



Oracle Cloud Infrastructure (OCI) Data Science Professional Learning Progress

Building, Training & Deploying ML on
OCI



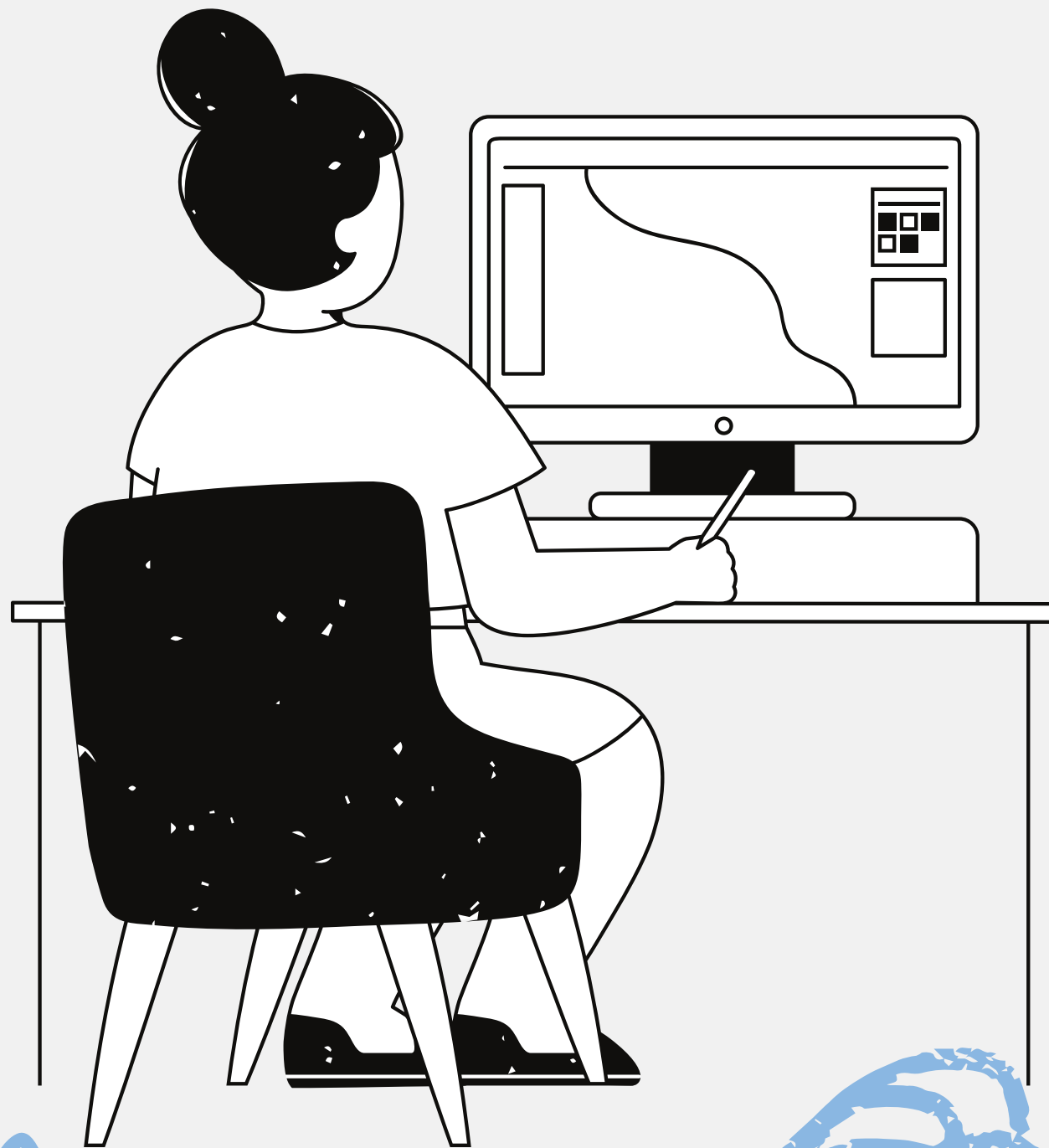
Course Overview

- Covers full ML lifecycle on OCI
- Audience: Data Scientists, ML/AI Engineers
- Hands-on with OCI services






