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DEVELOPMENT OF PORTAL FOR AGRI SERVICE AND CROP MANAGEMENT

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Abstract-

Agriculture is the main occupation of India. Agriculture is considered as the vital sector of Indian economy. It provides 50% employment all over India. Major issues faced by Indian farmers are insufficient water supply, less use of equipments nearby, following same crop pattern followed by ancestors and nearby farmers, lack of awareness about government schemes, poor storage facilities, rate moderation, market availability for bulk and little quantity and transportation problems. Nowadays, we can see agriculture is booming because of young minds interest towards farming. These young minds already have little knowledge in farming. Online portal for crop management will help them to get better knowledge in agriculture. Less use of equipments nearby is the major issue found which make the booming process move in descending order. Portal for rental machineries will make the nearby machinery holders visible to everyone. Portal with crop growth details, additional income generating ideas, vegetables availability and rental equipment details will help in booming of agriculture.

Keywords—Agriculture, rental machineries, online portal, crop management

I. INTRODUCTION

Agriculture is the biggest and most important sector of the world. A few decades ago, the agriculture sector added 75% to India's GDP, which has been reduced to 20.19% now. This is because, In most areas, the farmers follow primitive cultivation methods and traditionally-used plough and the farmers' preferences are always native accessories . Despite there is no shortage of efficient modern equipment and machinery, there's only a very little use of modern equipment among the farmers. And over dependence on traditional crops leads to shortage of other crops and problems in sales of traditional products. If we encourage youth for farming and farming related occupation, agriculture sector will definitely boom. These young people already have basic institutional education and knowledge; they can learn and grow quickly. For instance, almost all of them have smart phones; by using a modern agriculture websites, they can perform well in farms. And also by making modern equipments available to farmers and educating the farmers are going to be the solutions.

A. Objective

- The main objective of this website is that this creates interest in young people for farming by providing crop management details from seeding to harvesting and it encourages farmers to move from traditional methods of farming to modern farming equipment by providing information on available nearby modern machinery for rent.
- Using this website farmers can also sell their products that is available in smaller quantity to the nearby people which creates profit for farmers.

II. METHODOLOGY

This chapter deals with the methodology of developing a website and management of crop growth. As agriculture is a vast area, particular area should be chosen. Vegetable cultivation can be done in home gardening and terrace gardening. Details of Tamil Nadu grown vegetable is collected. Additional income generating process like oyster mushroom cultivation, vermicompost preparation, farm yard manure preparation, lotus cultivation in pond details are collected. After data collection and storage, front page layout is designed. Seller page layout for rental machinery, vegetables and pesticides is designed. Write the code for front page and seller page using HTML, CSS, JS, REACT.JS, SQL. Create a login page for user and seller. Add collected data in the website. Store the data in cloud. Find a free hosting site for the website. Test the website.

A. TECHNOLOGY USED

- HTML : HTML is one of the fundamental technologies used for web development and it provides the base structure for the website. HTML code ensures that all the content on a website is properly formatted.
- CSS: CSS defines the style and aesthetics of a web page.

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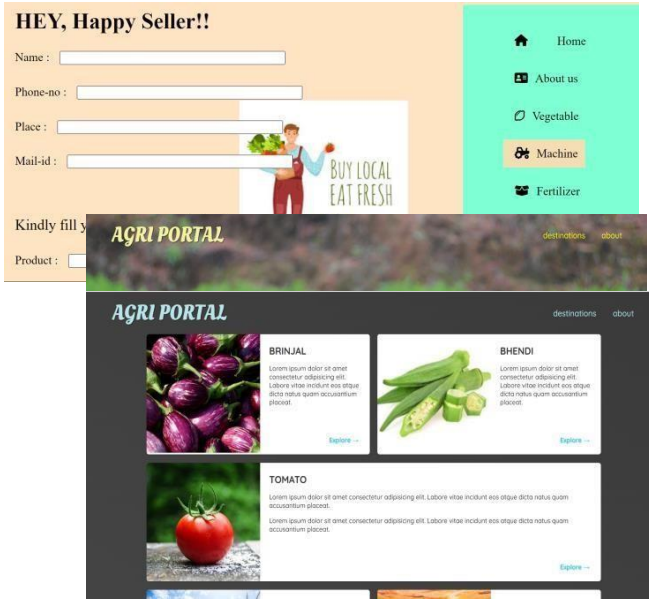
W
hile HTML is used in structuring a web page, CSS specifies the appearance of that structure. This includes page layouts, colours, fonts and element positioning. If HTML is the bones of the web page, CSS is the skin. It makes your website look good.



- JAVASCRIPT: Javascript is used for creating an interactive website. JavaScript helps in engaging the user by providing interactive elements. JavaScript allows you to implement complex features like displaying timely content updates, interactive maps, animated 2D/3D graphics, scrolling video jukeboxes.
- SQL : SQL is used to manage the database. SQL is the language with which a coder communicates with adatabase in order to manipulate the data held within. SQL databases use structured query language (SQL) to define and manipulate data.
- MongoDB: MongoDB is a document database. It stores data in JSON format called BSON.

B. DESIGN OF THE PRODUCT

Fig 1.seller page

Fig 2. Home page

Fig 3. Crop growth details

ESULT AND DISCUSSION

This website comprises of crop management, rental machinery details and product market which includes vegetable, pesticides.

Fig 4. Rental machinery site

Fig 5.Crop management

IV. CONCLUSION

This website is designed, created and tested. This website is user friendly, where it is separate for rental service and crop management. This website has details of nearby rental service and small and large scale produce seller. This makes the nearby sellers visible and rental machineries generate side income.

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