

STATEMENT OF ACCOMPLISHMENT

#23,494,931

HAS BEEN AWARDED TO

Tat Dat Tran

FOR SUCCESSFULLY COMPLETING

Intermediate SQL Queries

LENGTH

4 HOURS

COMPLETED ON

DEC 15, 2022



A handwritten signature in black ink, appearing to read 'Jonathan Cornelissen'.

Jonathan Cornelissen, CEO



INTERACTIVE COURSE Intermediate SQL Queries

Practice Now Replay Course Bookmark

4 hours
1 Videos
41 Exercises
1,485,515 Participants
3,450 XP

Course Description

The role of a data scientist is to turn raw data into actionable insights. Much of the world's raw data—from electronic medical records to customer transaction histories—lives in organized collections of tables called relational databases. To be an effective data scientist, you must know how to wrangle and extract data from these databases using a language called SQL. This course teaches syntax in SQL shared by many types of databases, such as PostgreSQL, MySQL, SQL Server, and Oracle. This course teaches you everything you need to know to begin working with databases today!



Statement of Accomplishment

View

DATASETS

IMDb Film data

Explore datasets



Nick Carched
Product Manager at DataCamp

Nick is a Product Manager at DataCamp. Prior to joining DataCamp, he earned his master's degree at Johns Hopkins Biostatistics and worked as a data scientist for McKinsey. Nick's passion for teaching data science began in graduate school, where he was heavily involved in tutoring fellow students, developing the Johns Hopkins Data Science Specialization, and building the swirl R package.

See More

COLLABORATOR(S)

Colin Ricardo

Filip Schouwenaers

1 Selecting columns 100%

This chapter provides a brief introduction to working with relational databases. You'll learn about their structure, how to talk about them using database lingo, and how to begin an analysis using simple SQL commands to select and summarize columns from database tables.

- Welcome to the course! ✓ 50 xp
- Onboarding | Tables ✓ 50 xp
- Onboarding | Query Result ✓ 50 xp
- Onboarding | Errors ✓ 100 xp
- Onboarding | Multi-step Exercises ✓ 100 xp
- Beginning your SQL journey ✓ 50 xp
- SELECTing single columns ✓ 100 xp
- SELECTing multiple columns ✓ 100 xp
- SELECT DISTINCT ✓ 100 xp
- Learning to COUNT ✓ 50 xp
- Practice with COUNT ✓ 100 xp

HIDE CHAPTER DETAILS

Completed

2 Filtering rows 100%

This chapter builds on the first by teaching you how to filter tables for rows satisfying some criteria of interest. You'll learn how to use basic comparison operators, combine multiple criteria, match patterns in text, and much more.

- Filtering results ✓ 50 xp
- Simple filtering of numeric values ✓ 100 xp
- Simple filtering of text ✓ 100 xp
- WHERE AND ✓ 100 xp
- WHERE AND OR ✓ 50 xp
- WHERE AND OR (2) ✓ 100 xp
- BETWEEN ✓ 50 xp
- BETWEEN (2) ✓ 100 xp
- WHERE IN ✓ 100 xp
- Introduction to NULL and IS NULL ✓ 50 xp
- NULL and IS NULL ✓ 100 xp
- LIKE and NOT LIKE ✓ 100 xp

HIDE CHAPTER DETAILS

Completed

3 Aggregate Functions 100%

This chapter teaches you how to use aggregate functions to summarize data and gain useful insights. You'll also learn about arithmetic in SQL and how to use aliases to make your results more readable.

- Aggregate functions ✓ 100 xp
- Aggregate functions practice ✓ 100 xp
- Combining aggregate functions with WHERE ✓ 100 xp
- A note on arithmetic ✓ 50 xp
- It's AS simple AS aliasing ✓ 100 xp
- Even more aliasing ✓ 100 xp

HIDE CHAPTER DETAILS

Completed

4 Sorting and grouping 100%

This chapter provides a brief introduction to sorting and grouping your results.

- ORDER BY ✓ 50 xp
- Sorting single columns ✓ 100 xp
- Sorting single columns (2) ✓ 100 xp
- Sorting single columns (DESC) ✓ 100 xp
- Sorting multiple columns ✓ 100 xp
- GROUP BY ✓ 50 xp
- GROUP BY practice ✓ 100 xp
- GROUP BY practice (2) ✓ 100 xp
- HAVING a great time ✓ 50 xp
- All together now ✓ 100 xp
- All together now (2) ✓ 100 xp
- A taste of things to come ✓ 100 xp

HIDE CHAPTER DETAILS

Completed

STATEMENT OF ACCOMPLISHMENT

#27,186,622

HAS BEEN AWARDED TO

Tat Dat Tran

FOR SUCCESSFULLY COMPLETING

SQL for Joining Data

LENGTH

5 HOURS

COMPLETED ON

DEC 18, 2022



A handwritten signature in black ink, appearing to read 'Jonathan Cornelissen'.

