A Project Report

on

ARTIFICIAL AGRICULTURE OFFICER

Submitted for partial fulfilment of the requirements for the award of the degree of

BACHELOR OF ENGINEERING IN COMPUTER SCIENCE AND ENGINEERING

BY

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CERTIFICATE

This is to certify that the project work entitled 'Artificial Agriculture Officer' submitted by Hiranmai Natuva (160114733128) and Charishma Ravoori (160114733186) in partial fulfilment of requirements for the award of degree of Bachelor of Engineering in Computer Science and Engineering as specialization is a record of the bonafide work carried out under the supervision of B. Lokesh Joel, Asst. Professor, Department of CSE, and this has not been submitted to any other university or institute for award of degree or diploma.

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DECLARATION

We hereby declare that the research work entitled "Artificial Agriculture Officer" is original and bonafide work carried out by us as a part of fulfilment for Bachelor of Engineering in Computer Science and Engineering, Chaitanya Bharathi Institute of Technology, Gandipet, Hyderabad, under the guidance of B. Lokesh Joel, Asst. Professor, Department of CSE, CBIT.

No part of the project work is copied from books/journals/internet and wherever the partition is taken, the same has been duly referred in the text. The reported are based on the project work done entirely by us and not copied from any other source.

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ACKNOWLEDGEMENT

The satisfaction that accompanies the successful completion of any task would be incomplete without

introducing the people who made it possible and whose constant guidance and encouragement crowns all

efforts with success. They have been a guiding light and source of inspiration towards the completion of the

project.

We would like to express our sincere gratitude and indebtedness to our project guide, B.Lokesh Joel, who

has supported us throughout our project with patience and knowledge.

We are also thankful to Head of the department, Dr. M Swamy Das for providing excellent infrastructure

and a conducive atmosphere for completing this project successfully.

We are also extremely thankful to our Project Coordinator. Dr. R Ravinder Reddy and Mr. Kiran

Prakash, Associate Professor, Dept. of CSE, for his valuable suggestions and interest throughout the course

of this project

We convey our heartfelt thanks to the Teaching and Non-Teaching Staff, for allowing us to use the

required equipment whenever needed.

Finally, we would like to take this opportunity to thank our families for their support through the work. We

sincerely acknowledge and thank all those who gave directly or indirectly their support in completion of this

work.

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ABSTRACT

There are massive amounts of data regarding agriculture in the world today. The data varies depending on region, climate, soil types, etc. Farmers may pose questions such as "What are the precautions to be taken before growing rice?" or "What is the optimal season to grow wheat?" At the moment, if the farmer has any doubts, he has to contact the local Agriculture Officer, who may be far away or on leave. Since, the officer may not always be available, the farmer may decide to farm using his own knowledge. He may make incorrect decisions which can lead to reduced crop production. Another issue is that the user may opt to use search engines to find the answers to his questions, they tend to respond with many irrelevant, long and winding answers. It is time consuming to manually filter through this data and it may cause the user to get irritated.

To prevent these kinds of issues and to make the required information more accessible, we are developing an android application that acts as an Agriculture Officer. The farmer can use this app from anywhere as long as he has an android device with a microphone. Taking the possible illiteracy of farmers in rural areas, we are adding the speech recognition aspect to our project. The app will take in verbal queries raised by the farmer, analyze the sentences, and return the appropriate response. This instant clarification of questions will make the farmer's life much easier and also increase his interest in growing crops. For this we are using Android Studio, Tensorflow, and Dialogflow.

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