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

Date	03 November 2022
Team ID	PNT2022TMID12898
Project Name	Retail store stock inventory analysis
Maximum Marks	4 Marks

Members : Gayathri G, Haritha K, Sendhilnathan E, Sanjith S

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

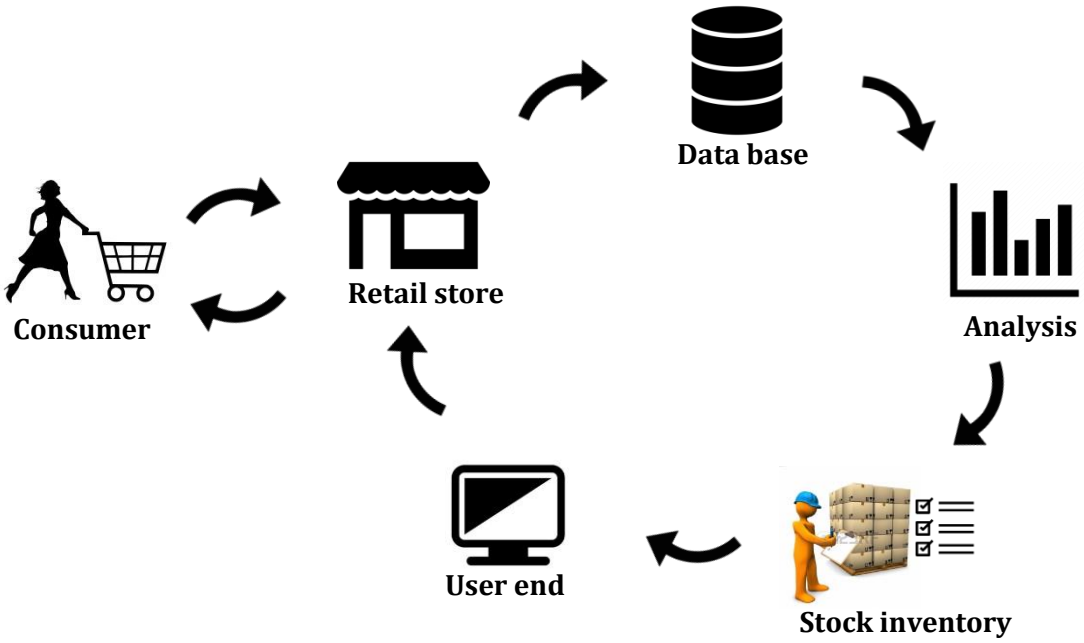

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User may have a direct interaction with retailer or through user end applications to find out the stock availability	HTML, CSS, JavaScript, HTTP
2.	Application Logic-1	Logic for a process in the application	IBM Cognos analytics
3.	Database	Data Type, Configurations etc.	Excel , xls formatted dataset
4.	Cloud Database	Database Service on Cloud	IBM cloud service
5.	File Storage	File storage requirements	IBM cloud storage
6.	Analysis	Analysing the previous stock supply to the particular retail store	IBM cognos
7.	Data visualization	Understanding the need for changes in stock supply to the store	Cognos IBM
8.	Update	Change the stock inventory to the store	User end contacts

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	IBM Cognos analytics, cloud
2.	Security Implementations	use of firewalls etc.	Encryption algorithms
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Web server – HTTP Application server – python Database server – IBM cloud
4.	Availability	For all consumers of the retail store	IBM cloud
5.	Performance	Retail store owners get to know how to manage their stock inventory to avoid losses and increase profit in demanded areas	ML algorithms , but usually IBM cognos for predictions