WILLOW-WAY: CROP RECOMMENDATION SYSTEM USING MACHINE LEARNING

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ABSTRACT

The importance of agriculture in Sri Lanka is increasing daily with the limitation of importing products from foreign countries. Therefore, many people tend to cultivate. But most of the times, farmers end up with heavy material loss with no profit due to the lack of knowledge about the exact crop suitable for their farm. With the improvement of the technology, the usage of modern technology is high by new farmers. And therefore, finding the most suitable crop for a specific area will make a considerable contribution for the economy of the country as well as for farmers. Even though there are methods identified to find the best crop, finding the crop with the consideration of the market price will give more value to the system.

The crop recommendation system is built with the aim of aiding modern farmers in their cultivation. The system works by considering the factors of the related farm and the live climate. Those factors are evaluated and considered effectively and recommendation the crop by giving more probability for crops with the highest market prices. The system used ensemble methodology along with used and non-used algorithms with the accuracy improvement.

The outcome of the research project is successful with a reasonable rate of accuracy and proper testing and evaluation.

The Willow-Way crop recommendation system provides a novel solution for modern farmers of Sri Lanka which facilitates the user with a clear web graphical user interface to make the usage of the system easy

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Keywords : Machine Learning , Ensemble Technology, Crop prediction

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