Course Modules I Learnt



01. Introduction & Configuration
Data Science intro, ADS SDK, Tenancy setup
and networking fundamentals

02. Workspace Design & Setup
Projects, JupyterLab, Conda environments,
OCI Vault & Git repositories

03. Machine Learning Lifecycle
Data access, preprocessing, training,
AutoML, evaluation, deployment & LLM
integration



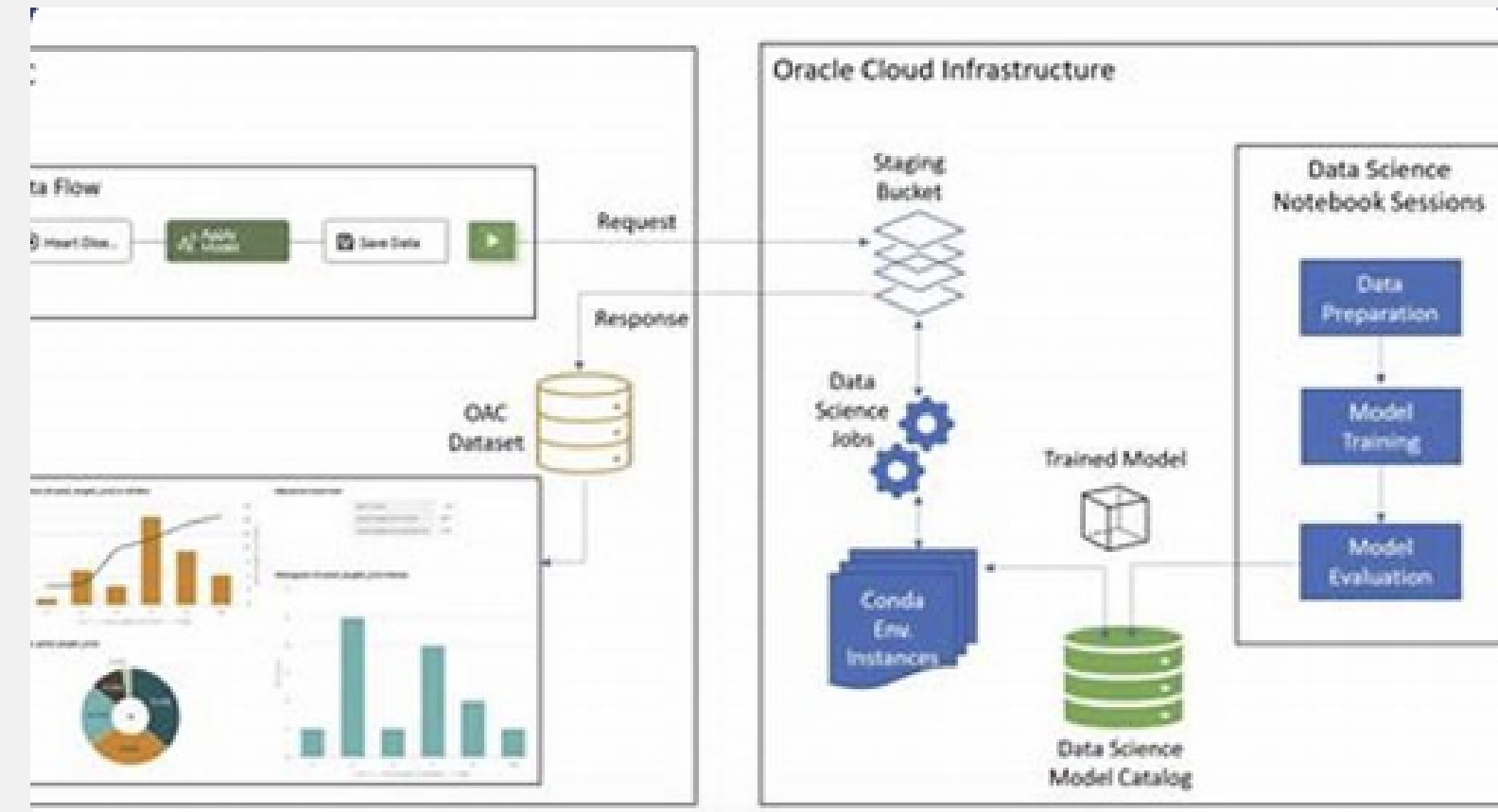
Module 1-2: Foundation & Workspace Setup

Introduction & Configuration

- Data Science service overview and ADS SDK introduction
- Tenancy setup and network configuration
- API authentication and security best practices
- Skill Check: 80%+ required to pass

