# PROPOSED SOLUTION

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| Date | 24 September 2022 |
| Team ID | PNT2022TMID35918 |
| Project Name | Fertilizer Recommendation for Disease Prediction |
| Maximum Marks | 2 Marks |

| S.No. | Parameter | Description |
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| 1. | Problem Statement (problem to be solved) | - In the recent years, due to the spread of multiple diseases in the farming and the availability of multiple fertilizers in the market, the famers are getting confused in predicting the diseases and choosing the correct fertilizers for treating them. |
| 2. | Idea / Solution Description | - When the user inputs an image of a diseased plant leaf, the application predicts the type of disease, displays the result along with the little background about the disease and suggestions to cure it.<br><br>- Deep learning techniques are used to identify the diseases and suggest appropriate fertilizers that can be taken for those diseases. |

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| 3. | Novelty / Uniqueness | - The classification technique is divided into the following steps:<br>1. Image acquisition<br>2. Pre-processing<br>- Instant solutions for farmer's queries. |
| 4. | Social Impact / Customer satisfaction | - Fertilizers are a supplementary to nourish and built up the soil fertility in order to support plant nutrients and increase their productivity.<br>- Nowadays, artificial intelligence and sensor technology plays a vital role in the agriculture field. The use of excess insecticides and fertilizers in farming poses a risk to human health. |
| 5. | Business Model (Revenue Model) | - Helpline support for resolving app related issues.<br>- Service availability depends on the plan subscribed by the farmers. |
| 6. | Scalability of the solution | - Positive is an outcome where the model correctly predicts positive class.<br>- Future diseases that are found and the preventative fertilizers for them can easily be incorporated into the current model, making it highly scalable. |