

# PostgreSQL for Analysts (code: PgSQL-analysis-reports)

### **Overview**

Nowadays the ability of using database is useful not only for programmers. The training *PostgreSQL* for analysts is recommended for people who are not directly involved in writing the project's code, but make reports and analyze the data collected by the application. The course leads from the basis of SQL language, through its more sophisticated clauses until specialistic solutions appearing only in PostgreSQL.

After completing the training students will be able to create advanced reports by writing queries *directly in SQL language*, thus relieving the team of developers. Many statements requiring tedious data export from a database and import to Excel or Access can be quickly and more efficiently generated directly from PostgreSQL.

In the course we take into account *the full range of the possibilities* offered by PostgreSQL, we discuss the examples of solving *the most common reporting problems*. The training includes a great amount of exercises.

Our instructors have many years of experience with PostgreSQL, both as administrators and as programmers. One of our trainers is a **PostgreSQL contributor** and a regular speaker at the world's largest conference on the topic.

## **Duration**

3 days

## **Agenda**

- 1. Relational databases basics
  - The concept of relation
  - Table, row, column
  - Representing data as relations
- 2. SQL language
  - Data extraction, SELECT clause
  - Data types in SQL
  - Functions and operators
  - Filtering, WHERE clause
  - Grouping, GROUP BY and HAVING clauses
  - Set-theoretic operations, UNION, INTERSECT, EXCEPT
  - Joining multiple tables
  - DISTINCT and DISTINCT ON operations
  - Import and export of the data
    - COPY command, CSV format
- 3. Advanced SQL issues
  - Perspectives and subqueries
  - OLAP functions (window functions)
  - Common Table Expressions, recursive queries
- 4. Useful PostgreSQL extensions
  - Data processing in XML
  - Tablefunc module\_tablefunc\_
    - Pivot tables
  - Full text search

#### Ask for details

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- Fuzzy search
  - Fuzzy matching
  - Edit distance (Levenshtein's distance)

# Target audience and prerequisites

The training is recommended to people who are not directly involved in writing the project's code, but make reports and analyse data collected by the application.

## **Certificates**

Course participants receive completion certificates signed by ALX.

## Locations

- Warsaw (English) Jasna 14/16A
- Online (English) your home, office or wherever you want
- any other location (London, UK, EU) on request

## **Price**

990 EUR

The price includes:

- course materials,
- snacks, coffee, tea and soft drinks,
- course completion certificate,
- one-time consultation with the instructor after course completion.

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