SRKR ENGINEERING COLLEGE::BHIMAVARAM

SRKR CODING CLUB

HACKOVERFLOW-2K24

PROBLEM STATEMENTS

Note: Participants can select one of the statements provided in the document or bring their own problem statements, provided they align with one or a mix of the aforementioned themes.

AGRICULTURE:

1. **Block chain-Based Supply Chain for Agriculture:** Develop a decentralized application using block chain to ensure transparency in the agriculture supply chain. The platform will allow farmers to track the journey of their produce from farm to market, ensuring authenticity and fair pricing. It will also provide real-time updates on crop prices and demand forecasts.

2. **AI-Powered Crop Disease Detection App:** Build a mobile application where farmers can upload pictures of their crops, and AI analyzes the image to detect diseases, recommend treatments, and suggest preventive measures. The app should integrate offline functionality for rural areas with poor internet connectivity.

3. **Smart Irrigation System with IoT and Web Dashboard**: Design a smart irrigation system using IoT sensors to measure soil moisture levels and weather forecasts. The system should optimize water usage and allow farmers to monitor and control irrigation from a web or mobile dashboard.

4. **Real-Time Market Price Tracker for Farmers**: Create a web or mobile app that tracks real-time market prices for various crops and provides recommendations on the best time and place to sell, helping farmers maximize their profits. Use API integration to pull data from multiple markets and block chain for secure transactions.

5. **Digital Education Platform for Farmers using AI and Local Languages**: Develop a web-based platform that provides educational resources and training for farmers in regional languages. The platform will use AI to personalize learning paths based on the farmer's current crop, season, and challenges, providing localized advice on best practices and techniques.