Azure Architecture Frame Learn360

Learn360

✖ Layer 1: Identity & Access

Students → 👥 ← Educators
← Admin

├── Single Sign-On (SSO)
├── Multi-Factor Authentication(MFA)
├── Conditional Access & RBAC
├── Microsoft Graph API (Sync with Teams, Outlook, SharePoint)

Microsoft Entra ID

Focus: Who accesses the system and how authentication/authorization is handled

✖ Layer 2 – Frontend + API Layer

routing and global balancing

Azure Front Door

frontend + backend logic (React/Next.js + Java)

Web App

Focus: How users interact with the app and how requests are routed to backend services

Azure API Management

controls API access, rate limits, security, Entra integration

serverless automation and triggers

Azure Functions and Logic Apps

✖ Layer 3 – AI + App Logic

Microsoft Azure OpenAI — chat, summarization

Speech, Vision, Language

Focus: Apply intelligence, personalization, and automation between the API layer and the data layer.

Azure Cognitive Services

AI & App Logic — Cognitive & generative services powering adaptive learning, chatbots, and content tagging

Azure Machine Learning

recommendations

chat/voice/video

✖ Layer 4 – Data, Storage + Analytics Layer

stores structured data (users, enrollments, assessments) — **SQL**

manages unstructured learner activity & AI insights — **Azure Cosmos DB**

stores videos, PDFs, and large learning content — **Azure Blob Storage**

Power BI Dashboard

visualizes performance, engagement, and ROI

Focus: Unified storage, search, and analytics for personalized learning insights and performance tracking.

enables intelligent search across lessons & media — **Azure Cognitive Search**

✖ Layer 5 – Security, Monitoring & Governance

Azure Security Center — Microsoft

Security & Access Control Threat protection & security posture

Microsoft Azure Defender for Cloud

Monitoring & Insights Real-time performance and alerting

Azure Monitor

Focus: Protect, monitor, and manage the entire stack — ensuring compliance, visibility, and operational excellence.

Governance & Compliance Resource compliance & cost management — **Azure Policy**