**DIGITAL FARMING SOLUTIONS USING MACHINE LEARNING AND INTERNET of THINGS**

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**Abstract:** Precision Agriculture is a method where resources are utilized in optimum amounts to get increased yields and profits in comparison with usual farming ways. Therefore, it is essential to develop end-to-end solutions which can help out farmers. Although effort has been put into making farmers aware of this kind of farming method, the solutions are still incomplete and not very user-friendly for farmers to make use of. An end-to-end solution will assist the farmers in being more cautious of their decisions when it comes to crop cultivation.

**Individual contribution and findings:** Done the IoT Implementation for data gathering and also learned Streamlit framework for the deployment of the models.

**Individual contribution to project report preparation:** Walkthrough on working and explanation of Arduino code and flask framework code. Also given walkthrough on the deployment of the models on Heroku.

**Individual contribution for project presentation and demonstration:** Done the working and explanation for IoT implementation for data gathering and also explained about whole system design and its deployment on the Heroku platform.

**Digital Signature Digital Signature**

Full Signature of Supervisor/s: Full signature of the student:



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