

The graduation project talks about solving the problems of food scarcity and pressure on human resources of water and food, so it was An essential component of modern agriculture is the implementation of advanced technologies that can optimize water usage while ensuring crops receive the required irrigation. By combining soil moisture sensing, precise irrigation control, and automatic tank refilling, this system not only conserves valuable resources but also enhances agricultural productivity and sustainability. When the moisture content falls below a predefined threshold, the system initiates the precise delivery of water, ensuring that the soil is adequately hydrated. This system is designed to revolutionize traditional farming practices by intelligently sensing the moisture content of the soil.