Azure storage

There are 4 Types of Storages

1. File Storage
2. Blob Storage
3. Table Storage
4. Queue Storage

1.File Storage

Azure File Storage is optimal for sharing files across users and applications that need classic file system access.

Use it when:

- You need to replace or supplement on-premises file servers (e.g.Windows File Server).
- Multiple VMs or applications need access to the same shared files.
- Lift-and-shift of legacy apps that expect a traditional file system.
- Mounting file shares on VMs or containers (Windows/Linux).

Example Scenarios:

- Hosting shared configuration files for distributed applications.
- Storing user profiles in a Virtual Desktop Infrastructure (VDI).
- Backup storage that needs to be accessed from different VMs.

-File share
-Legacy
-SMB

2.Blob Storage

Azure Blob Storage specializes in scalable, cost-efficient storage of unstructured data such as binary files, images, audio, video, or documents.

Use it when:

- You need scalable storage for images, videos, documents, or big data.
- You're building apps that stream media or deliver content (CDN).
- You want to archive infrequently accessed data (Cold or Archive tier).
- You need to store backups, logs, or telemetry data.

-Unstructured
-Large
-Page / Block

Example Scenarios:

- Hosting website images, CSS, and JavaScript files.
- Storing user-uploaded files in a web application.
- Video/audio streaming applications.
- Data lake storage for analytics (especially with Azure Data Lake Storage Gen2).

3.Table Storage

Azure Table Storage is a NoSQL key-value store ideal for large amounts of structured, non-relational data that needs fast, flexible access.

Use it when:

- You need fast and cost-effective access to structured data without complex joins.
- You want to store large volumes of semi-structured data.
- Your application needs flexible schema (e.g., each row can have different columns).

Example Scenarios:

- Storing user profile or device metadata.
- Application logs or diagnostics data.
- Lightweight inventory, order tracking, or IoT data.

Table

-Structured (NoSQL)
-Key/Value store
-Scalable & Low-cost

4.Queue Storage

Azure Queue Storage provides reliable messaging between distributed applications and components, focused on asynchronous communication.

Use it when:

- You need to enable asynchronous communication between application parts.
- You want to build reliable, loosely coupled architectures (e.g., microservices).
- You want to buffer and process workloads.

Queue

Example Scenarios:

- Processing user requests (e.g., image processing, order processing) in the background.
- Decoupling a web front end from a back-end worker role.
- Implementing retry logic or task queues in cloud apps.

-Queue
-Reliable
-MSMQ