

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

Date	03 October 2022
Team ID	PNT2022TMID28102
Project Name	Project - Global Sales Data Analytics
Maximum Marks	4 Marks

Technical Architecture:

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript
2.	Application Logic-1	Logic for a process in the application	Python
3.	Application Logic-2	Logic for a process in the application	IBM Cognos Analytics
4.	Application Logic-3	Logic for a process in the application	IBM Cognos Dispatcher
5.	Database	Data Type, Configurations etc.	MySQL
6.	Cloud Database	Database Service on Cloud	IBM Cognos content store
7.	File Storage	File storage requirements	Local Data source
8.	External API-1	Purpose of External API used in the application	Online Analytical processing

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Python Numpy, Pandas
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	IBM Cognos or NIST SP 800-131A, CSK, SSL
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Modularity through Microservices
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Cloud processing, Multiple endpoints through the use of load balancers.
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Very low latency, Serve high number of requests per sec, High graphical Interface