INTERNSHIP REPORT

On

Crop Rotation Advisor

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CERTIFICATE

This is to certify that the mini project report entitled "**Crop Rotation Advisor**" is a Bonafide record of work carried out by **Likitha U(BU22CSEN0300545)**, **K.Swetha (BU22CSEN0300529)**,**R.Ravinder(BU22CSEN0300247)**,**R.BhavyaSree(BU22CSEN030051)**, **Y Sindhu(BU22CSEN0102283)** submitted in partial fulfillment of requirement for the award of degree of **Bachelor of Technology in Artificial Intelligence and Machine Learning.**

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TABLE OF CONTENTS

I. Internship

II. Certificate

III. Acknowledgement

IV. Table of Contents

V. Abstract

1. INTRODUCTION
2. PROBLEM STATEMENT
3. OBJECTIVES
4. SCOPE OF THE PROJECT
5. METHODOLOGY
   - 5.1 Data Collection
   - 5.2 Data Preprocessing
   - 5.3 Machine Learning Models
   - 5.4 System Architecture
6. Requirement Analysis
7. Literature Review
8. Design Strategy
9. Status of Implementation
10. Crop Details
11. Results and Analysis
12. Challenges and Limitations
13. Conclusion

ABSTRACT

Agriculture plays a crucial role in sustaining human life, with crop rotation being a time-tested practice to enhance soil fertility and maximize yields. The "Crop Rotation Advisor" project is designed to assist farmers in making informed decisions by recommending suitable alternative crops based on various parameters such as soil type, climate conditions, crop duration, profit per acre, and water consumption. By leveraging AI and machine learning techniques, this system aims to promote sustainable farming practices, improve soil health, and ensure long-term agricultural productivity.

The project involves developing a full-stack web application where users can input key agricultural parameters. The backend processes this data using predictive models to generate optimized crop rotation suggestions tailored to the user's specific conditions. Additionally, the platform incorporates a user-friendly interface with a language selection feature, allowing users to switch between English, Telugu, and other regional languages for broader accessibility.

Through the integration of technology and agriculture, the Crop Rotation Advisor seeks to empower farmers with data-driven insights, reducing dependency on monoculture and mitigating the risks associated with soil depletion. This project stands as a step forward in achieving sustainable agriculture by balancing profitability and environmental conservation.