Project Design Phase-II
Technology stack (Architecture & Stack)

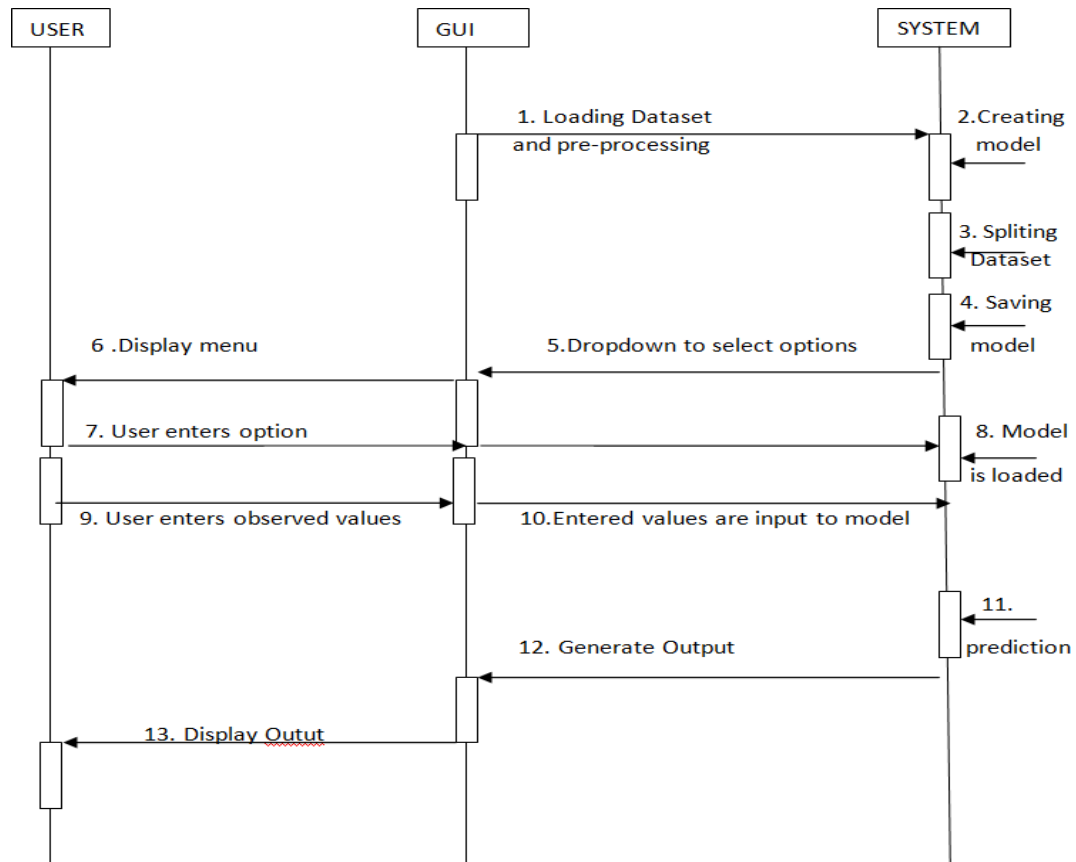| Date	15 October 2022
Team ID	PNT2022TMID49531
Project Name	Exploratory Analysis of rainfall data in India for agriculture
Maximum Marks	4 Marks

ARCHITECTURE:

USER	GUI	SYSTEM

1. Loading Dataset and pre-processing

2. Creating model

3. Spliting Dataset

4. Saving model

5. Dropdown to select options

6. Display menu

7. User enters option

8. Model is loaded

9. User enters observed values

10. Entered values are input to model

11. prediction

12. Generate Output

13. Display Outut

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Mobile App	HTML, JavaScript
2.	Application Logic-1	Logic for a process in the application	Python
3.	Data collection	Data can be collected by using Metrological Department	Internet Application
4.	Data set	The dataset can be used for training and testing the model.	Dataset is stored in Cloud
5.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
6.	Machine learning Model	Purpose of Machine learning model	Prediction Model
7.	Infrastructure(server/cloud)	Application Deployment on cloud server configuration	Cloud foundary
8.	Mobile Notification	The purpose of notification is to inform the weather condition and changes	Notification will be shown in electronic device

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Technology of Opensource framework
2.	Security Implementations	Without user permission access the account then it will give the message to the user admin through the phone number	Encryptions
3.	Scalable Architecture	The user may switch account and in simply way	Technology used
4.	Availability	User choose the multiple location and view the details	Technology used
5.	Performance	It will respond and give the solution with in few minute after the request will come in user	Technology used