Individual Assignment II: Oracle Pluggable Databases (PDB) Management

Course: Database Development with PL/SQL (INSY 8311) **Instructor:** Eric Maniraguha | eric.maniraguha@auca.ac.rw **Assignment Date:** February 9, 2026 **Groups:** A, B, C, D

Deadline: Monday, February 16, 2026 11:59 PM (STRICT)

Submission is ONLY through the Google Form below:
https://docs.google.com/forms/d/e/1FAIpQLSdE1lHUxJwQTgJ0haS95fizHvJWmEJGGQ5y9EAWUYigHYYeMQ/viewform

⚠ **NO EXTENSIONS. NO EXCUSES. LATE = ZERO.** ❌ **Do NOT send this assignment by email.** ❗ **Your GitHub repository MUST be public. Private repositories will receive ZERO.**

Message to Students

This is a **mandatory individual practical assignment** focused on **hands-on Oracle database administration skills**.

The skills practiced in this assignment are **foundational** and will be required for:

- Understanding **Oracle Multitenant Architecture**
- Future **PL/SQL laboratory sessions**
- **Quizzes, practical tests, and examinations**

Failure to complete **all required tasks exactly as instructed** will result in **ZERO MARKS**.

How to Maximize Your Grade

1. Follow **all naming conventions exactly** (no variations)
2. Perform **all tasks individually**
3. Provide **clear, readable screenshots** as evidence
4. Document your work **professionally on GitHub**
5. Submit **before the deadline** (late submission = zero)

Academic Integrity Guidelines (Strictly Enforced)

- This is an **individual practical assignment**
- **Do NOT copy** commands, screenshots, or repositories from classmates
- **Do NOT use ChatGPT or any AI tools** to generate commands or solutions
- Reused screenshots, shared repositories, impersonation, or collaboration will result in **ZERO MARKS**
- All work must reflect **your own execution and documentation**

Assignment Objective

By completing this assignment, you will demonstrate practical understanding of:

- Oracle **Multitenant Architecture**
- Creation and deletion of **Pluggable Databases (PDBs)**
- **User creation and management inside a PDB**
- Usage of **Oracle Enterprise Manager (OEM)**
- Professional **technical documentation using GitHub**

Assessment Weight

5 Raw Points (Practical Assessment)

Assignment Structure

This assignment consists of:

- **Three (3) technical tasks**
- **One (1) documentation task**

All tasks are **mandatory**.

Task 1: Create a New Pluggable Database

Create a **Pluggable Database (PDB)** using the **exact naming conventions below**.

Naming Conventions (Must Be Exact)

- **PDB Name:** `FirstTwoLettersOfFirstName_pdb_StudentID` *Example:* `er_pdb_2024101`
- **Username inside the PDB:** `FirstName_plsqlauca_StudentID` *Example:* `eric_plsqlauca_2024101`
- **Password:** Choose a **simple password** (you must remember it)

Requirements

- PDB must be created successfully
- User must be created **inside the PDB**
- This user account will be used for **all future class work**

Evidence Required

Provide screenshots clearly showing:

- PDB creation command
- PDB open state
- User created inside the PDB **Your username must be clearly visible**

Task 2: Create and Delete a PDB

Create a **temporary PDB**, then delete it completely.

Naming Convention

- **Temporary PDB Name:** `FirstTwoLettersOfFirstName_to_delete_pdb_StudentID` *Example:* `er_to_delete_pdb_2024101`

Requirements

1. Create the PDB successfully
2. Verify that it exists
3. Delete the PDB completely
4. Confirm that it no longer exists

Evidence Required

Provide screenshots clearly showing:

- PDB creation
- PDB deletion Commands and results must be visible

Task 3: Oracle Enterprise Manager (OEM)

Configure and access **Oracle Enterprise Manager (OEM)**.

Requirements

- OEM must be accessible
- Dashboard must reflect:
    - Your Oracle environment
    - Completed PDB tasks
- **Your username must be visible**

Evidence Required

- Clear screenshot of the **OEM dashboard**

Task 4: Documentation & Reporting

Prepare a **short professional report** and publish it on GitHub.

GitHub Repository Requirements

- **Repository Name:** `oracle_pdb_ass_II_[studentId]_[firstname]`
- **Visibility: PUBLIC (mandatory)**

Repository Must Contain

1. README.md

- Overview of tasks
- Oracle environment used
- Explanation of each task
- Challenges faced (if any) and how they were solved
- Integrity statement

2. screenshots/ folder

- PDB creation
- PDB deletion
- OEM dashboard

Submission Instructions (VERY IMPORTANT)

Submit ONLY via the Google Form

You must include the following information **inside the form and in your GitHub README**:

```
Repository Link: [GitHub URL]
PDB Name Created: [PDB Name]
Issues Encountered: [Yes/No]
```

❌ Email submissions will be ignored.

Final Checklist (Apply Before Submission)

- ☐ Correct PDB names used
- ☐ User created inside the PDB
- ☐ Temporary PDB created and deleted
- ☐ OEM dashboard screenshot included
- ☐ GitHub repository is PUBLIC
- ☐ README is clear and professional
- ☐ Deadline respected

Professional & Ethical Note

> *Excellence is never an accident; it is the result of discipline, commitment, and integrity.*

As future database professionals, **precision, discipline, and integrity** are non-negotiable.