Orientation Handout: Internship Overview

Sri Lanka Customs – ICT Directorate

Project: Implementation of a Centralized Knowledge Base for IT Helpdesk Support

📌 Objective of the Internship

To engage interns in the planning, structuring, and implementation of a centralized digital Knowledge Base system for the IT Helpdesk of the ICT Directorate. The goal is to improve internal support efficiency, consistency of responses, and knowledge retention within the helpdesk operation.

🧩 Project Background

The ICT Directorate provides technical support to all departments of Sri Lanka Customs. However, recurring issues, undocumented fixes, and knowledge gaps have led to inefficiencies. A centralized and searchable Knowledge Base will serve as a first-line support tool for the Helpdesk, reduce resolution time, and assist in onboarding new staff or officers.

🔧 Key Learning Areas

1. Helpdesk Operations

- Exposure to helpdesk workflows and ticket lifecycle
- Categorizing and prioritizing common issues
- Standard Operating Procedures (SOPs) and escalation paths

2. Knowledge Base Design Principles

- Structuring articles by topic, issue, and severity
- Tagging, indexing, and categorizing entries for searchability
- Defining templates for technical solutions and FAQs

3. Content Creation and Documentation

- Writing clear and concise help articles
- Documenting fixes, workarounds, and troubleshooting procedures
- Reviewing and refining outdated documentation

4. Platform Familiarity

- Introduction to platforms (SharePoint, Confluence, or custom CMS)
- Basic content management, versioning, and access control
- Integration with ticketing systems if applicable

5. IT Support Skills

- Understanding common desktop, network, and application issues
- Tracking support trends to identify article needs
- Collaborating with technical staff to verify solutions

🤝 Soft Skills Development

- Communicating with users and technicians
- Conducting interviews or walkthroughs with staff for input
- Maintaining clarity and consistency in technical writing

🎯 Intern Responsibilities

- Assist in auditing existing IT support documentation
- Create and publish new knowledge base articles
- Tag and organize content for searchability
- Support testing and feedback of the knowledge base platform
- Propose improvements based on observations or gaps

🧠 Expected Outcomes

By the end of the internship, the intern will be able to:
- Understand how an IT Helpdesk operates
- Create structured, user-friendly technical documentation
- Contribute to the launch and maintenance of a knowledge base
- Apply basic content management and support tools in a government IT setting

Project: Oracle Exadata Upgrade at Sri Lanka Customs

📌 Objective of the Internship

To provide interns with hands-on exposure to managing and maintaining Oracle's engineered database platform—Oracle Exadata—and to develop their understanding of enterprise IT infrastructure, database administration, and performance optimization in a real-world environment.

🧩 What is Oracle Exadata?

Oracle Exadata is a high-performance, integrated hardware and software platform optimized for running Oracle databases. It combines compute, storage, and network in a single engineered system to deliver superior database performance and scalability.

🔧 Key Learning Areas

1. Exadata Architecture Overview

- Components: Database Servers, Storage Cells, InfiniBand/ROCE network
- Deployment model and system layout

2. System Administration (Linux-based)

- Basic command-line operations
- Monitoring services and resource usage
- Introduction to patching and firmware updates

3. Database Management Tasks

- Using Oracle Enterprise Manager (OEM)
- Assisting with:
  • Database startup/shutdown
  • Tablespace and user management
  • Backup and Recovery via RMAN
- Understanding Oracle ASM and RAC

4. Performance Tuning Fundamentals

- Basics of Smart Scan, Hybrid Columnar Compression
- Reading AWR, ADDM, and ASH reports
- Monitoring I/O, memory, and CPU performance

5. Exadata Toolsets

- Using dcli, cellcli, and exadcli for system-wide management
- Reviewing logs and running diagnostic tools (e.g., exachk)

🔐 Security Awareness

- Introduction to Oracle's security architecture
- Working with roles, privileges, and audit policies
- Understanding Transparent Data Encryption (TDE)

📋 Standard Operating Procedures (SOPs)

- Following structured processes for:
  • Incident reporting
  • Maintenance tasks
  • Change requests and approvals

🤝 Soft Skills Development

- Working as part of a technical team
- Documenting technical procedures and observations
- Participating in knowledge-sharing sessions and reviews

🎯 Intern Responsibilities

- Observe and assist during system maintenance
- Maintain logs of daily activities and findings
- Complete assigned documentation tasks
- Report anomalies and escalate issues appropriately

🧠 Expected Outcomes

By the end of the internship, the intern will be able to:
- Understand the core components and functionality of Oracle Exadata
- Perform basic system and database administration tasks
- Read and interpret performance diagnostics
- Contribute meaningfully to infrastructure support workflows

For guidance and task assignments, report to:
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