Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	2 NOVEMBER 2025
Team ID	NM2025TMID04605
Project Name	Optimizing User, Group and Role Management with Access Control and Workflows
Marks	4 marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

Example:

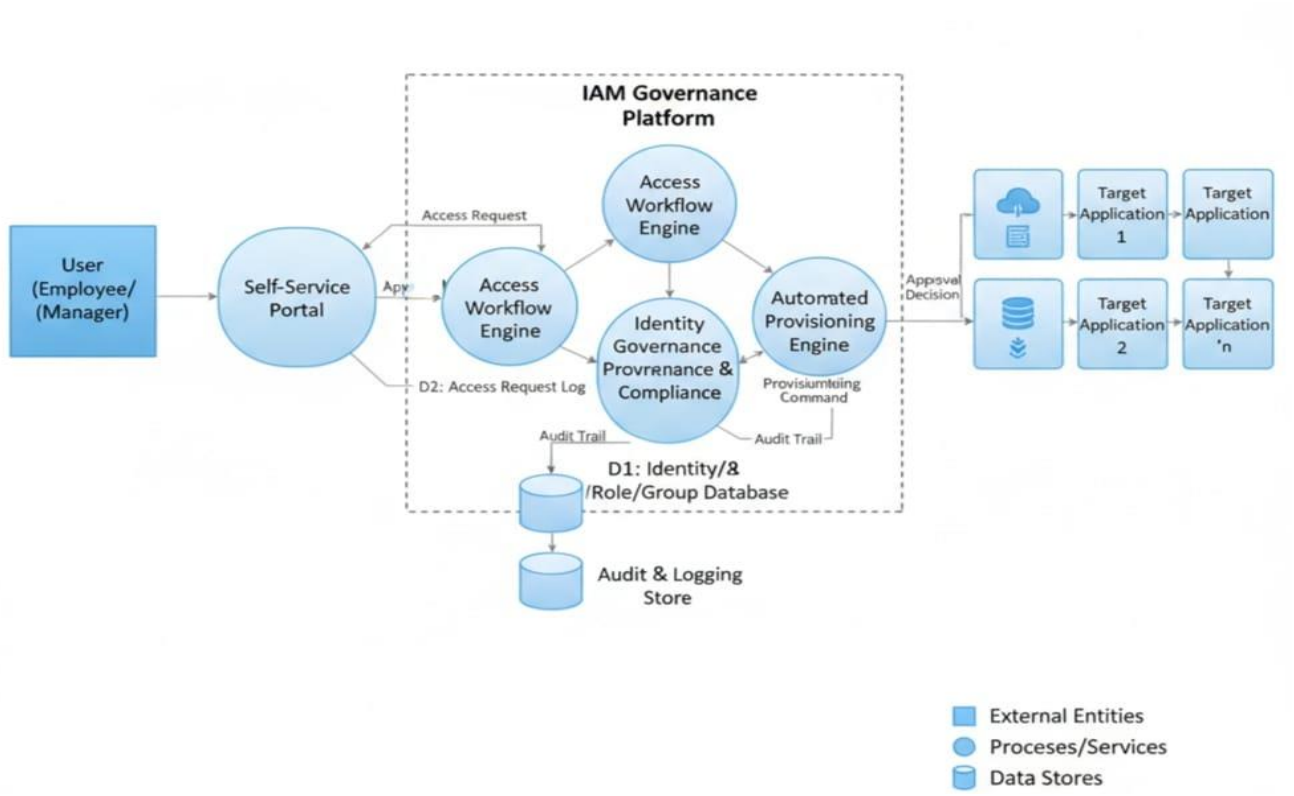

Table- 1 : Components & Technologies:

S. No	Component	Description	Technology
1.	User Interface	Single pane of glass for all access requests, approvals, and user profile management.	Self-Service Portal (Custom React App)
2.	Identification Governance Platform	Central engine for RBAC management, policy enforcement, and compliance reporting.	SailPoint Identity IQ / Okta IGA
3.	Provisioning Engine	Responsible for automated creation, update, and deletion of accounts in target systems.	SCIM (System for Cross-domain Identity Management)
4.	Source of Truth (SoT)	The authoritative source for all employee identity data (e.g., Job Title, Manager, Termination Date).	HRIS System (e.g., Workday) / Active Directory (AD)
5.	Access Workflow Engine	Manages the multi-step access approval routing process (Manager \ Role Owner \Security).	BPM Tool (e.g., Camunda) / Built-in IAM Workflow
6.	Audit & Logging Store	Secure database for storing all security events, access changes, and approval decisions for compliance.	Splunk / ELK Stack
7.	Target Applications	All external systems and resources where access needs to be provisioned (e.g., Salesforce, SAP, Azure).	Target Application APIs

Table-2: Application Characteristics:

S. No	Characteristics	Description	Technology
1.	Access Control Model	Use Role-Based Access Control (RBAC) defined by business functions, supplemented by ABAC for dynamic access.	Role Mining, ABAC Policies
2.	Security/Compliance	Enforce strong authentication (MFA) and ensure the system automatically enforces Segregation of Duties (SoD) policies.	MFA Integration, SoD Matrix
3.	Reliable Architecture	Implement high availability for the Provisioning Engine to ensure continuous account management.	Load Balancing, Clustering
4.	Automation Efficiency	Optimize the time taken from final approval to access fulfillment.	Zero-Touch Provisioning (ZTP) via SCIM
5.	Performance	The Self-Service UI should load quickly, and provisioning should happen in near real-time.	Caching, Asynchronous API Calls