MGM'S College of Engineering, Nanded

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

"CROP AND SOIL MANAGEMENT SYSTEM"

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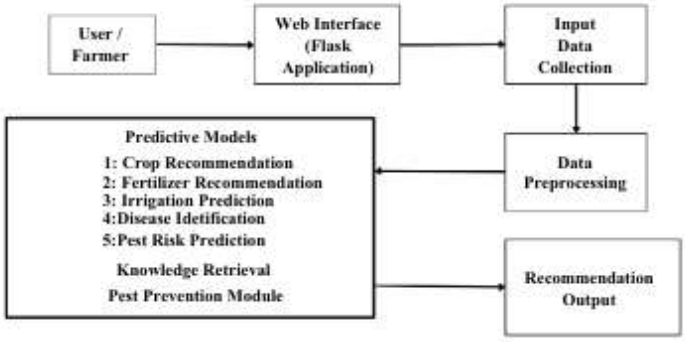
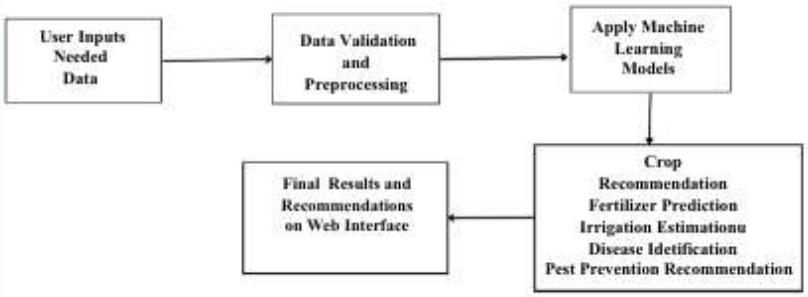
Introduction: Agriculture faces challenges such as soil degradation, irregular rainfall, and pest attacks. Traditional farming methods rely on experience and generalized practices, which may lead to low productivity and resource wastage. This project proposes a Crop and Soil Management System using Machine Learning to provide data-driven recommendations for crop selection, fertilizer usage ,irrigation planning,disease identification, pest risk prediction and pest prevention.

System Architecture:



Methodology:



Conclusion: The Crop and Soil Management System demonstrates how machine learning can enhance agricultural decision-making. By integrating crop recommendation, fertilizer guidance, irrigation prediction, and pest prevention, the system supports sustainable farming practices. The web-based design ensures accessibility for farmers with minimal technical knowledge.

Maps to	Names of Students	Name of Guide
PO-1, PO-2, PO-5, PO-7, PO-10; PSO-1, PSO-2	Ms. Shubhangi Jadhav Ms. Shambhavi Kshirsagar Ms. Swarangi Rajwade Ms. Rutika Sarje	Mr. M. N. Bhandare