ASSIGNMENT NO: 1

SQL Certification

1. QUALITY OF COURSE PROVIDERS:

Oracle Certification offers a structured pathway for IT professionals to validate their expertise and proficiency in various Oracle technologies and products. With certifications available across different tracks such as Database, Java and Middleware, Applications, Systems, Industries, and Cloud, individuals can specialize in areas relevant to their roles and interests. These certifications are divided into three levels: Associate, Professional, and Master, representing increasing levels of expertise. By earning Oracle certification, professionals gain recognition and validation of their skills, opening up new career opportunities and potential for career advancement. Oracle certifications cover a wide range of products and technologies, including Oracle Database, Java programming, Middleware, Applications like E-Business Suite, PeopleSoft, and Siebel, as well as Oracle Cloud services. Preparation resources provided by Oracle include official study guides, training courses, practice exams, and hands-on labs to help candidates succeed in their certification journey. Continuing education is emphasized, with recertification requirements ensuring that professionals stay current with evolving technologies and best practices. Oracle certifications are globally recognized and respected, offering benefits such as access to exclusive resources, communities, and job opportunities. Valid for a certain period, typically around three years, Oracle certifications demonstrate expertise that is valued by employers and organizations worldwide.

2. COURSE OVERVIEW:

Week 1: Creating Tables

• Creating table

• Viewing table information

• Table organization (heap, indexed, external)

• Table types (temporary, partitioning, table clusters)

• Table dropping

Week 2: Data Types for Developers

• Defining and viewing columns

• Character data types (char, varchar, clob)

• Numeric data type

• Datetime and Interval Data Types

• Adding and removing column

Week 3: Table Design

• Capturing requirements

• Build the conceptual model

• Design the logical model

• Create the physical model

Week 4: A series of quizzes to recap the material from week/module 1-3.

Week 5: Querying and Filtering Rows

• Selecting the rows

• Filtering rows

• Combining criteria

• Order of precedence

Week 6: Joining Tables

• All join concepts

• Filtering join

Week 7: Aggregating Rows

• Aggregating functions

• Grouping and filtering aggregates

• Generating subtotals

Week 8: A chance to recap and catch up on modules 5-7 covering the basics of SQL queries: select, joins, and group by.

Week 9: Adding and Saving Rows

• Single and multirow insert

• Saving and undoing DML

• Savepoints and rollback concepts

• Conditional multi-table insert

Week 10: Update and Transactions

• Update and filtering update

• Deadlock concepts

Week 11: Removing Rows

• Delete

• Truncate

• Soft delete concepts

Week 12: A final set of quizzes to check you've understood the material on insert, update, delete, and truncate

3. SAMPLE ASSIGNMENT:

The given assignments will be worked out in a live SQL worksheet provided by the Oracle Server. The question will be given along with the Sample output as shown below.

Complete the following statement to create a table to store the following details about bricks:

- Colour
- Shape

Use the data type varchar2(10) for both columns.

```
create table bricks (
  /*TODO*/
);

select table_name
from   user_tables
where  table_name = 'BRICKS';
```

When you create the table, the query should return the value "BRICKS".

As mentioned above we have to execute it in Live SQL Worksheet:

