

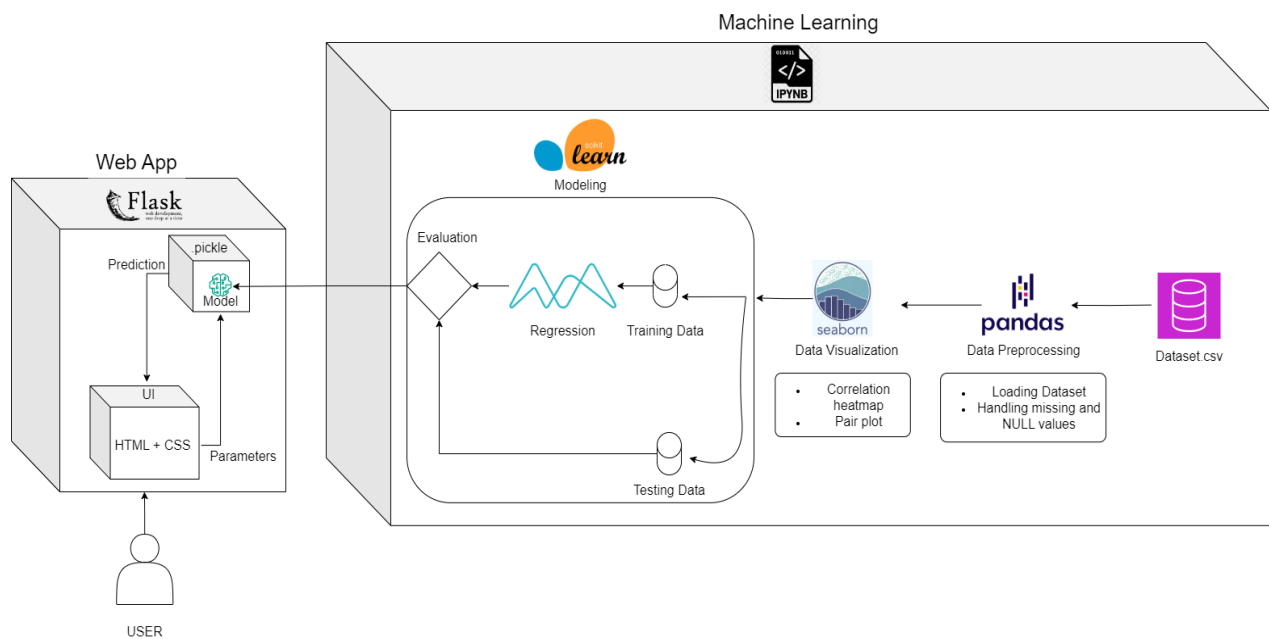
# PROJECT DESIGN PHASE

## DATA FLOW DIAGRAM & USER STORIES

Date:	23 October 2023
Team ID:	Team-592514
Project Name:	RAINFALL PREDICTION USING ML
Maximum Marks:	4 Marks

### Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is Stored.



### User Stories:

List some user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Data Analyst	Dive into Datasets and Pattern Recognition	USN-1	Dive into Datasets and Pattern Recognition	I can Identify strengths and weaknesses in the data and external factors that may impact the model. Provide insights to guide strategy and model development.	High	Sprint-1
		USN-2	Analyse historical rainfall datasets to identify patterns and trends.	I can Identify external factors that may impact the model	Moderate	Sprint-1
		USN-3	Utilize regression analysis to gain insights into rainfall patterns.	I can Analyse the rainfall data using regression techniques.	High	Sprint-1
Backend Developer	Flask Application Development	USN-1	A need to create a Flask application to serve the trained machine learning model for rainfall prediction.	I can Develop a Flask application for serving the machine learning model.	High	Sprint-1
		USN-2	Using the pickle library to serialize and deserialize the model for predictions.	I Used the pickle library to serialize and deserialize the model and Ensure the application can handle prediction requests efficiently.	Moderate	Sprint-1

Data Visualisation Expert	Colab and Jupiter Data Visualization	USN-1	I want to create <u>visualizations</u> that enhance rainfall predictions. This includes <u>visualizing</u> important data points, patterns, and challenges in the data.	Create data visualizations that enhance rainfall prediction through libraries called Matplotlib and Seaborn	Moderate	Sprint-1
		USN-2	Find Accuracy of models through Accuracy_score, Confusion matrix ,Roc- <u>Auc</u> Curve after dividing into train and test model. and save the model.	Splitting the data into Train and Test, evaluating the models and using pickle to save the model	High	Sprint-1
Customer (Mobile User)	Location	USN-1	As a web user, I want to register for the rainfall prediction application by providing my Location	I can view the chances or rain and other features	High	Sprint-1