**Cloud Application Development**

**YASH RAJ SINGH**

**500083186**

**R2142201344**

**Continuous Evaluation Week 2**

**Deliverables for Week 2:**

The student has to submit a document that should provide a detailed justification for their choice of platform taking into consideration the features and capabilities, scalability and availability, pricing and billing options, and security and compliance measures. This will demonstrate their understanding of the importance of selecting the right application platform for their project and their ability to make Informed decisions based on the platform's capabilities and suitability for their specific requirements.

For the project Data Redundancy Removal System, we use Azure cloud platform.

Azure is a cloud computing platform offered by Microsoft that provides a wide range of services for building, deploying, and managing applications and services.

**Feature and Capabilities:**

Azure offers services such as virtual machines, storage, databases, networking, machine learning, artificial intelligence, analytics, and Internet of Things (IoT) services, among others. Azure also provides tools and resources for developers, IT professionals, and business users to build, deploy, and manage applications on the cloud. It is a popular choice for organizations of all sizes, from small businesses to large enterprises, due to its flexibility, scalability, and cost-effectiveness.

**Scalability and Availability:**

Azure provides high scalability and availability for applications and services deployed on its platform, making it a popular choice for organizations that require high levels of performance and reliability. One of the key ways Azure provides scalability is through autoscaling capabilities that enable applications and services to scale up or down automatically based on demand. This ensures that resources are used efficiently and costs are optimized. Additionally, Azure provides load balancing capabilities that distribute incoming traffic across multiple instances of an application or service, ensuring that traffic is evenly distributed and individual instances are not overwhelmed.

**Cost-Effective:**

Azure's pricing and billing model is designed to offer flexibility and cost-effectiveness to organizations of all sizes. One of the key aspects of Azure's pricing is the pay-as-you-go model, which means that customers only pay for the resources they consume on an hourly basis. This allows organizations to scale resources up or down based on demand, and pay only for what they use.

Azure also provides tools and resources to help customers manage their costs and optimize their spending. For example, Azure Cost Management allows customers to monitor and analyze their spending across different Azure services, and set budgets and alerts to control costs. Azure Advisor provides recommendations for optimizing spending and improving performance.

**Security and Compliance Measures:**

Azure takes security and compliance very seriously, and offers a wide range of measures to help customers protect their data and applications. One of the key measures is compliance certification, as Azure is compliant with a large number of international standards and regulations such as ISO 27001, HIPAA, GDPR, and many more. This ensures that customer data and applications are being protected according to industry standards and regulatory requirements.

In addition to compliance certification, Azure provides robust security measures at every layer of its infrastructure. This includes physical security measures such as access controls, video surveillance, and biometric identification, as well as network security measures such as firewalls, network segmentation, and distributed denial-of-service (DDoS) protection.

**THANK YOU**