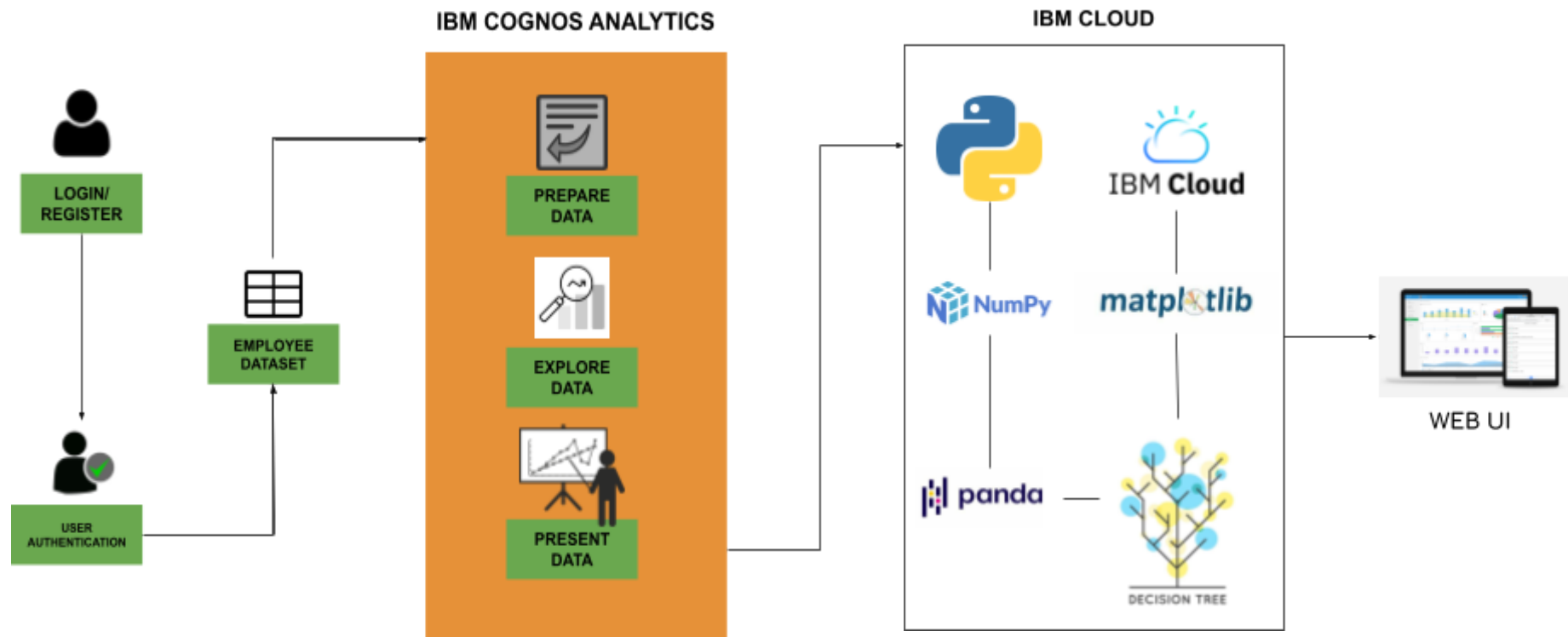


## Project Design Phase-II Technology Stack (Architecture & Stack)

Date	14 October 2022
Team ID	PNT2022TMID25104
Project Name	Corporate Employee Attrition Analytics
Maximum Marks	4 Marks

### Technical Architecture:



**Table-1 : Components & Technologies:**

S.No	Component	Description	Technology
1.	User Interface	User interacts with the application using Web Application.	HTML, CSS, JavaScript.
2.	Application Logic-1	When the user enters into our web application,the user is redirected to the home page of the interface, if they are already registered.	HTML, CSS, JS, PHP.
3.	Application Logic-2	Get the input from the user and analyse the dataset.	IBM Cognos Analytics, ML with Python.
4.	Application Logic-3	Displays the Results.	HTML, CSS, JS.
5.	Database	Stores the user's Credential details.	MySQL, NoSQL.
6.	Cloud Database	Datasets are uploaded to the cloud to work with it.	IBM DB2, IBM Cloudant, IBM Cloud.
7.	File Storage	Files are Stored on their respective cloud space provided.	IBM Block Storage or Other Storage Service or Local Filesystem.
8.	Machine Learning Model	Machine Learning Model is used to test, train and predict the result.	Decision Tree,Random forest,Support Vector Machine.
9.	Infrastructure (Server / Cloud)	Application Deployment on Cloud	IBM Cloud.

**Table-2: Application Characteristics:**

<b>S.No</b>	<b>Characteristics</b>	<b>Description</b>	<b>Technology</b>
1.	Open-Source Frameworks	IBM provides tools for simple to complex visualisations to be implemented	Python, Google Colab/ Jupyter, IBM Cognos Analytics.
2.	Security Implementations	It provides Exclusivity and is only ever share-able from your own account.	SHA-256, Encryptions, IAM Controls, OWASP.
3.	Scalable Architecture	It is capable of handling very large datasets .	Cognos Analytics
4.	Availability	Clicking on the shared link redirects you to the data visualisations as long as you have an account.	Cognos Analytics
5.	Performance	It is a simple tool that can be used to achieve complex and large visualisations with ease.	Cognos Analytics