**PROJECT DESIGN PHASE-I**

**PROPOSED SOLUTION**

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| **Date** | 24 September 2022 |
| **Team ID** | PNT2022TMID00031 |
| **Project Name** | Project – Plant disease prediction and fertilizer recommendation |

**PROPOSED SOLUTION TEMPLATE:**

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| **S.No.** | **Parameter** | **Description** |
| **1.** | **PROBLEM STATEMENT** | The farmer needs a way to detect the disease that the plant is affected by and use the suggested fertilizer so that the disease is cured and crop yield is increased. |
| **2.** | **IDEA / SOLUTION DESCRIPTION** | This model uses deep learning techniques to identify various diseases that the plants are affected with and helps the farmer to choose the appropriate fertilizer to cure the same, thus making their task simpler. |
| **3.** | **NOVELTY** | • Provides a feedback tab for farmers to convey their views about the accuracy of the recommendation.  • Accurate prediction of disease.  • Suggests preventive measures to protect the plants from various diseases.  • Provides a tab for uploading the images of affected plants with necessary guidelines. |
| **4.** | **SOCIAL IMPACT** | • It is very convenient for agriculturalists to treat their plants.  • Mostly used by farmers and people involved in environmental and agricultural research.  • It increases crop yield thereby enhances the growth and livelihood. |
| **5.** | **BUSINESS MODEL** | • We can provide pop-up ads, overlay ads, and other advertising  services from third party advertisers.  • A virtual assistant can be provided to help users navigate through the application. |
| **6.** | **FEASIBILITY OF IDEA** | • It is compatible with all browsers.  • It is very user friendly and simple to use.  • Economical and efficient solutions are provided.  •Uploading of images and their results generation is quick. |
| **7.** | **SCALABILITY OF SOLUTION** | • Enhancements to the app through expert customer service.  • User feedback can be analysed frequently to improve the application’s efficiency.  • The application takes less time for processing and fetching of results. |