

Assignment-2 iNeuron

1. Explain the advantages of Natural Queries in PowerBi with an example?

Ans:- The advantages of Natural Queries in PowerBi:

- **1.**Guided NLQ is a unique self-service BI experience.
- **2.**Every question is understood by Guided NLQ.
- **3.**Guided NLQ makes it simple to ask complex questions.
- **4.**Guided NLQ is integrated throughout Yellowfin.
- **5.**It's easy to embed Guided NLQ into your applications.
- 2. Explain Web Front End(WFE) cluster from Power BI Service Architecture?

<u>Ans:</u>- The Web Front End (WFE) cluster. The WFE cluster manages the initial connection and authentication to the Power BI service. The Back-End cluster. Once authenticated, the Back-End handles all subsequent user interactions. Power BI uses Azure Active Directory (Azure AD) to store and manage user identities.

3. Explain Back End cluster from Power BI Service Architecture?

<u>Ans:-</u> The Back-End cluster determines how authenticated clients interact with the Power BI service. The Back-End cluster manages visualizations, user dashboards, datasets, reports, data storage, data connections, data refresh, and other aspects of interacting with the Power BI service.

4. What ASP.NET component does in Power BI Service Architecture?

Ans:- ASP. NET component helps us to use real-time technologies like Web Sockets in power BI.

5. Compare Microsoft Excel and PowerBi Desktop on the following features: Data import, Data transformation, Modeling, Reporting, Server Deployment, Convert Models, Cost.

Ans:- Comparison of Microsoft Excel and power BI on the below mentioned points:

- **1.Data import :-** Excel has limitations in the amount of data it can work with. In contrast, Power BI can handle much larger amounts of data. Power BI can connect to a large number of data sources, while Excel's connectivity capacity is limited. Also, unlike Excel, Power BI can be easily used from mobile devices.
- **2. Data transformation :-** Excel is used to organize data, transform it and perform mathematical operations and calculations. On the other hand, Power BI was conceived as a business intelligence and data visualization tool for businesses. Excel has limitations in the amount of data it can work with.
- **3. Modeling :-** Power BI can connect to a large number of data sources, while Excel's connectivity capacity is limited. Also, unlike Excel, Power BI can be easily used from mobile devices. Power BI has faster processing than Excel. Power BI dashboards are more visually appealing, interactive and customizable than those in Excel.
- **4. Reporting :-** Power BI has faster processing than Excel. Power BI dashboards are more visually appealing, interactive and customizable than those in Excel. Power BI is a more powerful tool than Excel in terms of comparison between tables, reports or data files. Power BI is more user friendly and easy to use than Excel.
- **5. Server Deployment :-** The deployment process lets you clone content from one stage in the pipeline to another, typically from development to test, and from test to production. During deployment, Power BI copies the content from the current stage, into the target one. The connections between the copied items are kept during the copy process.
- **6. Convert Models :-** A Data Model allows you to integrate data from multiple tables, effectively building a relational data source inside an Excel workbook. Within Excel, Data Models are used transparently, providing tabular data used in PivotTables and PivotCharts. Data Modeling is one of the features used to connect multiple data sources in BI tool using a relationship. A relationship defines how data sources are connected with each other and you can create interesting data visualizations on multiple data sources.
- **7. Cost :-** Excel has been around for a long time, most users find it easy to learn. Power BI Desktop is free to download and use for personal use, but it takes \$10 per month per user to share reports with others. Since we already have Excel, we need to spend additional money to procure this and build dashboards.
- 6. List 20 data sources supported by Power Bi desktop.

Ans: - 20 data sources supported by Power Bi desktop.

- SQL Server database
- Access database
- SQL Server Analysis Services database
- Oracle database
- IBM Db2 database
- IBM Informix database (Beta)
- IBM Netezza
- MySQL database
- PostgreSQL database
- Sybase database
- Teradata database
- SAP HANA database
- SAP Business Warehouse Application Server
- SAP Business Warehouse Message Server
- Amazon Redshift
- Impala
- Google BigQuery
- Google BigQuery (Azure AD)(Beta)
- Vertica
- Snowflake