Project Design Phase-1

Proposed Solution Template

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| Date : 21-10-2022 |
| Team ID : PNT2022TMID38223 |
| Project Name : Fertilizer Recommendation System for Disease Prediction |
| Maximum Marks : 2Mark |

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) | In India the agriculture industry is extremely vital and crucial for economic and social development and jobs. In India, the agricultural sector provides a living for almost 48% of the population. Most of the Indian population depends on agriculture for their livelihood. The majority of farmers face the problem of an planting an inappropriate crop for their land based on a conventional or non-scientific approach. This is a challenging task for a country like India, where agriculture feeds approximately 42% of the population. The outcome of wrong crop selection is less yield and less profit. |
| 2. | Idea/Solution description | The solution to the problem is Machine Learning, which is one of the applications of Artificial Intelligence, is being used to implement the proposed system. Crop recommendation is going to recommend you the best crop you can grow in your land as per the soil nutrition value and along with as per the climate in that region. And recommending the best fertilizer for every particular crop is also a challenging task. To overcome all these issues this recommendation has been proposed. Nowadays a lot of research and work is being implemented in the smart and modern agriculture domain. Model to recommend the right crop based on soil value and the best fertilizer to use. |
| 3. | Noveity/Uniqueness | Consumers Farming is one of the major sectors that influences a country’s economic growth. In country like India, majority of the population is dependent on agriculture for their livelihood. Many new technologies, such as Machine Learning and Deep Learning, are being implemented into agriculture so that it is easier for farmers to grow and maximize their yield.  The Beneficial users   * Farmers * Common People * Seller * Buyer * Employees * Industrial People |
| 4. | Social impact/Customer Satisfaction | 1. In the crop recommendation application, the users can provide the soil data from their side and the application will predict which crop should the user grow. 2. For the fertilizer recommendation application, the user can input the soil data and the type of crop they are growing, and the application will predict what the soil lacks or has excess of and will recommend improvements. 3. For the last application, that is the plant disease prediction application, the user can input an image of a diseased plant leaf, and the application will predict what disease it is and will also give a little background about the disease and suggestions to cure it. These all are to improve the agriculture, that’s slightly reduces the poverty, climatic condition, soil erosion etc…. |
| 5. | Business Model (Revenue Model) | Predicting the fertilizers, Analysing the disease in a tap makes the life of farmers easy with minimal subscriptions would provide an acceptable return for the organization. This action adds a lot of value to the company and the business in society. |
| 6. | Scalability of the Solution | Our Fertilizer Recommendation system for disease Prediction is in the form of web application to provide this valuable service to the environment and society. |