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| | **UNIT ID: 2316** |
| **Domain** | **WEB DEVELOPMENT** |
| **Title:** | **Perform advanced database queries** |
| **Level: 5** | **Credits: 11** |

## Purpose

This unit standard is intended for those who perform advanced database queries. People credited with this unit standard are able to perform advance Structured Query Language (SQL) commands, perform database views creation, perform Structured Query Language (SQL) JOINS, perform Structured Query Language (SQL) groupings, and perform Structured Query Language (SQL) removal of duplicates.

This unit standard is intended for those who work as web developers.

## Special Notes

1. Entry information:

   Prerequisite:
   - None

2. This unit standard is to be delivered and assessed in the context of information and communication technology.

3. Assessment evidence may be collected from a real or a simulated workplace in which ICT operations are carried out.

4. Tools and equipment may include but are not limited to computer, external devices, storage devices and basic computer applications.

5. Performance of all elements in this unit standard must comply with industry standards.

6. Regulations and legislation relevant to this unit standard include the following:
   - Labour Act 2007(Act No 11, 2007).
   - Regulations relating to the health and safety of employees at work under schedule 1 (2) of the Labour Act No.11 of 2007 and all subsequent amendments.

## Quality Assurance Requirements

This unit standard and others within this sub-field may be awarded by institutions which meet the accreditation requirements set by the Namibia Qualifications Authority and the Namibia Training Authority and which comply with the national assessment and moderation requirements. Details of specific accreditation requirements and the national assessment arrangements are available from the Namibia Qualifications Authority on www.namqa.org and the Namibia Training Authority on www.nta.com.na

## Elements and Performance Criteria

### Element 1: Perform Advance Structured Query Language (SQL) commands

**Performance Criteria**

1.1 SELECT Commands with JOIN on 2 tables are performed.

1.2 SELECT Commands with JOIN on 2 tables with WHERE clauses are performed.

1.3 SELECT Commands with JOIN on multiple tables with WHERE clauses are performed.

1.4 SELECT Commands with JOIN on 2 tables with WHERE clause using reserved words is performed.

1.5 SELECT Commands with JOIN on 2 tables with WHERE clause using reserved words is performed.

1.6 Worded scenarios translation to SQL is performed.

### Element 2: Perform database views creation

**Performance Criteria**

2.1 Database views creation are defined.

2.2 Importance of views is explained.

2.3 Database views creation are created.

2.4 Advantages and disadvantages of database views are outlined.

### Element 3: Perform Structured Query Language (SQL) JOINS

**Performance Criteria**

3.1 Normal JOINS are performed.

3.2 LEFT JOINS are performed.

3.3 RIGHT JOINS are performed.

3.4 FULL JOINS are performed.

3.5 UNION is performed.

3.6 UNION ALL is performed.

**Element 4: Perform Structured Query Language (SQL) groupings**

**Performance Criteria**

4.1 GROUP function is explained and performed.

4.2 HAVING function is explained and performed.

4.3 MIN, MAX, SUM, COUNT functions are performed.

4.4 EXISTS function is explained and performed.

**Element 5: Perform Structured Query Language (SQL) removal of duplicates**

**Performance Criteria**

5.1 DISTINCT function is explained and performed.

5.2 UNIQUE function is explained and performed.

5.3 ROWNUM functions are performed.

## Registration Data

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| **Subfield:** | Information and Communication Technology |
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| **Date first registered:** | 30 July 2020 |
| **Date this version registered:** | 30 July 2020 |
| **Anticipated review:** | 2025 |
| | |
| **Body responsible for review:** | Namibia Training Authority |