

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

Date	03 October 2022
Team ID	PNT2022TMD37594
Project Name	Project-Data Analytics for DHL Logistics Facilities
Maximum Marks	4 Marks

Technical Architecture:

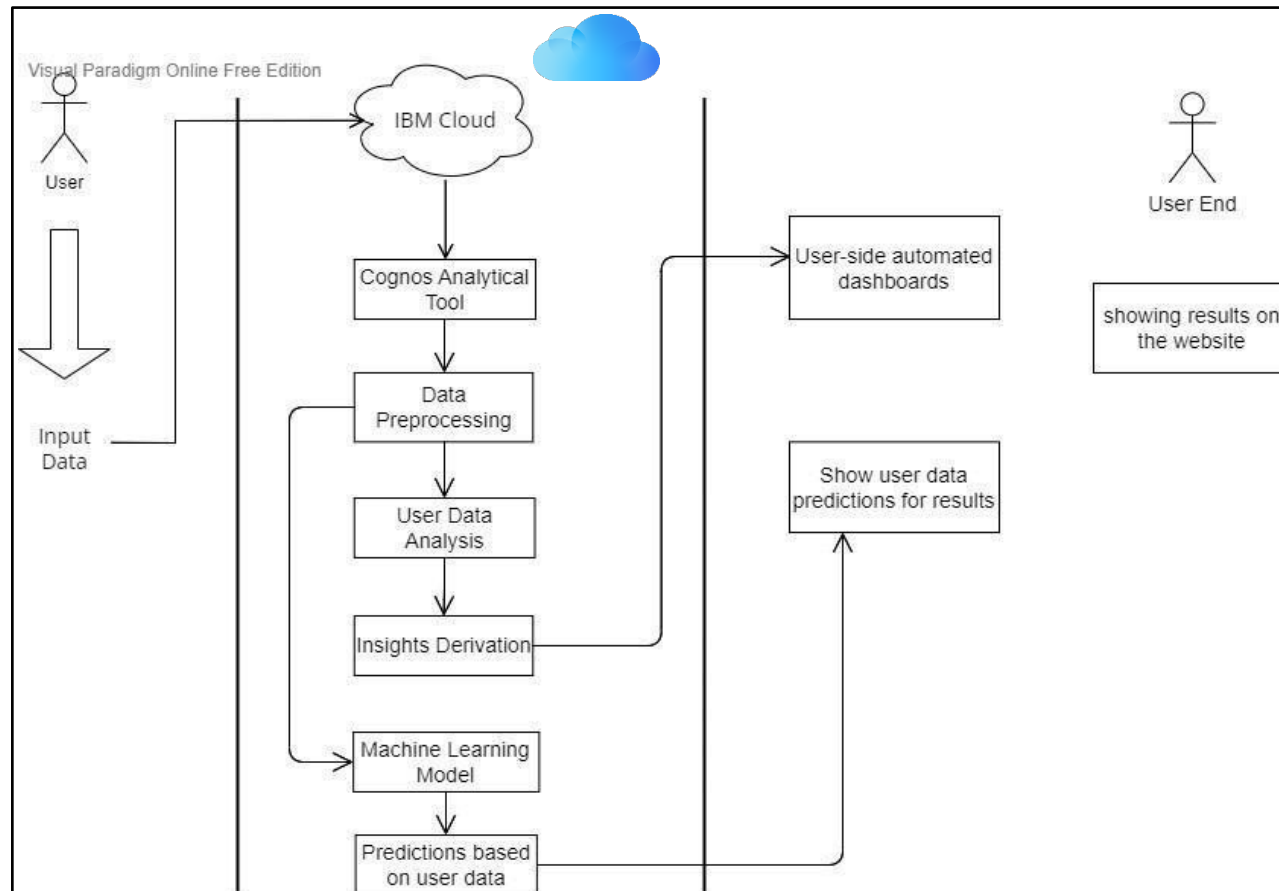


Table-1:Components&Technologies:

S.No	Component	Description	Technology
1.	UserInterface	User uploadsthecsvorexcelformatfilesintothewebpages	HTML,CSS, JavaScript
2.	ApplicationLogic-1	The user data will pass into the IBM cloud for storingandactsasadata source	IBMcloud
3.	ApplicationLogic-2	In cloud, data will be fetched by the Cognos analyticaltoolfordata analysis	IBMCognosanalyticaltool
4.	ApplicationLogic-3	The pre-trained Dashboards will be present to performanalysis on theincomingdata	IBMCognosanalyticaltool
5.	Database	Datawillberetrievedfromcloud	MySQL
6.	Cloud Database	DatabaseService oncloud	IBMDB2,IBMCloud
7.	File Storage	Customer sales data is uploaded in cloud throughinterface	IBMBlockStorageorOther StorageService or LocalFilesystem
8.	ExternalAPI-1	Toperformdataanalysisontheuserdata	IBMCognosTool
9.	ExternalAPI-2	Tobuildthemachinelearningmodelforclassification	JupiterNotebook
10.	MachineLearningModel	Todothepredictiveanalysis ontheinput data	Predictiveanalysismodel,etc.
11.	Infrastructure(Server/Cloud)	Application Deployment on Local System / Cloud LocalServer Configuration: Using the flask Cloud ServerConfiguration:IBMcloud	Local, CloudFoundry

Table-2:ApplicationCharacteristics:

S.No	Characteristics	Description	Technology
1.	Open-SourceFrameworks	List theopen-sourceframeworksused	TechnologyofOpensourceframework
2.	SecurityImplementations	Listallthesecurity/accesscontrolsimplemented ,useoffirewallsetc.	e.g., SHA-256, Encryptions, IAM Controls,OWASPetc.
3.	ScalableArchitecture	Justify the scalability of architecture (3 –tier, Micro-services)	Technology used
4.	Availability	Justifytheavailability ofapplication(e.g.,useofloadbalancers,distribute dservers etc.)	Technology used
5.	Performance	Design consideration for the performance of theapplication (number of requests per sec, use ofCache, useofCDN's)etc.	Technology used