Workspace Design & Setup

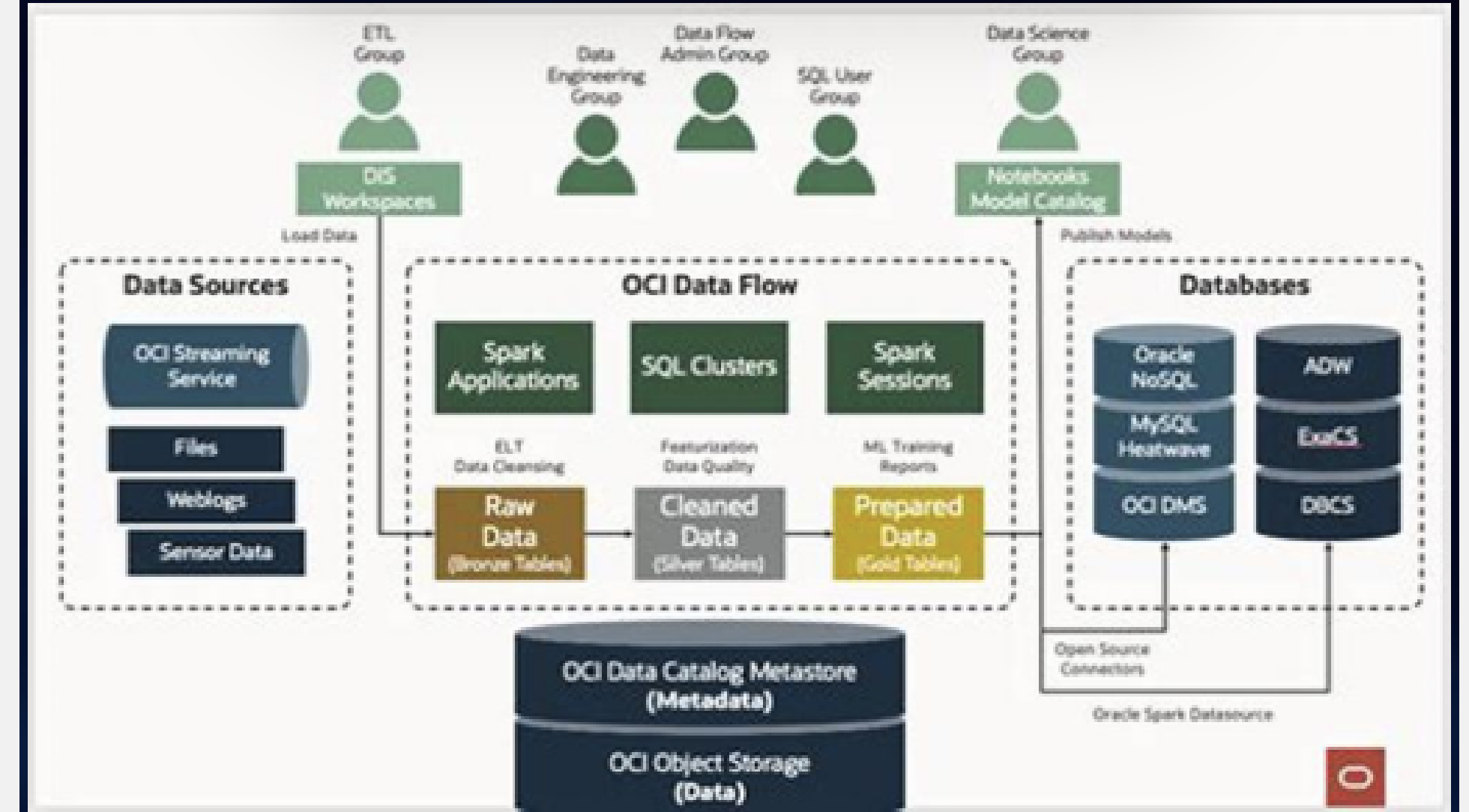
- Create and manage data science projects
- Configure JupyterLab environments with conda
- Integrate OCI Vault for secure credential management
- Set up Git repositories for version control



How to install
jupyter and jupyter-
lab in your conda
environment



Module 3: Complete ML Lifecycle



01

Data Access & Preprocessing

Connect to various data sources, clean and prepare data for machine learning tasks

02

Training & AutoML

Build models using traditional ML and leverage AutoML for hyperparameter optimization

03

Evaluation & Deployment

Evaluate model performance, ensure explainability, and deploy to production environments

04

LLM Integration

Integrate LangChain and Large Language Models for advanced AI capabilities

Learning Outcomes & Benefits

Key Learning Outcomes

Master the complete ML lifecycle on OCI with hands-on experience in data preparation, model training, evaluation, and deployment using industry best practices

OCI Services Mastery

Select and configure appropriate OCI services for diverse ML use cases with confidence

ADS SDK Proficiency

Streamline ML processes using Oracle's ADS SDK for efficient development workflows

Key Skills Gained

- OCI environment management
- Model building & deployment





Thank you

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