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

IV YEAR / VII SEMESTER

Unit II-
Topic : The Essential Charecteristics

There are many characteristics of [Cloud Computing](#) here are few of them :

1.On-demand self-services: The Cloud computing services does not require any human administrators, user themselves are able to provision, monitor and manage computing resources as needed.

2.Broad network access: The Computing services are generally provided over standard networks and heterogeneous devices.

3.Rapid elasticity: The Computing services should have IT resources that are able to scale out and in quickly and on as needed basis. Whenever the user require services it is provided to him and it is scale out as soon as its requirement gets over.

4.Resource pooling: The IT resource (e.g., networks, servers, storage, applications, and services) present are shared across multiple applications and occupant in an uncommitted manner. Multiple clients are provided service from a same physical resource.

5.Measured service: The resource utilization is tracked for each application and occupant, it will provide both the user and the resource provider with an account of what has been used. This is done for various reasons like monitoring billing and effective use of resource.

1.Multi-tenancy: Cloud computing providers can support multiple tenants (users or organizations) on a single set of shared resources.

2.Virtualization: Cloud computing providers use virtualization technology to abstract underlying hardware resources and present them as logical resources to users.

3.Resilient computing: Cloud computing services are typically designed with redundancy and fault tolerance in mind, which ensures high availability and reliability.

4.Flexible pricing models: Cloud providers offer a variety of pricing models, including pay-per-use, subscription-based, and spot pricing, allowing users to choose the option that best suits their needs.

5.Security: Cloud providers invest heavily in security measures to protect their users' data and ensure the privacy of sensitive information.

6.Automation: Cloud computing services are often highly automated, allowing users to deploy and manage resources with minimal manual intervention.

7.Sustainability: Cloud providers are increasingly focused on sustainable practices, such as energy-efficient data centers and the use of renewable energy sources, to reduce their environmental impact.