

## PROJECT PREREQUISITES

Date	19 September 2022
Team ID	PNT2022TMID46542
Project Name	FERTILIZERS RECOMMENDATION SYSTEM FOR DISEASE PREDICTION
Maximum Marks	4 Marks

### Hardware Specifications:

- Windows (minimum 10), Mac & Linux
- Ram - 4GB ( minimum)
- Hard Disk - 100GB (minimum)
- Processor - Intel i3 (above), AMD pro (above)

### Software Specifications:

- Google Colab - <https://colab.research.google.com/>
- Jupyter Notebook - <https://jupyter.org/>
- Visual Studio Code - <https://code.visualstudio.com/>
- IBM cloud service - <https://www.ibm.com/in-en/cloud>

### IBM :

- IBM cloud service - <https://www.ibm.com/in-en/cloud>
- IBM Account Creation - <https://vimeo.com/742609168/1824d26a5b>
- IBM Skill Build - <https://www.ibm.com/academic/home>
- Webmail - <https://sg2plmcpnl492529.prod.sin2.secureserver.net:2096/>
- IBM Cloud - <https://cloud.ibm.com/login>
- IBM Watson cloud studio

### Visual Studio Code :

VS Code will have **deep remote development**. You can connect to a container running a different OS and use any VS Code plugins, linting, debugging for that environment. Visual Studio Code is a lightweight but powerful source code editor which runs on your desktop and is available for Windows, macOS and Linux. It comes with built-in support for JavaScript, TypeScript and Node.js and has a rich ecosystem of extensions for other languages and runtimes (such as C++, C#, Java, Python, PHP, Go, .NET).

**To build Deep learning models we must require the following packages:**

## **Tensor flow:**

TensorFlow is an end-to-end open-source platform for machine learning. It has a comprehensive, flexible ecosystem of tools, libraries, and community resources that lets researchers push the state-of-the-art in ML and developers can easily build and deploy ML powered applications.

**Keras:** Keras leverages various optimization techniques to make high level neural network API easier and more performant. It supports the following features:

- Consistent, simple and extensible API.
- Minimal structure - easy to achieve the result without any frills.
- It supports multiple platforms and backends.
- It is a user-friendly framework that runs on both CPU and GPU.
- Highly scalability of computation.

**Flask:** Web framework used for building Web applications.