# Software Requirements Specification (SRS)

# 1. Introduction

1.1 Purpose:
The purpose of this document is to define the requirements for the PotatoSavior website, a consulting platform aimed at supporting farmers by diagnosing potato plant health issues, providing actionable guidance, and connecting them with expert agricultural services.

1.2 Intended Audience:

- Potato farmers seeking solutions for crop issues.
- Gardening enthusiasts interested in professional advice.

1.3 Intended Use:
The website will serve as a medium for farmers to:

- Learn about PotatoSavior's services and expertise.
- Obtain guidance on potato plant care.
- Access information on early and late blight.
- Upload images of their plants for diagnostic results using a deep learning model.

1.4 Product Scope:
The website will feature four main sections:

- **Company Information**: Details about PotatoSavior's mission and services.
- **Potato Plant Care**: Resources for nurturing potato plants.
- **Disease Information**: Information on common potato diseases.
- **Plant Health Check**: An image-upload-based diagnostic tool.

1.5 Risk Definitions:

- Risk of low internet connectivity among target users.
- Risk of incorrect diagnostic results from the deep learning model.
- Risk of potential misuse of user-uploaded images.

# 2. Overall Description

2.1 User Classes and Characteristics:

- **Farmers**: Primary users; may have limited technical proficiency and need straightforward interfaces.
- **Consultants**: Use the platform to engage with farmers and provide solutions.
- **Researchers**: Explore diagnostic results for agricultural insights.

## 2.2 User Needs:

- Intuitive navigation for accessing resources and services.
- Accurate and quick diagnostics from the image-based tool.
- Easy contact options for consulting services.

## 2.3 Operating Environment:

- The platform must function on common browsers (e.g., Chrome, Firefox, Edge).

## 2.4 Constraints:

- Image uploads limited to JPEG and PNG formats with a maximum size of 5MB.

## 2.5 Assumptions:

- The deep learning model is ready for integration.
- Farmers have basic knowledge of navigating web pages.

## 3. Requirements

3.1 Functional Requirements:

- The website shall allow users to navigate between four main pages.
- The Company Information page shall display the company's mission, vision, and contact form.
- The Potato Plant Care page shall provide care tips and guides.
- The Disease Information page shall include details of early and late blight.
- The Plant Health Check page shall allow image uploads, analyze them, and display diagnostic results.
- The system shall store user inquiries and uploaded images securely in the database.

3.2 Non-Functional Requirements:

- **Performance**: Diagnostic results must be delivered within 10 seconds of image upload.
- **Usability:** The interface must be simple and accessible, even on low-bandwidth connections.

## 4. User Stories

**As a farmer, I want** to understand PotatoSavior's consulting services so that I can address issues with my potato crops effectively.

**As a farmer, I want** clear guidance on taking care of my potato plants so that I can improve my yield with expert-backed advice.

**As a farmer, I want** detailed information about early blight and late blight so that I can prevent and treat these diseases with help from the company.

**As a farmer, I want** to upload an image of my potato plant and get diagnostic feedback so that I can identify issues and consult with experts for solutions.

**As a mobile user, I want** the website to function seamlessly on my phone so that I can access it while working in the field.

**As a farmer, I want** recommendations for follow-up actions and consulting services so that I can ensure my crops' health and productivity.