

Project Design Phase-II Technical stack Architecture

Date	29 October 2022
Team ID	PNT2022TMID43111
Project Name	ESTIMATE THE CROP YIELD USING DATA ANALYTICS
Maximum Marks	

Technical Architecture Diagram:

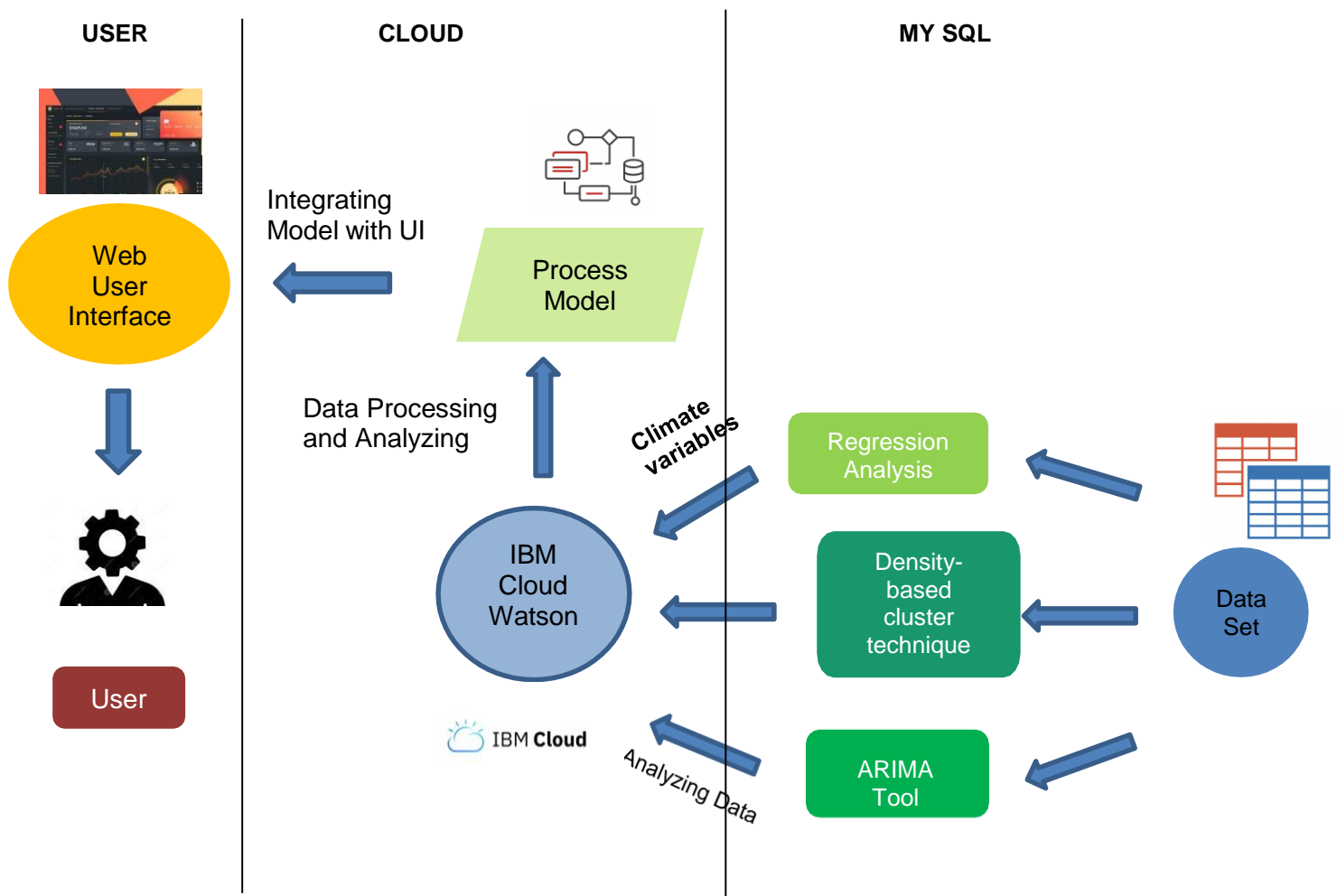


Table 1:Components and Technologies:

S.No	Component	Description	Technology
1.	User Interface	Website with data visualization to estimate the crop yield	HTML, CSS, JavaScript
2.	Application Logic-1	Regression Analysis to predict the climate variables	PYTHON
3.	Application Logic-2	ARIMA Tool to analyze the data	PYTHON
4.	Application Logic-3	Density Based Clustering technique to separate the variables	PYTHON

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask	Python
2.	Scalable Architecture	3– tier, Micro-services	User Interface
3.	Availability	Use of load balancers, distributed servers	IBM cloud
4.	Performance	100 request per second	IBM cloud Watson