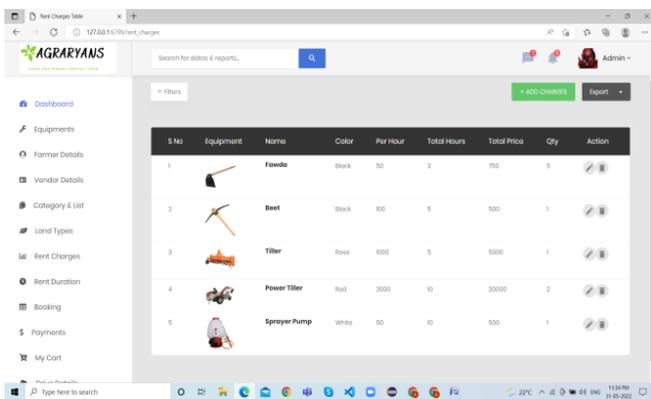


Fig 5.4: Rent Duration

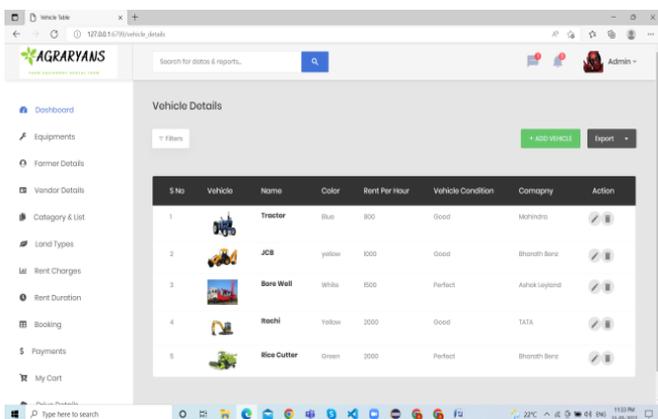


Fig 5.5: Vehicle Details

## REFERENCES

- [1] R. Carelli D. Herrera and S. Tosetti, "Agriculture Autonomous Vehicle Dynamic Modeling and Identification." 2016.
- [2] Chang-Ho Kang, Seung-Yeoub Shin, "Agricultural Machinery Rental Business Management System on the Web", 2014.
- [3] DAVID KAHAN, FRED ZAAL, ROGER BYMOLT, "Thinking Outside the Plot: Case Studies in East Africa Provide Insights on Small-Scale Mechanisation" 2017.
- [4] Hilmi, Martin, "Agri-food value chain small-scale actors Agricultural mechanisation services are available for rent." 2018.
- [5] S.Y.Jung, "web-based maintenance and management systems", 2011.
- [6] Krunal Bagaitkar, Khoshant Lande "Tractor Hiring Application for Farmers".2018.
- [7] MUHAMMAD AYAZ, MOHAMMAD AMMAD-UDDIN, MOHAMMAD AMMAD. 'Toward Making the Fields Talk: Internet-of-Things(IoT)-Based Smart Agriculture.',2019.

## 6. CONCLUSION

Website design is one of the most significant and difficult undertakings. When a seller or farmer registers on the site, the information they provide is saved on the site. The website stores products with copyright, descriptions, and images. In addition, any installed goods that the administrator reviews will be updated on the website. As a result, the system is inextricably linked to the website.