

# 0. Course Introduction

## Introduction to PostgreSQL



# PostgreSQL

# LOGISTICS



## **Class Hours:**

- Instructor will provide class start and end times.
- There will be regular breaks in class.



## **Telecommunication:**

- Turn off or set electronic devices to silent (not vibrate)
- Reading or attending to devices can be distracting to other students
- Try to delay until breaks or after class

# INSTRUCTOR – ROD DAVISON

- Involved in the technology industry since 1972
- Academia (theoretical mathematics, linguistics, cognitive science)
- Artificial Intelligence R&D and product development
- Software Development: small products to large scale systems development
- Data Analytics: Social Research, experimental design. Market Research, Project Manager and Research Director
- Quality and Testing, Business Analysis, Consulting and training



# INTRODUCTIONS

- Briefly, share with us your:
  - Name you prefer to use in class
  - Area of professional expertise (DBA, developer, tester, etc.)
  - Current job responsibility if relevant
  - Database experience
  - Level of familiarity with PostgreSQL
  - Any specific learning objectives or goals you might have for the class
- Also...
  - Please ask any questions you might have about the class



# CLASS MATERIALS

- There are two GitHub repositories provided
- The first contains all the course materials
  - Located at <https://github.com/ExgnoRepos/2421-Postgresql-Sept-9>
  - This includes the markdown materials, slides, labs and additional resources
  - The repository will be available until October 11, 2024
  - Additional material may be added during the class if required
  - We will also be making use of the official PostgreSQL documentation
- The second contains a copy of the labs
  - Located at <https://github.com/ExgnoRepos/2421-Postgresql-Labs>
  - This repository will also be available until October 11, 2024
  - This is a convenience repository so that you can clone just the labs into your VM





# LAB ENVIRONMENTS

- Each student will have a dedicated Windows 10 VM with PostgreSQL already installed
  - The VMs will be available continuously until the end of the last day of class
  - The Windows VMs will also be used for remote access to a Unix PostgreSQL server
  - You will be assigned usernames for the remote server
- There is no need to install anything on your own computer for the class
- The first lab will walk through how to access the VMs



# AGENDA

- Introduction to PostgreSQL
- psql: The PostgreSQL client
- Installation and Setup
- Managing and configuring tables & views
- Performance optimization
- Monitoring
- Backup and Recovery
- High Availability and Replication
- Upgrades
- Migration overview



# CLASS PROTOCOLS

- Think of this as a graduate level seminar where the instructor is also the facilitator of contributions made by the group.
  - You and your fellow students represent a collective body of knowledge and experience
- You will get the most out of this class by being interactive, and proactively sharing your insights, experiences and opinions on the material presented.
- Your feedback and questions are always welcomed.
- Speak up anytime.
- Have fun.





## End Module



# PostgreSQL