**Keerthika**

**SQL BI Developer**

**Professional Summary**

* Overall’ 8 years of experience managing **SQL Server environments (2014, 2016, 2019, 2022)**, with expertise in **administration**, **ETL processes**, and **data modeling**. Proficient in **database installation, configuration, maintenance**, and performance optimization to ensure high availability and reliability. Extensive experience with **SQL Server** upgrades, applying service packs and hotfixes, and performing unattended installations to maintain system efficiency.
* Deep understanding of the **SDLC**, from planning and **requirements gathering** to deployment and production support. Skilled in **designing databases, relational database management systems (RDBMS)**, and **data warehouses** that are scalable, optimized, and aligned with business needs.
* Strong foundation in data modeling concepts to structure data efficiently, ensuring high application performance and usability.
* Proficient in performance tuning and query optimization to improve response times and reduce resource usage. Familiar with using **Database Consistency Check (DBCC)** utilities for regular **database health checks,** ensuring **data integrity** and consistency.
* Conducts capacity planning to anticipate and prepare for future database growth, minimizing downtime and maintaining performance standards.
* Skilled in **Tableau** for **data visualization, enabling clear** and actionable insights for **business stakeholders.** Experienced in creating advanced analytical reports using **MS Excel, MS PowerPoint, and MS Access**, tailored to meet business requirements.
* Adept using reporting tools like **ProClarity and SQL Server Reporting Services (SSRS)** to build insightful, data-driven reports from **OLAP (Online Analytical Processing) cubes.**
* Proficient in complex **SQL techniques**, including recursive **Common Table Expressions (CTEs)**, temporary tables, and effective use of **DDL/DML triggers** for data consistency.
* Well-versed in writing optimized **SQL queries** that enhance data retrieval and manipulation while supporting application performance.
* Experienced in optimizing Tableau dashboards for performance and user experience.
* Translates complex business requirements into efficient **ETL (Extract, Transform, Load)** and reporting specifications, supporting data migration and transformation initiatives.
* Builds robust **ETL packages** from multiple data sources, including **SQL Server, flat files, Excel, and XML, to streamline data flows** and maintain consistency across applications.
* Experienced designing and developing **OLAP cubes with SQL Server Analysis Services (SSAS),** including measure groups, dimensions, and relationships for accurate data analysis. Utilizes **OLAP capabilities** to structure large datasets for faster retrieval, enabling more efficient data analytics and reporting.
* Manages database security through authentication, user roles, and permission configurations to ensure data integrity and access control. Proactively resolves deadlocks and other security issues to maintain seamless database operation and protect sensitive information.
* Knowledgeable in **SQL Server** clustering to improve database fault tolerance and system redundancy. Skilled in using **SQL Profiler** and **tracing tools** to monitor and analyze **SQL Server events**, maintaining system health, and troubleshooting issues as they arise. Experience working within **AWS environments** to support distributed database operations and provide reliable data storage solutions. Creates automated **SQL jobs, packages, and alerts** using **SQL Mail** and **Database Mail** for efficient **database management.**
* Proficient in setting up linked servers to support distributed queries across **SQL servers**, facilitating seamless data integration across systems. Hands-on experience in automating routine database tasks with Windows batch scripting and PowerShell, enhancing productivity and reducing manual intervention.
* Utilized Azure SQL Database and Azure Synapse Analytics for scalable data warehousing and analytics.
* Skilled in writing **SQL** and Windows scripts to perform complex operations efficiently, supporting routine maintenance and data processing tasks. Familiarity with the Hadoop ecosystem for handling large-scale **data projects**, employing **Python for data analysis** and **data science.**
* Strong foundational knowledge **in Python programming**, with an understanding of **variables, data types, loops, and conditionals**, enabling them to create scripts that support data operations.
* Experienced in collaborating closely with cross-functional teams, from gathering initial requirements to developing, deploying, and providing production support for projects.
* Highly effective communicator with a team-oriented mindset, skilled in sharing knowledge and contributing to team success.
* Known for creativity and innovation in solving complex problems, with a proactive approach to identifying and implementing improvements. Self-motivated and resourceful, consistently thinking outside the box to add value and enhance database solutions.

**Technical Skills:**

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| **SQL Server Tools:** | SQL Server Management Studio |
| **Programming Languages:** | SQL, PL/SQL, C#, HQL, Python |
| **ETL Tools:** | Data Transformation Services, SQL Server Integration Services (SSIS), SQL Server Reporting Services (SSRS), SQL Server Analysis Services |
| **Methodologies:** | (SSAS), Agile, waterfall |
| **Monitoring Tools:** | Kibana, Grafana, ESP |
| **Other Tools:** | MS Office, MS Excel, MS Project, MS PowerPoint, Visual studio |
| **Operating Systems:** | MS Visio Windows 10/8/7/XP, UNIX, LINUX, MAC |
| **Reporting Tools:** | SSRS, Power BI, Tableau |
| **Big Data Ecosystem:** | HDFS, Hive, PIG, Oozie, HBase, Kafka |

**Education**

* Bachelor of Engineering in Computer Science
* East Point College of Engineering and Technology, India

**Professional Experience**

**Client: MetLife Inc., New York, NY June 2022 – Present**

**Role: SQL BI Developer**

**Project Description**: As an SQL BI Developerat MetLife, Inc., a leading global financial services company, I supported and optimized data processes within the organization, facilitating efficient data management for insurance, annuities, employee benefits, and asset management products. My role involved developing robust ETL pipelines, enhancing data visualization and reporting solutions, and collaborating with stakeholders to meet data-driven business requirements.

