# Project Design
# Phase-I Solution
# Architecture

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| Date | 14 OCTOBER 2022 |
| Team ID | PNT2022TMID06004 |
| Project Name | SmartFarmer - IoT Enabled Smart Farming Application |
| Maximum Marks | 4 Marks |

## IOT BASED SMART FARMING

The best tech solution to solve existing business problems is to first find the temperature, humidity, and moisture level from sensors. then sending thru python Django as the python then using Api sending data to MIT app. so from App we can control the sensors.

The characteristics are to extra care of plants improve growth and save water with a minimal amount of investment Structure includes MIT App then python then Arduino with sensors from cultivation and other aspects of the software to project stakeholders helps them to understand how much they save it. **Features, development phases, and solution requirements:**

Humidity measurements indicate the concentration of water vapor present in the air. They provide their measurements in the form of a proper electronic signal. Moreover, they also report relative humidity i.e. the ratio of moisture in the air to the maximum moisture at a given temperature.

The relative humidity is useful for many applications, like HVAC (Heating Ventilation Air Conditioning) and comfort optimization applications in Smart Buildings and Facilities Management.

State-of-the-art humidity sensors provide support for internet connectivity and can be flexibly deployed in Internet of Things (IoT) applications. This facilitates the integration of humidity measurements with the output of other sensors (e.g., temperature sensors) and boosts IoT applications intelligence in various industry applications.

The quality of a humidity sensor is reflected in its accuracy, reliability, response time, longevity, security, robustness, and ease of deployment. These characteristics also determine the sensor’s cost. Furthermore, they drive the selection of humidity sensors for different applications.

MIT App Inventor is an intuitive, visual programming environment that allows everyone even children, to build fully functional apps for smartphones and Those tablets .new to MIT App Inventor can have a simple first app up and running in less than 30 minutes.

**Specifications:**

Extra care for plants improves growth and saves water with a minimal amount of investment.

**Example - Solution Architecture Diagram:**