Solar Tracking and Automatic Irrigation

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Overview

- An automatic irrigation system is a technology-driven solution designed to efficiently and effectively manage the watering of plants, crops, or lawns without the need for manual intervention. These systems use various components and sensors to automate the process of delivering water to plants, ensuring that they receive the right amount of moisture at the right time.

Introduction

- This project is to develop an automatic irrigation system that conserves water and reduces costs while improving soil health and plant growth.
- The main objectives include using sensors to monitor soil moisture and prevent over- or under-irrigation, with the help of an Arduino Uno for signal analysis.
- The system also incorporates a pump to deliver fertilizer and water efficiently.

Motivation of the Project

- An advanced solar tracking and automatic sprinkler irrigation IoT project can address critical issues in agriculture and renewable energy, offering economic, environmental, and social benefits.
- It aligns with the goals of sustainable agriculture and clean energy production while leveraging the power of IoT for data-driven decision-making and automation.

SDG and its Impact

- The "Advance Solar Tracking and Automatic Sprinkler Irrigation IoT Project" has the potential to positively impact multiple SDGs by promoting sustainable agriculture, renewable energy adoption, efficient resource management, and climate action.

Plan of action

S.no	Plan of action	Duration
1	Problem identification	1st August - 31st August
2	Literature Survey	1st September - 30th September
3	Module Identification	1st October - 15th October
4	Module Implementation	16th October - 15th November
5	Report	16th November - 3oth November

Thank you