**Key responsibilities:**

* Collaborated daily with business stakeholders to analyze requirements, assess progress, and align deliverables with organizational goals, ensuring the **BI solutions** met business needs effectively.
* Designed and implemented **SSIS packages** in **Business Intelligence Development Studio (BIDS)** and **Visual Studio** to extract data from **legacy systems** to **SQL Server (2019, 2022)**.
* Developed and maintained data transformation workflows using SQL Server Integration Services (SSIS) to streamline data flow across platforms and ensure accurate data migration.
* Created complex **T-SQL scripts,** including stored procedures, functions, indexes, tables, and views, to meet the varied requirements of business applications.
* Optimized SQL queries for performance using **SQL Profiler, Data Engine Tuning Advisor,** and **index tuning wizard,** ensuring quick data retrieval and efficient database operations.
* Utilized **Erwin** for logical and physical data modeling to design data schemas that support efficient storage and retrieval, ensuring data integrity.
* Managed the BI environment, incorporating data sources, data models, and warehousing strategies **(data marts, ODS, OLAP)** and employing **star** and **snowflake schema designs** with fact and dimension tables.
* Built Power BI reports and dashboards from scratch, allowing for data analysis and insights for business users, including geolocation comparisons by area, region, and sub-region.
* Created **Excel Pivot tables** and **dashboards** to present data in intuitive formats, aiding in geographical data analysis.
* Developed a wide range of report types, including tabular, matrix, drill-down, drill-through, parameterized, and ad-hoc reports, using SQL **Server Reporting Services (SSRS)** to address specific business requirements.
* Maintained **OLAP cubes** and multidimensional data models within **SQL Server Analysis Services (SSAS),** building **MDX queries** for comprehensive data analysis.
* Utilized SSAS to implement complex analytical processes and manage data marts for enhanced business insights and strategic decision-making.
* Configured and managed Power BI Premium Capacity to share applications efficiently with business users, maintaining data security and performance.
* Installed and managed on-premises gateways, ensuring secure data transfer between on-premises data sources and the Power BI service for real-time analytics.
* Designed and developed robust ETL processes using SSIS to extract, transform, and load data from various sources.
* Wrote **test scripts** based on business requirements to conduct functional testing, data validation, and data reconciliation, ensuring data accuracy and reliability in BI reports.
* Utilized SSRS to create ETL metadata reports, track execution times, and log errors with descriptions for SSIS package troubleshooting.
* Experience on the Scripting Languages like Python, Bash & PowerShell
* Skilled in data preparation and cleaning using Tableau's data preparation tools.
* Implemented event handlers and error handling within SSIS packages, ensuring smooth ETL operations and notifying relevant user communities of process results.
* Managed AWS resources and EC2 instances for hosting BI and analytics solutions.
* Monitored database performance, maintaining data integrity and optimizing SQL queries for efficiency, reducing load times and improving data retrieval.
* Adept at utilizing Tableau's advanced features like calculated fields, table calculations, and custom visualizations.
* Managed relationships between tables using star schemas in Power BI, optimizing the data model to streamline report building and analysis.
* Worked closely with team members and stakeholders, ensuring a continuous flow of project updates and feedback to maintain alignment on project status and objectives.
* Built **SSIS ETL** packages for processing fact and dimension tables, including slowly changing dimensions, to keep database platforms updated and resilient to changes in data structure and content.

**Environment:** MS SQL Server (2019, 2022), Power BI, Erwin, BIDS, Visual Studio, SSIS, SSRS, SSAS, SharePoint Server, Visual Basic

**Client: IQVIA, India Sep 2015 – Apr 2021**

**Role: SQL BI Developer**

**Project #1:**

**Project Description:** As an SQL BI Developer at IQVIA, a leader in healthcare analytics and clinical research services, I was responsible for delivering end-to-end Business Intelligence (BI) and Data Analytics solutions, working across multiple technologies and platforms to meet the business intelligence needs of the life sciences sector. I managed data transformation processes, built complex BI dashboards, and contributed to a global data management system with a focus on SQL Server, SSIS, SSRS, SSAS, Power BI, and Tableau.

