

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

Domain	Data Analytics
Team ID	PNT2022TMID08352
Project Name	Project -Retail stock inventory
College	Dhanalakshmi Srinivasan Engineering College

Technical Architecture:

IBM COGNOS ANALYTICS

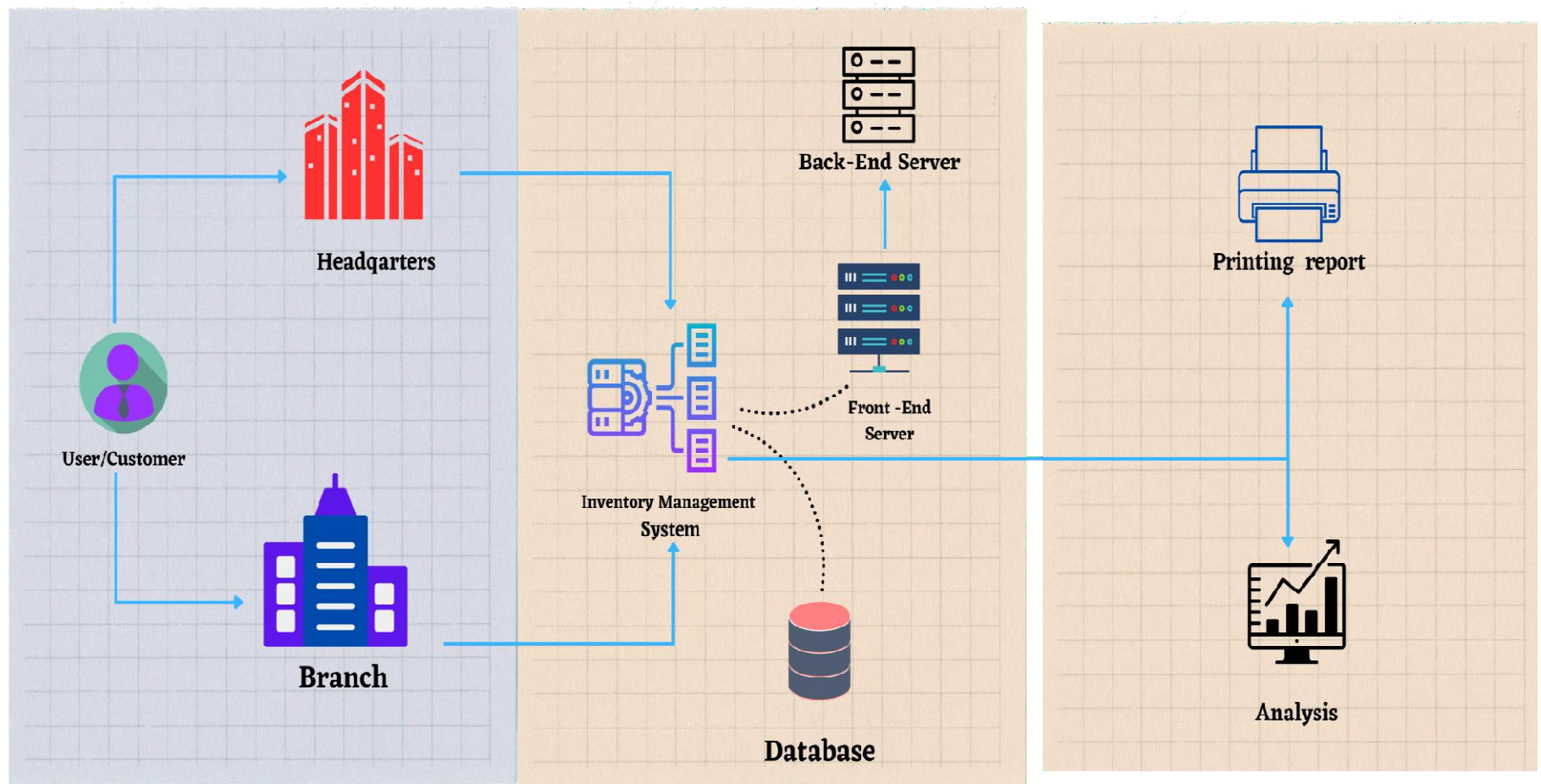


Table-1 : Components & Technologies:

S.No	COMPONENT	DESCRIPTION	TECHNOLOGY
1.	User Interface	The user interacts with application using Web UI	HTML, CSS, JavaScript
2.	Data Processing	The data from the dataset is pre-processed	IBM Cognos Analytics
3.	Cloud Database	The clean dataset is stored on IBM Cloud	IBM Cloud
4.	Data visualization	The data is visualized into different forms	IBM Cognos Analytics, Python
5.	Prediction	These Algorithm techniques are used to predict the proper way to make the stock in store.	ML algorithms –Logistic Regression, Linear Regression, Random Forest, ABC Techniques.

Table-2: Application Characteristics:

S. No	CHARACTERISTICS	DESCRIPTION	TECHNOLOGY
1.	Open-Source Frameworks	Open-source frameworks used	IBM Cognos Analytics, Python
2.	Security Implementations	Request authentication using Encryptions	Encryptions
3.	Scalable Architecture	Scalability consists of 3-tiers	Web Server - HTML, CSS, Javascript Application Server - Python Database Server - IBM Cloud
4.	Availability	The application is available for cloud users	IBM Cloud Hosting
5.	Performance	The user can know how to maintain the inventory to increase profits.	ML algorithms