SNS COLLEGE OF ENGINEERING

Kurumbapalayam (Po), Coimbatore – 641 107

An Autonomous Institution

Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A' Grade
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING(IoT and Cybersecurity Including BCT)

COURSE NAME : Cloud Service Management /19OE219

IV YEAR / VII SEMESTER

Unit II-

Topic : Cloud Service Life Cycle

Cloud Service Lifecycle

The cloud service lifecycle is the process that cloud providers use to design, develop, deploy, and manage cloud services. It involves a set of stages that a cloud service goes through, from ideation and planning to retirement. The cloud service lifecycle typically consists of the following stages

1.Service strategy: This is the initial stage where the provider identifies and evaluates potential cloud services. They consider factors like market demand, competition, and organizational goals.

2. Service design: In this stage, the provider determines the technical and functional requirements of the service, and the resources needed to develop and implement it. They also design the architecture and infrastructure of the service.

3. Service transition: This stage involves the deployment of the service to the cloud environment. The provider tests the service and ensures that it meets the required standards, security protocols, and quality expectations.

4. Service operation: This is the stage where the provider delivers the service to the users, monitors it for performance, and maintains it as required. They also provide customer support and manage service disruptions and other incidents.

5. Service improvement: In this stage, the provider continuously reviews and evaluates the service for optimization and improvement. They use feedback from users to identify areas for improvement and make necessary changes to enhance the service's performance, reliability, and availability.

6. Service retirement: This is the final stage in the lifecycle, where the provider decides to retire the service when it is no longer needed or viable. They ensure that user data is safely transferred or deleted, and take any other necessary measures to close the service down.

The cloud service lifecycle helps providers to manage their services effectively and ensure that they meet customer needs and organizational goals

Cloud-based **software-as-a-service (SaaS)** product that allows users to manage their email marketing campaigns. The following is an overview of the service lifecycle:

1. **Plan: In** this phase, the service provider defines the scope and requirements of the SaaS product, identifies potential customers, and creates a plan for developing and launching the service.

2. **Develop:** This phase involves the development and testing of the SaaS product. The service provider develops the software and the infrastructure ecessary to host and deliver the service. Quality assurance tests are performed to ensure that the software functions as expected and meets the requirements defined in the planning phase.

3. **Deploy:** In this phase, the SaaS product is launched to the public. The service provider makes the software available to customers and provides access to the necessary infrastructure to host and manage the service. The software is delivered through the cloud, and customers can access the service from anywhere with an internet connection.

4. **Operate:** In this phase, the service provider operates the SaaS product and provides ongoing support to customers. The provider monitors the performance of the service, troubleshoots any issues that arise, and ensures that the service is available and functional for customers.

5. Optimize: In this phase, the service provider continually improves the SaaS product to meet the changing needs of customers. The provider collects feedback from customers and uses it to inform future updates and enhancements to the service.

6. Retire: In this phase, the service provider retires the SaaS product. This may happen if the product is no longer profitable or if it is replaced by a newer, better version. The provider may give notice to customers, offer alternatives or migration plans, and provide support during the transition period