**SERVICE NOW(WEEK-2)**

1. Service Overview and Architecture:

Platforms like Service Now offer a cloud-based environment for IT service management and automation. They help streamline processes and integrate various functions within an organization.

🡪There are five entities in the architecture,

1-Multi-tier Architecture:

* **Presentation Layer (UI)** (This is the front-end interface where users interact with the platform. It includes dashboards, forms, lists, and other user interface elements)
* **Application Layer (Business Logic)** (This layer contains the core functionality and business logic of the platform. It includes scripts, workflows, and automation rules that define how data is processed and tasks are handled)
* **Data Layer (Storage)** (This is where all the data is stored. It consists of databases and data tables that hold records and metadata)

2-Integration Layer**: APIs and Web Services** (The integration layer facilitates communication between the platform and external systems and it uses API’s)

3-Customization and Extensibility:

* **Customization** (ServiceNow allows for extensive customization through scripting, configuration, and design tools. This layer enables users to use the platform to meet specific business needs without altering the core system)
* **Extensibility** (The platform can be extended with additional modules, applications, and plugins to add new features or enhance existing functionality)

4- Security and Access Control: (**Authentication and Authorization**)

5- Performance and Scalability:

* **Load Balancing and Caching** (To handle varying loads and ensure smooth performance, the architecture may include load balancing and caching mechanisms)
* **Scalability** (The platform is designed to scale horizontally or vertically to accommodate growing data volumes, user loads, or additional functionalities)

### 2-User Interface and Branding:

* **User Interface (UI)** (The interface is the part of the platform users interact with, designed for ease of use and accessibility. It includes dashboards, forms, and various widgets)
* **Branding** (Customizing the UI with company logos, colours and themes to ensure that the platform aligns with the organization's branding guidelines)

3- Task Management:

* Involves creating, assigning, and tracking tasks and work items within the platform. Tasks can be automated and prioritized to improve efficiency and workflow.

4- Notifications:

* Notifications are alerts or messages sent to users about important events or updates. They can be configured to trigger based on specific conditions or changes in the system.

5- **Knowledge Management:**

* Knowledge Management (KM) is a crucial component in platforms like ServiceNow, designed to capture, organize, and share valuable information within an organization.
* Its main purpose is for Centralized Knowledge and Efficient Problem-Solving.
* Its key Components are Knowledge Base, Articles and Article Creation and Review.
* Its features are **Search and Retrieval**, **Categorization and Tagging** and **User Contributions.**
* The Knowledge Management advantages are Improved Efficiency, Enhanced Collaboration and Consistency.

6- Service Catalog:

* The **Service Catalog** is a critical component in IT service management platforms like ServiceNow. It serves as a centralized repository where users can request and manage services and products provided by the IT department or other business units.
* Its main purpose is for Centralized Request Portal and Streamlined Processes.
* The key Components are Catalog Items, Categories and request Forms.
* Some of the features of SC are User Experience, Approval Workflows, Automated Fulfilment, and **Service Level Agreements (SLAs).**

7- Access Control List (ACL):

* Manages permissions and security by defining who can access or modify specific records or data fields. ACLs help enforce data security and privacy policies.
* ACL’s are used for Security Management and Granular Permissions.
* The permissions that can be granted using ACL’s are Read, Write , Create and Delete.
* There are three types of ACLs namely **Table-level ACLs, Field-level ACLs** and **Record-level ACLs.**
* The Common and effective Uses are Enhanced Security, Compliance and Customization.

### 8- Data Import:

* The process of bringing external data into the platform. It involves mapping data from external sources to platform tables and ensuring data integrity and consistency.

### 9-**Configuration Management Database (CMDB)**

* A repository that maintains information about IT assets and their relationships. It supports configuration management, change management, and incident management by providing a comprehensive view of the IT environment.
* The main purpose of the CMDB; **Central Repository** and **Support IT Operations**.
* **The key Components are Configuration Items (CIs),** Attributes and Relationships.
* The benefits of the CMDB are **Improved Incident and Problem Management, Better Change Management** and **Enhanced Service Management.**
* **Data Accuracy** and **Complexity** are the two main challenges for CMDB

### ****10-**Update Sets:**

* Packages that contain customizations and changes made to the platform. They are used to move updates between different instances, such as from development to production

11- Events:

* System-generated triggers or messages that represent changes or occurrences within the platform. Events can be used to automate actions or send notifications.
* The events are mainly used for the **Automating of Actions** and **Monitor and Respond.**
* The key Components of the Events are **Event Definition**, **Event Trigger** and **Event Handler.**
* The best examples of the events are Service Request, Security alerts and Incident Creation.

### 12- **Platform Stats:**

* Metrics and performance indicators that provide insights into platform usage, performance, and health. This includes data on system load, response times, and user activity.