

## Stored Procedures in PL/pgSQL for PostgreSQL (code: PL/pgSQL)

### Overview

Implementation of complicated *business processes* in database often requires using stored procedures. In case of PostgreSQL it means using PL/pgSQL language. Although it's SQL's close relative it has some differences which open up new opportunities for programmers.

The training shows PL/pgSQL constructions, ways of defining and developing procedures and triggers. Basing on **practical examples** we show how to close the business logic processes inside stored procedures and what are benefits of applying such architecture. Students also learn writing new *triggers* which preserve data integrity.

We also discuss **the best practises** while creating PL/pgSQL procedures and we emphasise the most common mistakes. We show when using PL/pgSQL is necessary and when the procedure in SQL only is sufficient. We explain the difference between the two mentioned approaches.

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.

### Ask for details

Phone +44 203 608 6289

info@alx.training

### Duration

2 days

### Agenda

1. Procedures defining
  - Input and output signature
  - Scalars return
  - Tables return
  - Volatile, stable, immutable procedures
2. PL/pgSQL language
  - Language constructions
    - Variables declaration
    - Conditional expressions
    - Loops and cursors
  - Cooperation with SQL
  - Explicit SQL calls
    - Dynamic SQL
  - Exceptions handling
  - Complex procedures debugging
  - Best practices of writing a code
3. Triggers
  - Triggers defining
  - Data acceptance, modification, discarding
  - Examples of the triggers usage

### Target audience and prerequisites

We recommend that the participants know SQL language and have minimum experience with any programming language.

## **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**

740 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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