Project Design Phase-I
Proposed Solution Template

Date	21 October 2023
Team ID	Team - 592909
Project Name	Project - Potato Disease Classification
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	The objective is to develop a deep learning model for potato disease classification that analyzes the health of the potato. It is to specify if the potato is early blight or late blight. The problem to be solved is potato disease.
2.	Idea / Solution description	The solution is to design a model that can achieve the high rate of accuracy classification. We can classify potato leaves by using deep learning techniques, like transfer learning, or other models. Continuous learning from more data helps improve accuracy. This provides real time potato leaf monitoring for farmers' benefit.

3.	Novelty / Uniqueness	This solution's uniqueness stems from its precise potato leaves classification achieved by employing advanced deep learning techniques such as CNN, transfer learning and other techniques. . What sets it apart is its capacity to constantly enhance accuracy by learning from stored data.
4.	Social Impact / Customer Satisfaction	The potato leaf disease classification method has a profound societal influence. Through its precise identification and diagnosis of diseases in potato crops, it enables farmers to implement timely preventative measures, reducing crop losses. This ensures a more healthy food supply, reduces economic hardship for farmers, and many more.
5.	Business Model (Revenue Model)	One way to set up the business model for a potato disease classification technique is by offering farmers a subscription service. Subscribers would get access to the disease classification system and receive regular reports about their crops, helping them take action in time. The money earned would also come from providing advice on how to prevent these diseases. Additionally, teaming up with companies that sell farming supplies to provide complete solutions and sharing data with agricultural research organizations could bring in more income.

6.	Scalability of the Solution	The idea of using machine learning and image processing for potato leaf disease classification seems like it can grow well. It can handle more and more pictures of potato leafs as the dataset gets bigger, without needing much more computer power. The design also makes it easy to add new kinds of diseases and get better at finding them as we learn more. This ability to scale up is important for keeping up with changes in farming and getting better at spotting diseases over time.