FERTILIZER RECOMMENDATION SYSTEM
DISEASE PREDICTION

PROBLEM STATEMENT:

- 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. As per the 2019-2020 economic survey, an Indian farmer's median wage in 16 states is Rupees 2500. Most of the Indian population depends on agriculture for their livelihood. Agriculture gives an opportunity of employment to the village people to develop a country like India on large scale and give a push in the economic sector. The majority of farmers face the problem of 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. And the outcomes for the farmer of choosing the wrong crop for land is moving towards metro city for livelihoods, suicide, quitting the agriculture and give land on lease to industrialist or use for the non-agriculture purpose. The outcome of wrong crop selection is less yield and less profit.
- Who does the problem affect? - Persons who do Agriculture.
- What are the boundaries of the problem? - People who Grow Crops and facing Issues of Plant Disease.
- What is the issue? - In agricultural aspects, if the plant is affected by leaf disease, then it reduces the growth and productiveness. Generally, the plant diseases are caused by the abnormal physiological functionalities of plants.

- When does the issue occur? - During the development of the crops as they will be affected by various diseases.
- Where does the issue occur? - The issue occurs in agriculture practicing areas, particularly in rural regions.
- Why is it important that we fix the problem? - It is required for the growth of better quality food products. It is important to maximise the crop yield.
- What solution to solve this issue? - An automated system is introduced to identify different diseases on plants by checking the symptoms shown on the leaves of the plant.
- What methodology used to solve the issue? - Deep learning techniques are used to identify the diseases and suggest the precautions that can be taken for those diseases.