Jonathan Cornelissen, CEO



SQL for Joining Data

Practice Now | Replay Course | Bookmark

5 hours
15 Videos
55 Exercises
353,927 Participants
4,450 XP

Course Description

Now that you've learned the basics of SQL, it's time to supercharge your queries using joins and relational set theory. In this course, you'll learn all about the power of joining tables while exploring interesting features of countries and their cities throughout the world. You will master inner and outer joins, as well as self joins, semi joins, anti joins and cross joins—fundamental tools in any PostgreSQL wizard's toolbox. Never fear set theory again after learning all about unions, intersections, and except clauses through easy-to-understand diagrams and examples. Lastly, you'll be introduced to the challenging topic of subqueries. You will be able to visually grasp these ideas by using Venn diagrams and other linking illustrations.



Statement of Accomplishment
View

This course is part of these tracks:
SQL Server Fundamentals

DATASETS
Countries
Leaders
Diagrams
Explore datasets



Dr. Chester Iamoy
Educator, Data Scientist, and R/Python Consultant

Chester enjoys helping others get into data science, figuring out how to best practice and improve on their skills, and working as a part-time consultant on R and Python programming projects. He is co-author of "Statistical Inference via Data Science: A Modern Dive into R and the Tidiverse" available at modernlive.com and for purchase from CRC Press. He likes leading education and data science teams with the goal of improving best practices based on data from the learning sciences.

See More

COLLABORATOR(S)

- Colin Ricardo
- Filip Schouwaers

PREREQUISITES

Intermediate SQL Queries

1 Introduction to joins 100%

In this chapter, you'll be introduced to the concept of joining tables, and will explore the different ways you can enrich your queries using inner joins and self joins. You'll also see how to use the case statement to split up a field into different categories.

- Introduction to INNER JOIN 50 xp
- inner join 100 xp
- inner join (2) 100 xp
- inner join (3) 100 xp
- INNER JOIN via USING 50 xp
- Review inner join using on 50 xp
- inner join with using 100 xp
- Self-ish joins, just in CASE 50 xp
- Self-join 100 xp
- Case when and then 100 xp
- inner challenge 100 xp

HIDE CHAPTER DETAILS Completed

2 Outer joins and cross joins 100%

In this chapter, you'll come to grips with different kinds of outer joins. You'll learn how to gain further insights into your data through left joins, right joins, and full joins. In addition to outer joins, you'll also work with cross joins.

- LEFT and RIGHT JOINS 50 xp
- Left Join 100 xp
- Left join (2) 100 xp
- Left join (3) 100 xp
- Right Join 100 xp
- FULL JOINS 50 xp
- Full join 100 xp
- Full join (2) 100 xp
- Full join (3) 100 xp
- Review outer joins 50 xp
- CROSSing the rubicon 50 xp
- A table of two cities 100 xp
- Outer challenge 100 xp

HIDE CHAPTER DETAILS Completed

3 Set theory clauses 100%

In this chapter, you'll learn more about set theory using Venn diagrams and get an introduction to union, union all, intersect, and except clauses. You'll finish by investigating semi joins and anti joins, which provide a nice introduction to subqueries.

- State of the UNION 50 xp
- Union 100 xp
- Union (2) 100 xp
- Union all 100 xp
- INTERSEctional data science 50 xp
- Intersect 100 xp
- Intersect (2) 100 xp
- Review union and intersect 50 xp
- EXCEPTIONal 50 xp
- Except 100 xp
- Except (2) 100 xp
- Semi-joins and Anti-joins 50 xp
- Semi-join 100 xp
- Relating semi-join to a tweaked inner join 50 xp
- Diagnosing problems using anti-join 100 xp
- Set theory challenge 100 xp

HIDE CHAPTER DETAILS Completed

4 Subqueries 100%

In this closing chapter, you'll learn how to use nested queries and you'll use what you've learned in this course to solve three challenge problems.

- Subqueries inside WHERE and SELECT clauses 50 xp
- Subquery inside where 100 xp
- Subquery inside where (2) 100 xp
- Subquery inside select 100 xp
- Subquery inside FROM clause 50 xp
- Subquery inside from 100 xp
- Advanced subquery 100 xp
- Subquery challenge 100 xp
- Subquery review 50 xp
- Course review 50 xp
- Final challenge 100 xp
- Final challenge (2) 100 xp
- Final challenge (3) 100 xp

HIDE CHAPTER DETAILS Completed