

EFFICIENT FARMING

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ABSTRACT

It is believed that the process of precision agriculture is crucially essential. The economic condition of Indian farmers is abominable and farming without the correct types of equipment is a big hurdle, manual work is also a big headache for farmers because it takes a lot amount of hard work and time, that too in inefficient yielding. Instead of working with the machines and equipment would benefit them more rather working manually, but the next big problem is the machines and equipment cost a large amount of money, also most of the farmers couldn't get afford the perfect pieces of equipment. The local solution of getting the equipment is from the rentals but most of the time farmers in their naive attitude get fooled by the rentals due to lack of knowledge to deal and cop the correct rate.

Even rentals have to cope with low business because of less reach with the farmers, so as the farmers are not very known to the rentals and especially with the rentals that are emerged in a recent period. The goal of our work is to create and develop an environment for both farmers and rentals, includes mending the corresponding problems. We are developing an approach (Efficient Farming Application, EFA) that will be available commercially for surveying manufacturers, providers of equipment and services, agricultural consultants and farmers. Rentals will get an opportunity to flash their business online that gonna benefit farmers in a way were farmers will be getting all the essential information of equipment and the valuable rate just one click away. In addition, details of the equipment will be of their areas and locations.

KEYWORDS: Efficient Farming Application, EFA.

I. INTRODUCTION

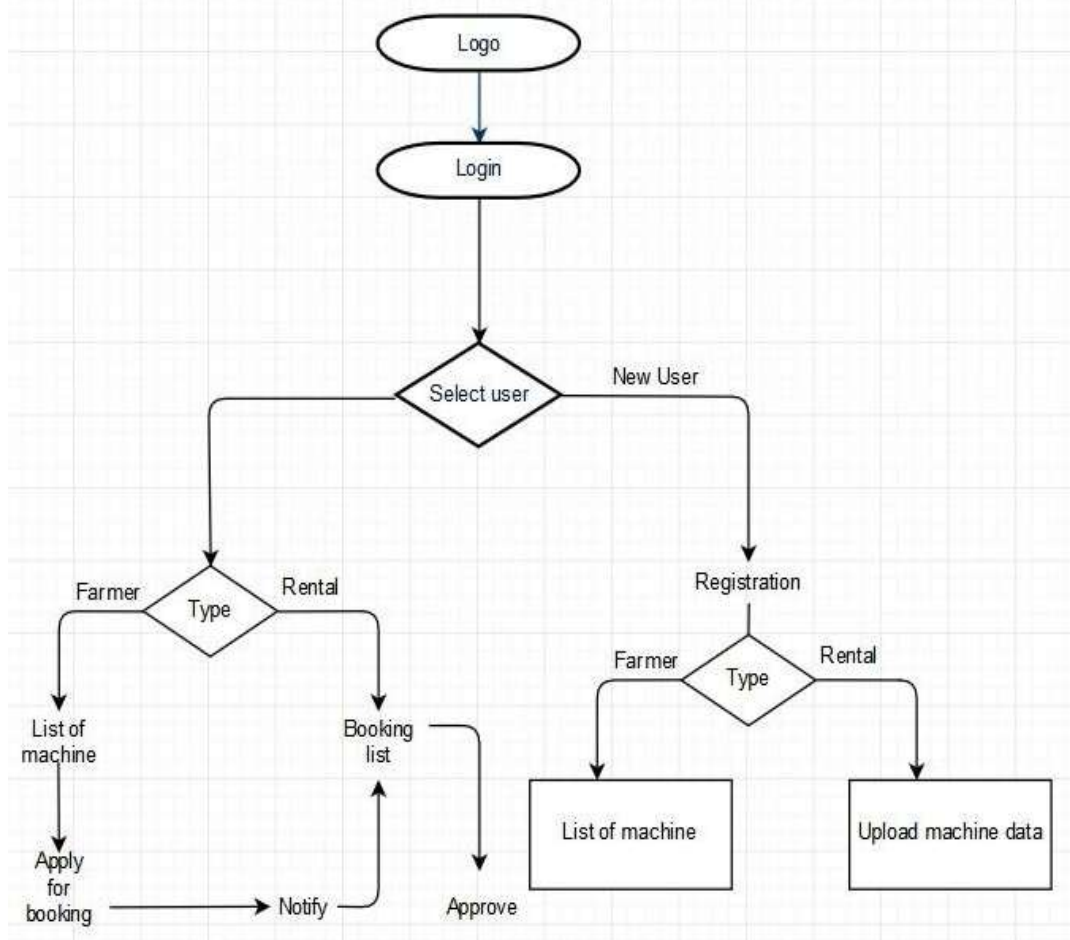
The project is all about efficient farming while taking care of the economic condition of the farmers and trying to push up the level of business and marketing for the rentals. This project will help out many businesses and peoples to reconnect with the right path to move forward.

The specific topic has been chosen by us because as per the SIH Project, this is the real- time and current problem a lot many peoples are going through. We even talked with some of the farmers regarding the same issues and they too addressed, that they are facing it.

The course of this project will be addressing the probable problems like the equipment problem of the farmers. The key point of the low business of the rentals. The farmers can use to hire tractors as well as other mechanizations at a normal amount all using their mobile phone. This would not only help them avoid manual labor but can be also be considered as an important step to encourage this profession.'

