

# WEEK 6

## DAY – 1, 2, & 3

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25/09/2023

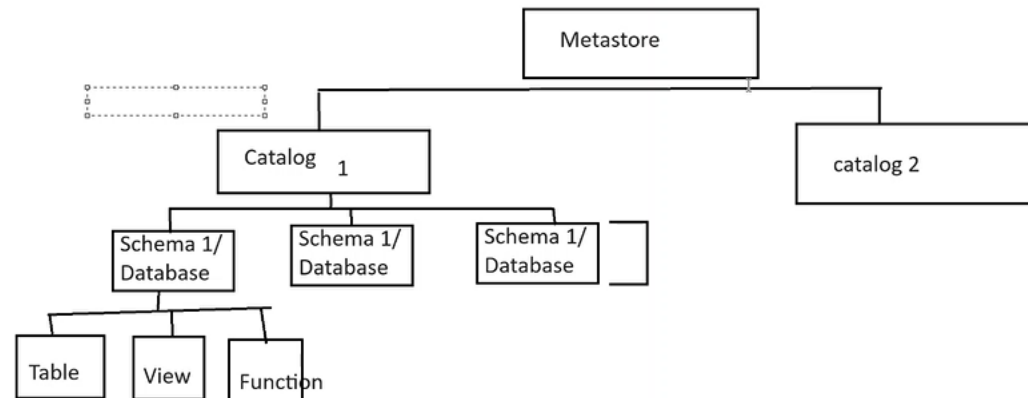
26/09/2023

27/09/2023

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# Data Bricks

- <https://notepad.pw/shellidasep23>
- Used for predictive analysis
- Lab
- Storage+compute
- Data Hiera



# Data Bricks

- Data Bricks Architecture

- Mounting

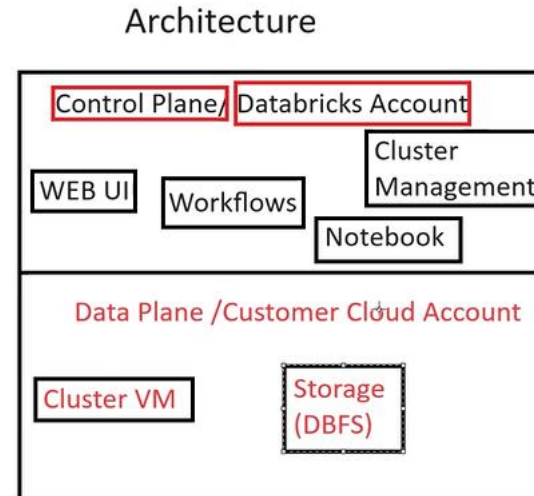
- Notebook auth

1. Access key

2. SAS

3. Service Principal

- Lab





# Data Bricks

- DataBricks to ADF
- GitHub config
- Data Bricks Lakehouse (Data Lake + DW)
- Optimize large files
- Time Travel
  - Version
  - Timestamp
- Connect sqldb

# WEEK 6

## + DAY – 4

○ 28/09/2023

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# Azure Container



- Introduction to Docker Containers
  - IaaS – VMs
  - PaaS – Azure SQL, DataBricks, Docker
  - SaaS – Office 365, Power BI Service
- All containers are run by a single OS & kernel and hence uses fewer resources
- Developing & automating the deployment of application
- Features
  - Lightweight & fast env
  - Open source
  - Easy & consistent way of delivery of application
  - Fast & efficient dev life cycle
  - Segregation of duties
  - Service-oriented arch – PaaS
  - Security
  - Scalability
  - Image & Volume Management
  - Networking

# Azure Container

- Client-Server Architecture
- Azure Container Services
  - Azure Container Instances
  - Azure Container Apps
  - Azure Kubernetes Services



# Kubernetes



- Open source container management tool
- Manages docker containers in the form of a cluster
- Features
  - Automatic scheduling
  - Self Healing capability
  - Automated rollouts & rollbacks
  - Horizontal scaling
  - Resource utilization
  - Support for multiple clouds & hybrid clouds
  - Extensibility
  - Community Support
- Client-Server arch



# WEEK 6

## + DAY – 5

○ 29/09/2023

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# DevOps

# Continuous Development

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