Cloud

A network of remote servers located on the internet that store, manage, and process data is referred to as the cloud. Access to a variety of computing resources, such as servers, storage, databases, networking, and software programmes, is made available on demand. Hosting and operating a website on cloud infrastructure as opposed to conventional on-premises servers is known as website deployment on the cloud. An overview of website setup on the cloud is provided below:

- Cloud service providers: These companies provide infrastructure and services for deploying websites, including Amazon Web Services (AWS), Microsoft Azure, and Google Cloud Platform (GCP). These suppliers offer a variety of services to suit various demands and have data centres spread across the globe.

- Elasticity and Scalability: Cloud hosting enables websites to adjust resource allocation according to demand. Your hosting environment's capacity can be readily changed to handle traffic peaks or user base expansion. This scalability makes sure that even during times of high traffic, your website is responsive and accessible.

- High availability features and redundant infrastructure are generally provided by cloud service providers. This means that automatic failover and load balancing systems might benefit your website, lowering the chance of downtime and increasing reliability.

- Pay-as-you-go Pricing: Pay-as-you-go cloud hosting enables you to only pay for the resources you really utilise. It is therefore affordable, especially for small and medium-sized websites that could have erratic traffic patterns.

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