Project Design Phase-I Proposed Solution Template

| Date | 18 October 2022 |
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| Team ID | PNT2022TMID04747 |
| Project Name | Project - Project - Fertilizers Recommendation |
| | System For Disease Prediction |
| 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) | Farmers detect the crop diseases and plant diseases with their naked eye which makes them take tough decisions on which fertilizers to use for diseased plants. In case the farmer makes wrong predictions and uses the wrong fertilizer, it will mess up the whole plant and cause enough damage to plant and fields. It is necessary to develop disease prediction and fertilizers recommendation system which predicts disease of plants and recommend fertilizer for selected plants |
| 2. | Idea / Solution description | Implementation of artificial intelligence for identification of disease and recommendation of fertilizer using Convolution Neural Network (CNN). The combination of two major things required in farming in one system is spraying proper fertilizer to the plant. |
| 3. | Novelty / Uniqueness | Efficient approach for controlling the disease and spraying fertilizers in farming. Time efficient approach compared to KNN, SVM and ANN. It can suggest and predict best and correct fertilizers for diseased plant. |
| 4. | Social Impact / Customer Satisfaction | Yield right crop at the right time, balancing the crop production, control plant disease, economic growth and planning to reduce the crop scarcity. Hence to detect and recognize the plant diseases and to recommend fertilizer it is necessary to provide |

| | | symptoms in identifying the disease at its earliest. Hence implemented new fertilizers Recommendation System for crop disease prediction. |
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| 5. | Business Model (Revenue Model) | Typically dedicate 15% of their Al investment to algorithms, 25% to technologies and 60% to embedding Al into business processes and agile ways of working. In other words, companies invest twice as much in people and processes as they do in technologies. |
| 6. | Scalability of the Solution | This can be improved by introducing online purchases crops, fertilizers, etc., easily |