Project Design Phase II

Technology Stack (Architecture & Stack)

Date	29.10.2025
Team ID	NM2025TMID05816
Project Name	Educational Management System
Maximum Marks	4 Marks

Technical Architecture :

- This architecture supports educational institutions in automating workflows, managing student and faculty requests, and streamlining administrative operations using the ServiceNow platform. It enhances collaboration, transparency, and operational efficiency through centralized service management and secure cloud-based integration.

Table1:Components&Technologies:

S.No	Component	Description	Technology
1	UserInterface	Students and staff access requests and dashboard	viaweb ortal.ServiceNow Web I
2	ApplicationLogic-1	Automatesticketcreation,categorisation	Scriptincludes
3	ApplicationLogic-2	Validatesrequestsandsetsprioritybasedon education	usinessrules
4	ApplicationLogic-3	Notifiesusersaboutprogressandresolutionof servicenow	Notifications
5	Database	Storesuser,request,andworkflowdatasecure ly servicenow	CMDB
6	CloudBackend	Ensuresperformanceandscalabilitythrough servicenow	ServiceNowSaaSClo ud
7	External API	IntegratesERPandacademicsystems	APIIntegration
8	**MachineLearning**	**Predictsrequestcategoriesandautomates task**	**PredictiveIntelligen ce**

Table 2: Application Characteristics :

S.No	Characteristics	Description	Technology
1	Open-SourceFrameworks	NotApplicable	-
2	SecurityImplementations	ImplementsACLsandrole-basedsecureaccess forACL	ScopedApplications
3	ScalableArchitecture	ServiceNow'sSaaSmodelensuresscalability acrossservicenow	loudArchitecture
4	Availability	Hostedinhigh-availabilityServiceNowcloud	loudInstance
5	Performance	Optimizedusingindexeddatabases	Flowoptimization