Estimation of crop yield using Data analytics

Project Design Phase-II

TECHOLOGY ARCHITECTURE

- Crop production in India is one of the most important sources of income and India is one of the top countries to produce crops.
- As per this project we will be analyzing some important visualization, creating a dashboard and by going through these we will get most of the insights of Crop production in India.
- The data is fetched from the user and data is analyse , cleaned , pre-processed and so on thus the data report is been created.
- Using IBM Cognos , the Data visual are been generated according to the data report which we have created using the user data.
- This can create huge change in field , crop yield estimating and profit to the farmers.

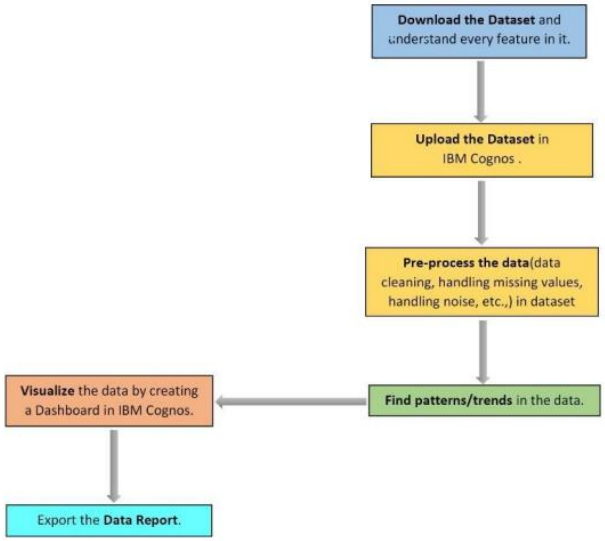

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	Dataset Download	To work with datas ,they are collected from the given link	Kaggle
2.	Application Logic-1	To create the account for the users to work with.	IBM cloud
3.	Application Logic-2	To work with analysis ,cognos analytics is installed	IBM Cognos Analytics with Watson
4.	Application Logic-3	Data visualization is done using the dataset	IBM Watson Analytics
5.	Database	Data related to crop production in previous andalso crop data	Kaggle
6.	Cloud Database	IBM Watson cloud provides storage.	IBM Cognos
7.	Dashboard	Using the dataset given the dashboard are created	IBM cognos Analytics.
8.	Exploitation	The dashboard done are altogether created in a single dashboard and the link is generated.	IBM cognos Analytics

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	A software where in original source code is made freelyavailable and may be redistributed and modified according to the user requirement.	Apache Spark and Hadoop
2.	Security Implementations	It provides the crop-related diseases	multispectral camera sensors mounted on drones
3.	Scalable Architecture	A 3-tier architecture wherein application gets data from various sources, manipulates it, stores them inIBM Cloud and visualize them through IBM Cognos	IBM Cloud, IBM Cognos
4.	Availability	The application being developed is made available toall users(farmers).	Cognos Analytics
5.	Performance	Multiple technologies and services that will improvethe usability in agricultural activities	Robots, IoT Agriculture sensors.