

RequirementAnalysis

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| TeamID | LTVIP2025TMID28774 |
| ProjectName | EducationalOrganizationUsingServiceNow |

(a) SolutionRequirement

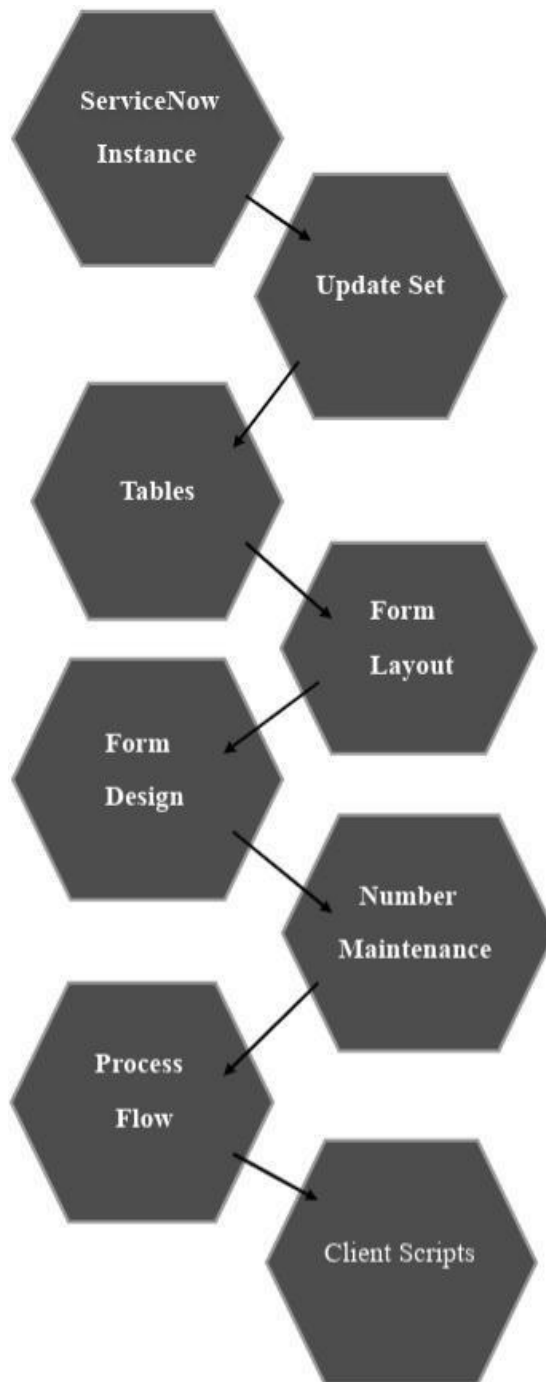
• FunctionalRequirements

| FRNo | Functional Requirement | SubRequirement |
|------|-----------------------------|---|
| FR-1 | SettingUpServiceNowInstance | Setting up a ServiceNow instance involves creating a personal developer account on the ServiceNowDevelopersite andrequestingafree cloud-basedinstance. |
| FR-2 | CreatingAUpdateSet | Update Sets are used in ServiceNow to capture and transfer configuration changes from one instance to another. This helps to track student admission management, attendance, and other educationalprocessefficientlywithinthe ServiceNowplatform. |
| FR-3 | CreatingATable | Tablesareusedtostorestudentrecordsina simple and organized manner. |
| FR-4 | FormLayout | Formlayoutenablestheproperseparationof studentrecordsintosectionsandhighlights mandatory fields, ensuringorganized data entry and completeness. |
| FR-5 | FormDesign | Educationalorganizationprojectformdesignis essentialformanaginganddisplayingstudent, teacher,andservice-relateddata. |
| FR-6 | NumberMaintenance | Educational organization project, this feature is usedtoassignandmaintainuniqueidentifiersfor different records. |
| FR-7 | ProcessFlow | Process Flow refers to the step-by-step sequence of tasks or actions that define how a particular function or service is carried out within the ServiceNow platform. Educational organization project, processflowshelp automateandmanage various operations like student admissions, staff onboarding, and service requests. |
| FR-8 | ClientScripts | clientscriptsareusedtoensurecorrectdataentry and improve the usability of forms for students, teachers, and admins. |

• **Non-Functional Requirements**

| NFR No | Non-Functional Requirements | Description |
|--------|-----------------------------|--|
| NFR-1 | Usability | ServiceNow enhances usability in educational institutions by providing a user-friendly and efficient digital platform for managing various administrative and academic tasks. |
| NFR-2 | Security | ServiceNow provides a secure platform for managing sensitive data in educational institutions. |
| NFR-3 | Reliability | ServiceNow ensures high reliability for educational institutions by offering a stable, consistent, and trustworthy digital platform for managing academic and administrative operations. |
| NFR-4 | Performance | ServiceNow enhances the performance of educational organizations by optimizing administrative processes, improving response times, and ensuring efficient management of academic operations. |
| NFR-5 | Availability | Availability refers to how consistently and reliably the ServiceNow platform is accessible to users—students, faculty, and administrative staff—when needed. |
| NFR-6 | Scalability | Scalability refers to the ability of the ServiceNow platform to grow and adapt as the needs of an educational institution increase—whether in terms of users, data volume, or services. |

