**AWS Tools**

1. **AWS EC2 :**

Amazon Elastic Compute Cloud is a web service that provides secured, resizable compute capacity in cloud. Access reliable,Scalable infrastructure on demand. Provide secure compute for applications. Optimize performance and cost with flexible options.It offers scalable, on-demand compute capacity, allowing users to access and manage virtual servers as needed. EC2 instances can be customized with different hardware and software configurations, and users can choose from various operating systems and software available on the AWS Marketplace.EC2 allows users to easily scale their virtual servers up or down based on demand, offering flexibility to meet changing business need.Users pay only for the resources they use, billed on a per-second basis for certain EC2 instance.

1. **AWS Textract :**

Amazon Textract is a machine learning (ML) service that automatically extracts text, handwriting, layout elements, and data from scanned documents.Textract provides you the ability to customize our pretrained features to meet the document processing needs specific to your business. Amazon Textract can extract the data in minutes instead of hours or days. It securely automates data processing with data privacy, encryption, and compliance standards.extract is a fully managed service, meaning you don't need to manage infrastructure or worry about scaling, and it can handle large volumes of document.extract can be integrated with other AWS services, such as Amazon Comprehend, for further text analysis and understanding.You only pay for the pages processed, with no minimum fees or upfront commitment.

1. **AWS S3 :**

Amazon S3 is an object storage service that offers industry-leading scalability, data availability, security, and performance.Store and protect any amount of data for a range of use cases, such as data lakes, websites, cloud-native applications, backups, archive, machine learning, and analytics. S3 stores data as objects within buckets, where an object consists of a file and optional metadata.S3 is designed for high scalability and durability, offering industry-leading data availability and performance.S3 offers different storage classes, allowing users to choose the best option based on their data access frequency, durability, and cost requirement.S3 provides a web service interface and a powerful API for accessing and managing data

1. **AWS Bedrock :**

Amazon Bedrock is a fully managed service that offers a choice of high-performing foundation models (FMs) from leading AI companies like [AI21 Labs](https://aws.amazon.com/bedrock/ai21/), [Anthropic](https://aws.amazon.com/bedrock/claude/), [Cohere](https://aws.amazon.com/bedrock/cohere/), [DeepSeek](https://aws.amazon.com/bedrock/deepseek), [Luma](https://aws.amazon.com/bedrock/luma-ai/), [Meta](https://aws.amazon.com/bedrock/llama/), [Mistral AI](https://aws.amazon.com/bedrock/mistral/), [poolside](https://aws.amazon.com/bedrock/poolside/) (coming soon), [Stability AI](https://aws.amazon.com/bedrock/stability-ai/), and [Amazon](https://aws.amazon.com/ai/generative-ai/nova/) through a single API, along with a broad set of capabilities you need to build generative AI applications with security, privacy, and responsible AI. Amazon Bedrock is serverless

1. **AWS SageMaker :**

Amazon SageMaker is a cloud-based machine lsarning (ML) service that helps users build, train, and deploy ML models.Amazon SageMaker Unified Studio provides an integrated experience to use data and tools for analytics and AI. Discover the data and put it to work using familiar AWS tools for model development, generative AI, data processing, and SQL analytics. Work across compute resources using unified notebooks, discover and query diverse data sources with a built-in SQL editor, train and deploy AI models at scale, and rapidly build custom generative AI applications.

1. **AWS CodeCommit :**

AWS CodeCommit is a managed source control service that helps teams collaborate on code by providing a secure, scalable, and private Git repository in the cloud. It eliminates the need for developers to manage their own source control infrastructure. CodeCommit provides high service availability and durability and eliminates the administrative overhead of managing your own hardware and software.CodeCommit repositories are encrypted at rest as well as in transit. The service can handle repositories with large numbers of files or branches, large file sizes, and lengthy revision histories.

1. **AWS CodeBuild :**

AWS CodeBuild is a fully managed, continuous integration service that compiles source code, runs tests, and produces artifacts ready for deployment, eliminating the need to manage your own build servers.[According to](https://aws.amazon.com/codebuild/) AWS, you just specify your source code location and build settings, and CodeBuild handles the rest. AWS CodeBuild compiles your source code, runs unit tests, and produces deployable artifacts. CodeBuild can be integrated with other AWS services, such as AWS CodePipeline for continuous delivery.CodeBuild scales automatically and processes multiple builds concurrently.You only pay for the build minutes you use.You don't need to manage, patch, or scale your own build servers. CodeBuild is designed to be fast and efficient.

1. **AWS CodeDeploy :**

AWS CodeDeploy is a fully managed deployment service that automates software deployments to various compute services like EC2, ECS, Lambda, and on-premises servers. It helps developers rapidly release new features, minimize downtime, and reduce errors associated with manual deployments.CodeDeploy can deploy applications from various sources like S3 buckets, GitHub, and Bitbucket repositories. CodeDeploy handles the complexity of updating applications, reducing the need for manual operations. It supports deploying to EC2 instances, on-premises servers, ECS services, and AWS Lambda function

1. **AWS CloudWatch :**

AWS CloudWatch is a monitoring and observability service.It allows users to gather and track metrics, collect and store logs, set alarms, and take automated actions based on the performance and operational data of their AWS resources. CloudWatch helps improve visibility into application performance, system health, and operational issues.It uses CloudWatch Container Insights to monitor, troubleshoot, and alert your containerized applications and microservices. CloudWatch collects, aggregates, and summarizes compute utilization information such as CPU, memory, disk, and network data, as well as diagnostic information such as container restart failures, to help DevOps engineers isolate issues and resolve them quickly. Container Insights gives you insights from container management services such as Amazon ECS for Kubernetes (EKS), Amazon Elastic Container Service (ECS), AWS Fargate, and standalone Kubernetes (k8s)

1. **Jenkins :**

Jenkins is an open-source automation server that facilitates continuous integration and continuous delivery (CI/CD) by automating tasks like building, testing, and deploying software, making it a popular DevOps tool. It's a key tool for implementing continuous integration (CI) and continuous delivery (CD) workflows, which are essential for modern software development.Jenkins is a self-contained Java program, making it easy to set up and configure.Jenkins Pipeline allows developers to define, manage, and automate a series of steps that transform source code into a deployable application.Jenkins automates tasks like code testing, conducting staged deployments, and deploying to production environments.

1. **Docker :**

Docker is a platform that allows you to package applications and their dependencies into containers, enabling consistent and portable execution across different environment.Docker uses containers, which are lightweight, portable, and self-sufficient units of software that include everything needed to run an application, such as libraries, code, and runtime.It Ensures applications run the same way regardless of the environment (development, testing, or production).Containers can be easily moved and run on different systems without compatibility issues. Containers are lightweight and require fewer resources than virtual machines, making them ideal for scaling and deploying application.Docker streamlines the process of deploying and managing applications.