SQL Worksheet

4. **CERTIFICATE:**

ORACLE Dev Gym

Certificate of Completion

is presented to

HarshaVarthanan

in recognition of their completion of

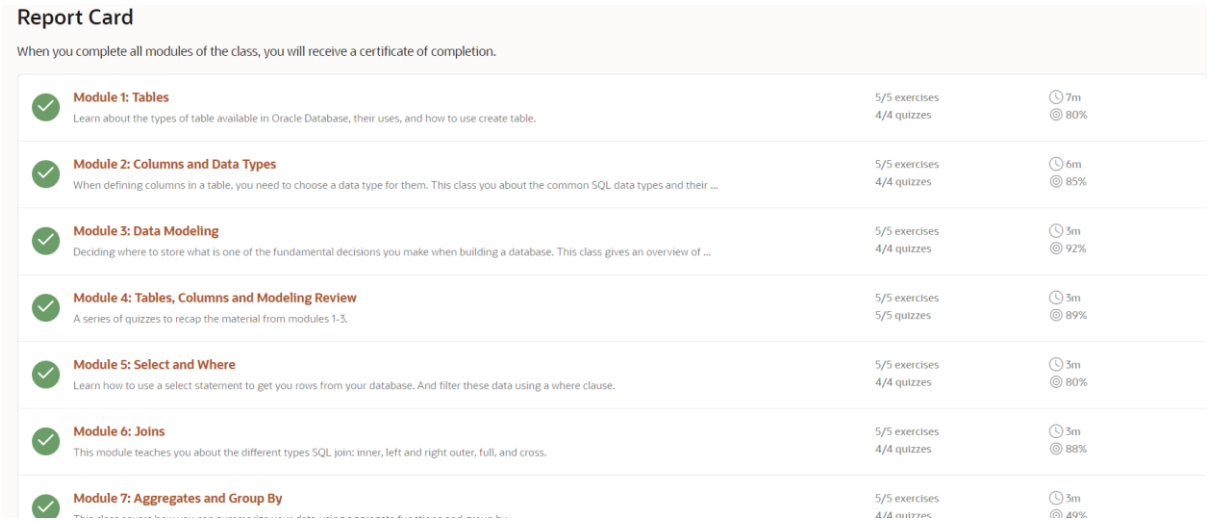
Databases for Developers: Foundations

taught by Chris Saxon

Presented by: Steven Feuerstein
Founder, Oracle Dev Gym

Steven Feuerstein

5. REPORT CARD (GIVEN BY ORACLE):



Report Card

When you complete all modules of the class, you will receive a certificate of completion.

Module 1: Tables	Learn about the types of table available in Oracle Database, their uses, and how to use create table.	5/5 exercises 4/4 quizzes	7m 80%
Module 2: Columns and Data Types	When defining columns in a table, you need to choose a data type for them. This class you about the common SQL data types and their ...	5/5 exercises 4/4 quizzes	6m 85%
Module 3: Data Modeling	Deciding where to store what is one of the fundamental decisions you make when building a database. This class gives an overview of ...	5/5 exercises 4/4 quizzes	3m 92%
Module 4: Tables, Columns and Modeling Review	A series of quizzes to recap the material from modules 1-3.	5/5 exercises 5/5 quizzes	3m 89%
Module 5: Select and Where	Learn how to use a select statement to get you rows from your database. And filter these data using a where clause.	5/5 exercises 4/4 quizzes	3m 80%
Module 6: Joins	This module teaches you about the different types SQL join: inner, left and right outer, full, and cross.	5/5 exercises 4/4 quizzes	3m 88%
Module 7: Aggregates and Group By	This class covers how you can summarize your data using aggregate functions and group by.	5/5 exercises 4/4 quizzes	3m 49%
Module 8: Select, Joins and Group By Review	A chance to recap and catch up on modules 5-7 covering the basics of SQL queries: select, joins and group by.	5/5 exercises 5/5 quizzes	5m 74%
Module 9: Insert and Commit	Learn how to use insert to loads data into your database tables. And save and undo your changes with commit and rollback.	5/5 exercises 4/4 quizzes	4m 70%
Module 10: Update and Transactions	Master the basics of changing values in your tables with the update statement. This module also covers the concept of a transaction:...	5/5 exercises 4/4 quizzes	2m 63%
Module 11: Delete and Truncate	Learn how to remove data from your database using delete and truncate. This class covers the differences between these operations an...	5/5 exercises 4/4 quizzes	3m 59%
Module 12: Insert, Update and Delete Review	A final set of quizzes to check you've understood the material on insert, update, delete, and truncate. Complete the course to get y...	5/5 exercises 5/5 quizzes	5m 49%