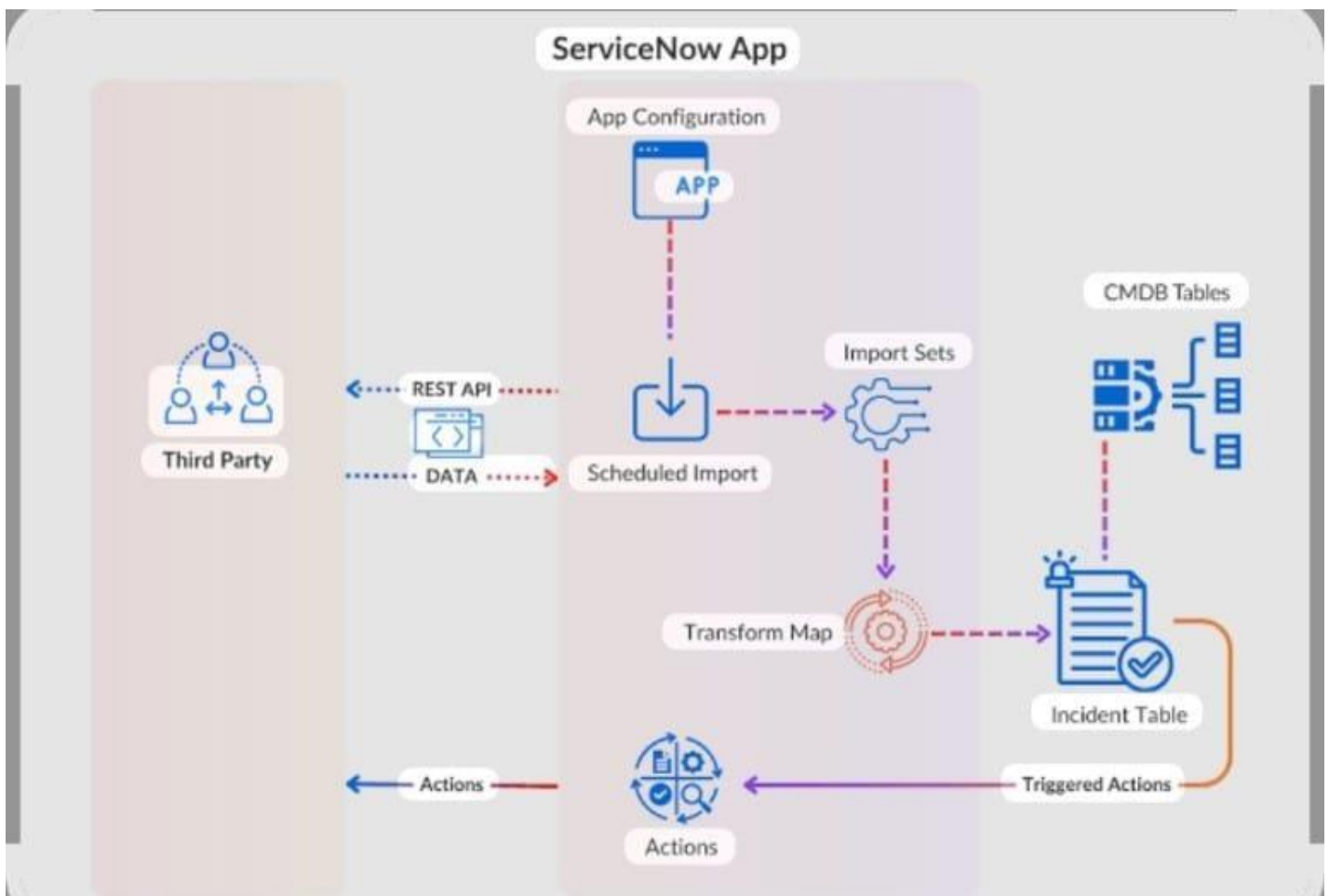
(b) DataFlowDiagram



(c) TechnologyStack

A technology stack is a combination of software tools, programming languages, frameworks, and technologies used to build and run an application or project. The technology stack of ServiceNow is a blend of proprietary and standard technologies that support its cloud-based, enterprise service management platform.

Architecture of ServiceNow:



The architecture of ServiceNow is designed as a multi-instance, cloud-based platform that ensures scalability, flexibility, and security. It is structured into several key layers, beginning with the User Interface layer, which provides users with access through web browsers, mobile apps, and service portals.