PROJECT

SMART WATER MANAGEMENT SYSTEM

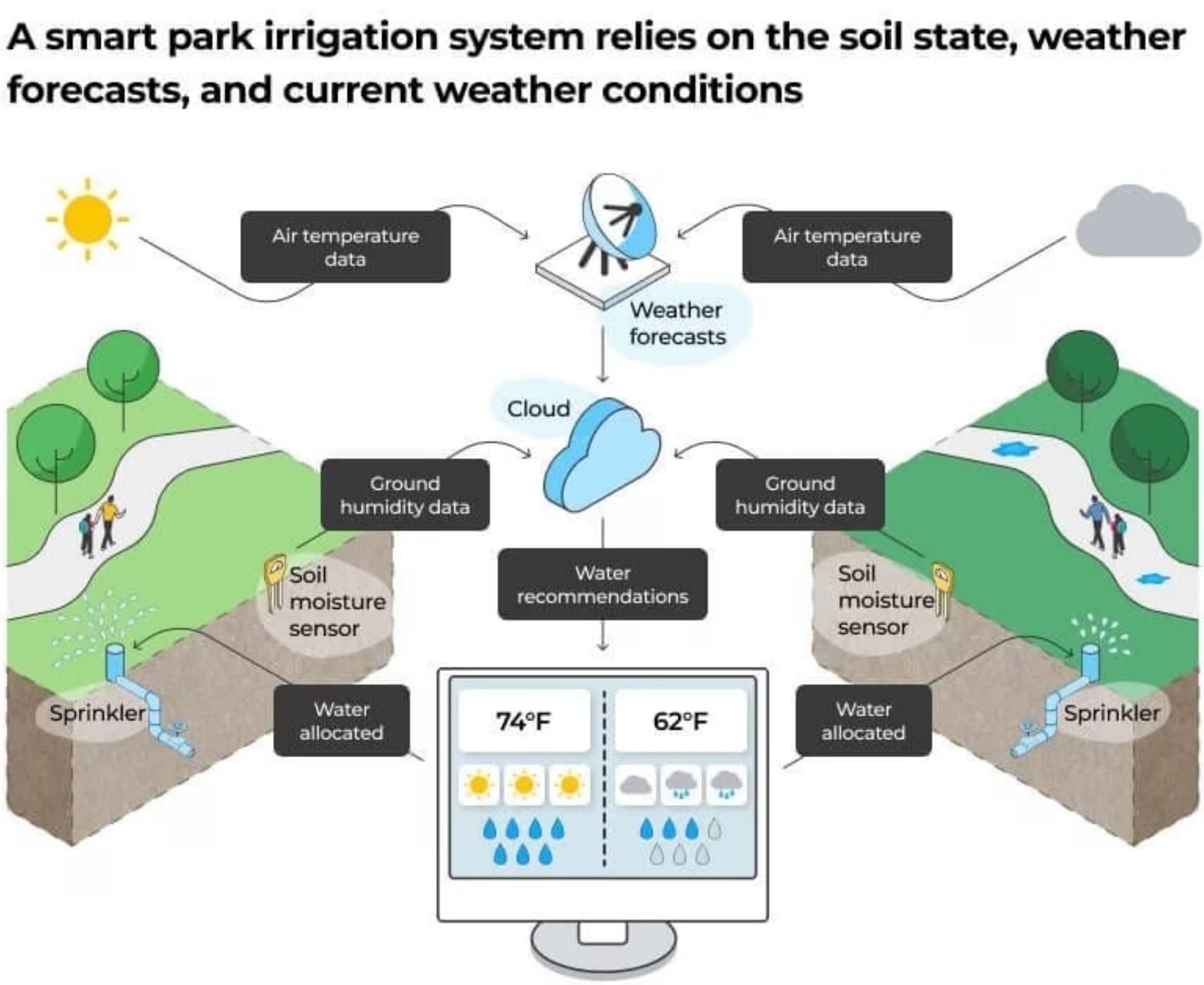
TEAM NAME:

Project-212982-Team-1

Smart Water Management System

Problem Statement

Altered precipitation patterns, prolonged droughts, and extreme weather events associated with climate change can disrupt the availability of water.Agriculture accounts for a significant portion of water use. In regions with inadequate water resources, reduced agricultural productivity can lead to food shortages.



Design Thinking

- **Empathize**: I understand that smart irrigation can be a valuable solution for individuals looking to efficiently manage their watering needs while also conserving water resources. It's an approach that combines technology and data to ensure plants and crops receive the right amount of water, reducing the risk of overwatering and promoting sustainable practices. This not only saves on water bills but also contributes to environmental conservation. By automating and optimizing the irrigation process, it offers convenience and peace of mind to those who care for their green spaces.

- **Define**: Once you have empathized with the various people's, it is crucial to define the problem statement clearly and concisely. This step involves identifying the specific pain points, in the existing water management system. It also includes setting measurable goals and objectives for the proposed solution.

- **Ideate**: In the ideation phase, you generate a wide range of ideas to address the identified problem. People's, and technology specialists come together to brainstorm potential solutions. This creative process encourages out-of-the-box thinking and fosters innovation.

- **Prototype**: After ideation, select the most promising ideas and develop prototypes or mock-ups to visually represent the proposed solution. These prototypes serve as tangible examples that showcase the functionality, features, and potential benefits of the system. Prototyping allows for early validation and feedback from people's, which helps refine the concept before moving forward.

- **Test**: Testing is a critical phase where the prototypes are evaluated, refined, and validated. It involves rigorous real-world simulations, controlled experiments, and pilot projects to assess the effectiveness, feasibility, and practicality of the proposed water management system. Testing helps identify any shortcomings,

challenges, or unintended consequences, enabling further improvements and adjustments to be made.

Conclusion

By following this user-centred design approach, the water management system can be developed iteratively, ensuring that it achieves its intended goals and meets the needs of all people's. It is a optimization to the people with the complexity of a water management system.