**Name :-** Prashant Salvi

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**What is Azure App Service?**

Azure App Service is a powerful tool offered by Microsoft Azure, a cloud computing platform. It is a fully managed platform as a service (PaaS) that enables developers to build, deploy, and manage web applications, REST APIs, and mobile back ends. With App Service, you can develop in your favorite language, including .NET, .NET Core, Java, Node.js, PHP, and Python.

**Key Features of App Service**

App Service offers several key features that make it an attractive choice for developers. These include:

* **Multiple languages and frameworks:** App Service supports a wide range of languages and frameworks, including ASP.NET, ASP.NET Core, Java, Node.js, PHP, and Python.
* **Security:** App Service provides a secure environment for your applications, with features such as authentication and authorization, SSL/TLS certificates, and network security groups.
* **Scalability:** App Service allows you to scale your applications up or down to match changing demand, with features such as autoscaling and load balancing.
* **DevOps capabilities:** App Service provides a range of DevOps capabilities, including continuous integration and continuous deployment (CI/CD), package management, and staging environments.
* **Integration with other Azure services:** App Service can be easily integrated with other Azure services, such as Azure Storage, Azure Database, and Azure Active Directory.

**Why Use App Service?**

There are several reasons why you might choose to use App Service for your web applications and APIs. These include:

* **Easy deployment:** App Service makes it easy to deploy your applications, with features such as one-click deployment and automated deployment from source control.
* **Scalability and reliability:** App Service provides a scalable and reliable environment for your applications, with features such as autoscaling and load balancing.
* **Security:** App Service provides a secure environment for your applications, with features such as authentication and authorization, SSL/TLS certificates, and network security groups.
* **Cost-effective:** App Service is a cost-effective option, with a pay-as-you-go pricing model that means you only pay for the resources you use.

**App Service Plans**

App Service plans determine the compute resources available to your applications. There are several different App Service plans available, including:

* **Free:** The free plan provides a limited set of resources, including 1 GB of storage and 60 minutes of CPU time per day.
* **Shared:** The shared plan provides a shared set of resources, including 1 GB of storage and 240 minutes of CPU time per day.
* **Basic:** The basic plan provides a dedicated set of resources, including 3 GB of storage and 720 minutes of CPU time per day.
* **Standard:** The standard plan provides a higher level of resources, including 10 GB of storage and 1440 minutes of CPU time per day.
* **Premium:** The premium plan provides the highest level of resources, including 30 GB of storage and 2880 minutes of CPU time per day.

**App Service Environments**

App Service environments provide a fully isolated and dedicated environment for your applications. These environments are ideal for applications that require a high level of isolation and security.

**App Service on Linux**

App Service can also be used to host web applications on Linux. This provides a cost-effective and scalable option for developers who prefer to use Linux.

**Conclusion**

In conclusion, Azure App Service is a powerful tool that provides a fully managed platform as a service (PaaS) for building, deploying, and managing web applications, REST APIs, and mobile back ends. With its support for multiple languages and frameworks, scalability, security, and DevOps capabilities, App Service is an attractive choice for developers. Whether you're building a new application or migrating an existing one to the cloud, App Service is definitely worth considering.