**Key responsibilities:**

* Followed the **Software Development Life Cycle (SDLC)** to thoroughly analyze business requirements, designing workflows to ensure that information moved efficiently from source systems to destination systems.
* Planned, defined, and designed data structures using **Erwin** based on business requirements, creating documentation to guide the data flow architecture.
* Created visualizations in **Power BI,** incorporating data representations such as cross-tabs, maps, scatter plots, pie charts, bar charts, and density charts to present actionable insights.
* Designed interactive dashboards and published reports to the Power BI preview portal, connecting to **SSAS Tabular models** through the Analysis connector.
* Utilized **HiveQL** to retrieve and process data within Hive databases in a **Hadoop ecosystem,** supporting large-scale data analytics.
* Installed **SQL Server** and associated management tools, upgraded existing databases, and configured environments for optimized performance and security.
* Scheduled and monitored SSIS packages to ensure timely and accurate data integration.
* Built **SSIS packages** for data transfer from **OLTP** to **OLAP systems,** extracting data from sources like text files, XML files, SQL Server, Excel, and Oracle using **Business Intelligence Development Studio (BIDS)**.
* Designed SSIS packages with complex data flows, using package deployment utilities to facilitate deployment in different environments, and scheduled jobs for automated data loading processes.
* Developed error handling and event management processes to improve reliability within ETL pipelines, creating ETL metadata reports using SSRS.
* Worked with various scripting languages like Shell and Python, Wrote Python scripts for pushing data from Mongo DB to SQL Database
* Employed AWS EMR for big data processing and machine learning tasks.
* Implemented Tableau solutions to support data-driven decision-making processes.
* Designed, processed, and partitioned cubes using SSAS for efficient data aggregation and analysis. Created calculated measures and dimensions using **MDX (Multidimensional Expressions)** to support robust analytics.
* Deployed SSAS objects with the deployment wizard and integrated SSAS tabular models for seamless analysis with Power BI and Excel.
* Created parameterized, drill-down, drill-through, and ad-hoc reports in **SSRS** using local and global variables, expressions, and filters.
* Leveraged Azure Data Factory for data integration and ETL processes.
* Developed SSRS reports for external and internal reporting, including Activity-Based Costing (ABC) for shipment tracking, and optimized report performance through **SQL Profiler** and **Database Tuning Advisor**.
* Documented troubleshooting steps and best practices in Confluence, contributing to a knowledge repository that supported team members and streamlined issue resolution.
* Actively participated in **Agile methodology,** attending **daily scrum meetings** and coordinating with team members to ensure timely project delivery.

**Environment:** Agile, SQL Server (2019, 2022), SSIS, SSAS, SSRS, Terraform, Erwin, Share point, MDX, PowerBI, Tableau, Power BI, BIDS, MS Office, T-SQL, Windows, Linux

#### **Role: SQL BI Developer**

#### **Project #2:**

**Key responsibilities:**

* Gathered business requirements for BI analytics, creating technical designs and documentation to guide the development and testing of solutions.
* Developed and maintained ETL processes using **Microsoft SSIS** to integrate data into the Enterprise Data Warehouse, handling complex transformations, and managing source-to-destination data flows.
* Coordinated table structure architecture, ETL process documentation, and long-term data management strategies to ensure data integrity and maintainable solutions.
* Designed and managed **SQL Server objects,** including tables, indexes, user-defined functions, triggers, and parameterized stored procedures.
* Wrote optimized **T-SQL queries,** improving stored procedure performance through **SQL Profiler,** and **Database Tuning Advisor** by identifying and implementing necessary indexing strategies.
* Configured and managed **Virtual Machines (VMs)** for development and testing environments, deploying **Windows/Linux OS** based on project requirements.
* Created and managed VMs using **Azure Resource Manager (ARM) JSON templates** and automated VM operations using **PowerShell** and **Azure .NET SDK**.
* Set up Multi-Factor Authentication (MFA) to secure applications and access, enhancing security protocols within project environments. Implemented **Azure Operational Insights** (also known as Microsoft Operations Management Suite), analyzing system performance, security status, capacity planning, malware assessment, and log management.
* Utilized SSIS features like script tasks, data flow tasks, and control flow tasks to automate data pipelines.
* Built and published interactive, customized reports and dashboards using **Tableau Server** to provide stakeholders with easy access to insights.
* Utilized custom SQL in Tableau Desktop to pull and manipulate data for creating detailed and visually engaging reports, enhancing the quality of business intelligence.
* Utilized **Data Script tasks** within SSIS to execute custom programs and manage error handling in data files. Created project-level deployment processes in TFS, defining variables, expressions for connection strings, project parameters, and configuration for streamlined deployment.
* Developed parameterized reports in SSRS and published knowledge articles to standardize troubleshooting steps across projects. Conducted **unit testing, System Integration Testing (SIT), User Acceptance Testing (UAT),** and comprehensive data validations to ensure robust and reliable solutions.
* Participated in **Agile sprints,** adapting processes to meet project requirements and achieve high standards of quality in deliverables.

**Environment:** SQL Server 2014/2012, Windows Server 2008, SSIS, SSAS, SSRS, Tableau 9.3, SQL profiler, Performance Monitor, Python, Visual Studio 2015, Facets, Power BI, ASP.NET, C#.NET, T-SQL, Agile, XML, VSTS, MS Visual Studio, Teradata, Team Foundation Server (TFS).