II. METHODOLOGY

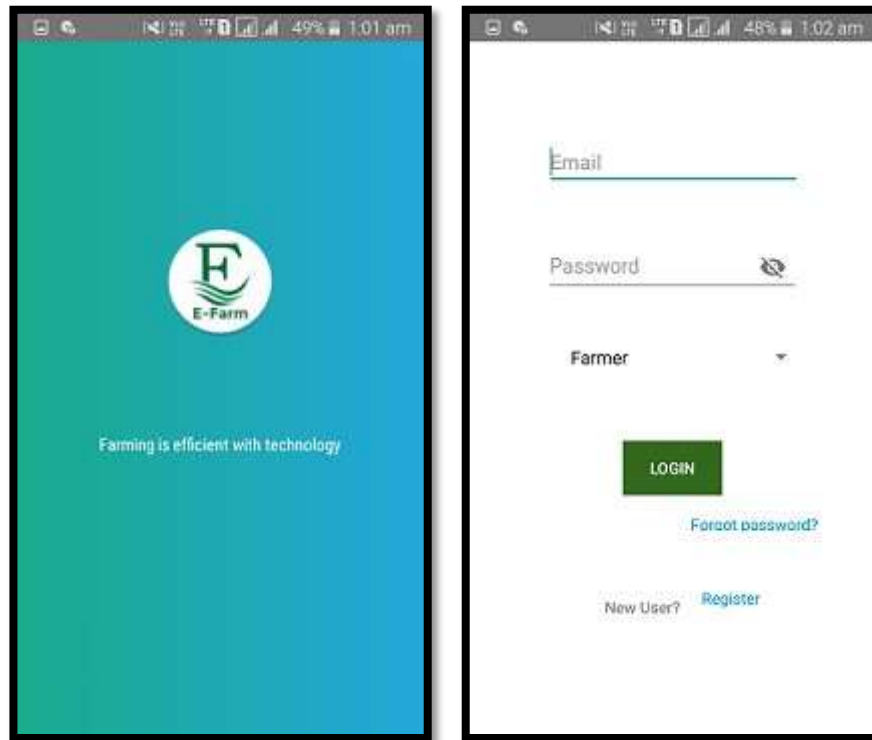
A mobile application that farmers can use to hire tractor as well as other mechanizations at a nominal amount all using their mobile phones. This would not only help them avoid manual labor but can be also be consider as an important step to encourage this profession.



III. RESULT

It is in the domain of social relevance and can be applicable to the developing country like India and as India has its economy maximum based on agriculture it would help those farmers for producing more by making their work efficient using machinery. On this application a farmer can get machineries on actual market price and they can analyses everything according to their requirements and budgets, also the renters can come in direct touch with their customers for the transparent transactions. They can also get a free platform to do their marketing and building up the business. As if now the country is having few companies which are providing the same kind of services as ours, but we have almost covered all their flaws and made this application way more smooth then others application. The farmer can easily get any of his desired equipment online and hence farmers can work more efficiently, on the other hand the renter can also get benefit of this service as from the point of business. The renter can make profit off it; this will help them to increase their business and market in an efficient way.

Outputs.



IV. PROPOSED SOLUTION

As the project users Android Application it can have a wide variety of applications in various areas. In affordable rate. This would not only help them avoid manual labor but can be also be considered as an important step to encourage this profession. A mobile application that farmers can use to hire tractor as well as other mechanizations at a nominal amount and that too all using their mobile phone over an application. This would not only help them avoid manual labor but can be also be consider as an important step to encourage this profession.

V. CONCLUSION

This is an android application which will be providing several features for the farmers and the rentals for enhancing the farming efficiently and to build up the business perspective on a big scale for the recently emerged rentals. The application will work for all the solution to farming issues includes economical problems and others.

VI. FUTURE SCOPE

In future SMS service will be integrated in this project for alert notification when the transaction will be detected. Currently, one can fetch all the information over the application, In future, everything will be connected to the email system and one can get all the information through email. Currently, our system is only on mobile application, more acutely only on android, In future the application would be available on different platforms as well as over a website for more easy access.

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VII. REFERENCES

- [1] Y. Aoyagi and T. Asakura. A study on farmer recognition in scene using genetic algorithms and neural networks. In Proc. IEEE Conf. on Industrial Electronics, Control and Instrumentation, pages 1838,1843, Taipei, Taiwan, 1996.
- [2] M. Betke and N. Makris. Fast tractor in noisy using simulated annealing. In International Conference on Computer Vision, pages 523,530, 1995.
- [3] Wang, G.Y.; Ren, G.H.; Quan, T.F. Agriculture methods with high accuracy and efficiency. In Proceedings of the 2nd International Conference on Computer Science and Electronics Engineering (ICCSEE), Hangzhou, 22–23 March 2013; pp. 1426–1429.
- [4] R. D. Charette and F. Nashashibi, "Real Farmer Traffic Recognition Based on Adaptive Traffic Lights Template," in IEEE, 2009.
- [5] C. Bahlmann, Y. Zhu, R. Vishwanathan, M. Pelkoffer and T. Koehler, "A System for Application Detection, Tracking," in IEEE, 2005.
- [6] S. B. Wali et al., "Renting application: Current Trends and Challenges.," Sensors (Basel)., vol. 19, no. 9, May 2019.