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Learning Without Bounds



Database Theory and Practice for Actuarial Analysis: Chapter 1: Course and Instructor Introductions

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Instructor Background

- 25 years as practicing actuary in Property and Casualty
 - Primary insurance
 - Consulting
 - Reinsurance
 - Long history of database project work
 - Learned the hard way
- Delighted to be here working with The Infinite Actuary!



Course Purpose

- Designed for actuarial analysts
- Covers necessary database theory and SQL for actuarial research and data acquisition
- Topic List
 - What is a database
 - Types of databases
 - RDBMS Platforms
 - Data normalization and ERDs
 - Basic-Advanced Structured Query Language (SQL)
 - Special topics for actuarial analysts
 - I'm stuck with Access® -- how do I use it effectively



Insurance Perspective

- Course taught using insurance centric examples and exercises
- Brief overview of processes, terminology, and accounting concepts provided
- Microsoft Access® used as platform for course
 - NOT ideal Database Management System
 - NOT best educational platform
 - BUT...in actuarial practice, everybody has it and almost all actuarial analysts use it in practice
 - If you do not already have Access®, you can obtain a license through Microsoft Office 365 program for less than \$100/year.



Course Materials

- Course enrollment entitles you to lifetime access to:
 - Online videos
 - Handouts
 - Sample databases
 - Exercises and solutions
 - Course forum
 - Me, the instructor
- However, be careful what you post or send by e-mail. Remember that some company data are **highly** confidential.



Course Requirements

- Microsoft Access® on a PC
- 30-40 hours of effort
 - Exercises are REALLY important – practice and problem solving enhance knowledge
 - Follow along with every example in Access®
- A humble, but hungry attitude
 - Approach every data set with caution and a desire to learn. You can learn the easy way or you can learn the hard way.



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- Bill Wilson, ACAS, MAAA
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- Ernest Crawford (data modeler)
- Jack Pei (database administrator)
- You – I want your suggestions and corrections



A few words about communication!