**Project Design Phase-I**

**Proposed Solution Template**

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| Date | 9 November 2023 |
| Team ID | PNT2022TMID |
| Project Name | Project – Potato Disease Classification |
| Maximum Marks | 2 Marks |

**Proposed Solution Template:**

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

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| **S.No.** | **Parameter** | **Description** |
| 1. | Problem Statement (Problem to be solved) | Potato diseases are a major problem for farmers, causing significant crop losses. Early detection and treatment of potato diseases is essential to minimize these losses. However, traditional methods of potato disease detection are time-consuming and require expertise. |
| 2. | Idea / Solution description | We propose a new potato disease classification system that will allow farmers to easily identify and treat potato diseases. Our system will use machine learning to classify potato diseases based on images of potato leaves. Farmers will be able to take a picture of a potato leaf with their smartphone and upload it to our system. Our system will then identify the disease, if any, and provide the farmer with treatment recommendations. |
| 3. | Novelty / Uniqueness | Our potato disease classification system is novel in several ways. First, it is the first system to use machine learning to classify potato diseases based on images of potato leaves. Second, our system is designed to be easy to use by farmers, even those with limited technological expertise. Third, our system provides farmers with treatment recommendations, which will help them to minimize crop losses. |
| 4. | Social Impact / Customer Satisfaction | Our potato disease classification system will have a significant social impact. It will help farmers to reduce crop losses, which will lead to increased income and improved food security. Our system will also help to improve the quality of potatoes produced, which will benefit consumers. |
| 5. | Business Model (Revenue Model) | We plan to offer our potato disease classification system as a subscription service. Farmers will pay a monthly fee to access the system. We will also offer a free trial version of the system so that farmers can try it before they subscribe. |
| 6. | Scalability of the Solution | Our potato disease classification system is highly scalable. We can easily add more servers to handle additional traffic. We can also add new features to the system, such as the ability to classify diseases other than potato diseases.  We believe that our potato disease classification system has the potential to revolutionize the way that farmers detect and treat potato diseases. We are committed to making our system accessible and affordable for farmers all over the world |