

# POSTGRESQL FOR DEVELOPERS

Duration: 4 Days



#### COURSE OVERVIEW

The PostgreSQL for Developers course is a comprehensive training program designed to equip you with the knowledge and skills necessary to effectively utilize PostgreSQL, a powerful and widely used relational database management system.

PostgreSQL, often referred to as Postgres, is renowned for its reliability, scalability, and extensibility. This course focuses on practical aspects, providing hands-on experience in working with PostgreSQL to develop robust and highperforming database applications.

The course delves into into the basic constructs and operations of PostgreSQL, such as creating databases, managing tables, and using data types. You will also learn about guerying data using SQL.

This course also covers advanced PostgreSQL features such as stored procedures, triggers, and views. You will understand how to leverage these features to enhance application functionality and automate database tasks.

You will learn about indexing strategies to optimize query performance, enabling faster data access and improved overall database efficiency. You will gain insights into implementing data integrity constraints to ensure data consistency and reliability.

By the end of the course, you will have a strong foundation in PostgreSQL development. You will be equipped with the skills and knowledge to design, develop, and maintain robust and high-performing database applications using PostgreSQL. The practical, hands-on approach of the course will enable the you to apply your learning in real-world scenarios, enhancing your productivity and effectiveness as PostgreSQL developers.





#### WHAT YOU WILL ACCOMPLISH

- ✓ Introduction to PostgreSQL
- Understanding PostgreSQL Database Design
- Understanding Data Normalisation and Relationships
- ✓ Working on PostgreSQL Tables
- Working on PostgreSQL Data Manipulation
- Working on PostgreSQL Data Querying and Filtering
- ✓ Working on PostgreSQL Joins
- Working on PostgreSQL Data Aggregation and Grouping
- Working on PostgreSQL Combine Queries and Subqueries
- ✓ Working on PostgreSQL Common Table Expression (CTE)
- Working on PostgreSQL Built-In Functions
- ✓ Working on PostgreSQL JSON data
- ✓ Working on PostgreSQL Store Procdures and Views and Triggers
- ✓ Working on PostgreSQL Data Imports and Exports
- ✓ Working on PostgreSQL Backups and Recovery
- Working on PostgreSQL Database Security
- Working on PostgreSQL on Cloud
- Working on PostgreSQL Databse Design Project











### WHY THIS COURSE

The journey of becoming a PostgreSQL for Developer can bring numerous benefits to you as a developer.

- PostgreSQL is widely used in the industry and has gained a reputation as a powerful and reliable database management system. By mastering PostgreSQL, you equip yourself with a sought-after skill that is in high demand among employers.
- PostgreSQL is known for its ability to handle large volumes of data and support complex applications. By learning PostgreSQL, you gain the knowledge and techniques to design and develop robust and scalable database applications that can handle diverse business needs.
- This course covers essential aspects of database design and optimization, including schema design, indexing strategies, and guery optimization. These skills enable you to create efficient database structures and write optimized queries, resulting in improved application performance.
- This course focuses on a practical, hands-on approach, allowing you to gain real-world experience working with PostgreSQL. Through interactive exercises and projects, you'll have the opportunity to apply your learning and develop proficiency in utilizing PostgreSQL effectively.
- PostgreSQL has a vibrant and supportive open-source community. By becoming part of this community, you can access valuable resources, collaborate with like-minded professionals, and stay updated on the latest advancements in PostgreSQL.

Taking the PostgreSQL for Developer course equips you with the skills and knowledge to work effectively with PostgreSQL, opening up numerous career opportunities and enabling you to build robust and scalable applications.







## WHO SHOULD ATTEND

This course is designed with developers in mind. It is a valuable resource for anyone interested in learning about PostgreSQL, its architecture, functionalities, and application in software development.

- If you are new to database development or have limited experience with PostgreSQL, this course is an excellent starting point. It provides a comprehensive introduction to SQL Server, equipping you with the necessary skills to begin a career as a database developer or application developer.
- If you are already working as a developer and want to enhance your skills in working with PostgreSQL databases, this course is designed for you. It will deepen your understanding of PostgreSQL, improve your query writing techniques, and provide insights into advanced topics such as query optimization and performance tuning.
- Software engineers or Full-stack developers who work with both front-end and back-end technologies can enhance their skill set by gaining proficiency in PostgreSQL. They can integrate PostgreSQL into their applications and leverage its powerful features to create efficient and scalable data-driven applications.
- Students pursuing a degree or certification in computer science or a related field can benefit from learning PostgreSQL as part of their curriculum. It equips them with practical skills that are highly relevant in the industry and can enhance their employability.
- If you have a general interest in databases and want to acquire proficiency in PostgreSQL, this course is suitable for you. It provides a solid foundation in PostgreSQL and equips you with the skills necessary to work with the RDBMS effectively.







### COURSE PREREQUISITE

To effectively learn the PostgreSQL for Developer course, it is beneficial to have a basic understanding of the following prerequisites:

- No previous knowledge of SQL or PostgreSQL is needed for this course.
- Comfortable navigating and working in a Windows environment.
- Comfort with using computers, navigating through the file system, and working with software applications is important. You should be able to perform tasks such as installing software, navigating through directories, and executing basic commands.

This course is designed to be accommodative towards varying levels of experience. Therefore, even if you don't have extensive programming or database knowledge, you can still benefit from the course by starting with the basics and building your skills from there.



WhatsApp 8214 5913

hi@loc.com.sa