**Smart Gardening Software Requirement Specification (SRS)**

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29-January-2023

Version 1.0

**Table of Contents**

1. Introduction

* **(i)** Purpose of this document
* **(ii)** Document Conventions
* **(ii)** Scope of this document

2. General description

3. Functional Requirements

4. Interface Requirements

5. Performance Requirements

6. Design Constraints

7. Non-Functional Attributes

8. Preliminary Schedule and Budget

9. Appendices

1. Introduction

* (i) Purpose of this document

The goal of this document is to create a mobile app or website that allows users to remotely control our automatic irrigation system to water the plant.

* (ii) Document Conventions

| TCP | Transmission Control Protocol |
| --- | --- |
| IoT | Internet of Things |

* (iii) Scope of this document

The purpose of the automatic irrigation system is to make it easier for the garden administrator to control the garden by receiving data related to pH, moisture, and temperature from the garden and having an automatic watering system as a weekly data summary report, automatically watering the plants based on humidity, and having a mobile application to fully access our system. The system is built around a Raspberry Pi Zero W computer and the TCP communication protocol. We promise to provide a unique user experience with the low cost pricing.

1. General description

Raspberry Pi Zero W will be used to build embedded IoT devices. TCP is one of the most important protocols in the Internet protocol suite. We're thinking about combining the Raspberry Pi Zero W and TCP to apply to the smart gardening project. Because this application offers an automatic watering system via mobile app, users can keep track of their plants' health and watering.

1. Functional requirement

3.1 Summary of Functions

The AIM (Automatic Irrigation) system necessitates a technology-based solution for a user to keep track of- data gathering, management system whose major functions include:

* Moisture the soil Data on humidity
* Except between 11 a.m. and 2 p.m., automatic watering based on humidity is used.
* Watering Forecast Notification to alert the user
* Outside the net house can be accessed remotely.