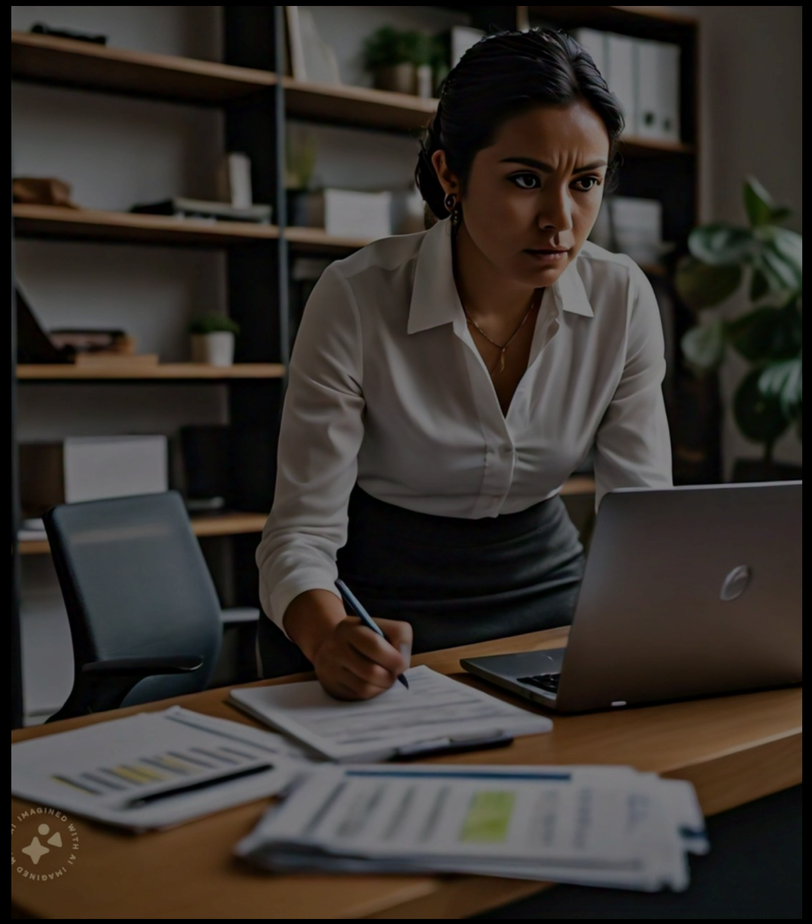
Docker

TS
TECH TEACH
EDUCATIONALSOLUTIO

OUR MISSION :



"Our mission is to empower learners worldwide through innovative technology, personalized learning experiences, and accessible educational resources. We strive to cultivate a community where every individual can achieve their full potential, regardless of their background or circumstances."

OUR VALUES :

"To pioneer the future of education by leveraging cutting-edge technology to make learning more engaging, effective, and inclusive. We envision a world where education transcends boundaries, creating opportunities for lifelong learning and fostering a society enriched by knowledge and creativity."

COURSE CURRICULUM:

Week 1: Docker Fundamentals Review

- Day 1-2: Docker Basics
  - Overview of containerization.
  - Installing Docker on various platforms.
- Day 3-4: Core Docker Commands
  - Docker CLI commands (run, build, push, pull, etc.).
  - Working with Docker images and containers.
- Day 5: Dockerfile and Image Creation
  - Writing Dockerfiles to create custom images.
  - Best practices for building efficient Docker images.

COURSE CURRICULUM:

Week 2: Docker Compose and Multi-Container Applications

- Day 1-2: Introduction to Docker Compose
  - Overview of Docker Compose and its use cases.
  - Writing docker-compose.yml files.
- Day 3-4: Multi-Container Applications
  - Orchestrating multi-container applications with Docker Compose.
  - Networking between Docker containers.
- Day 5: Docker Compose Project
  - Hands-on project to create a multi-container application using Docker Compose.

COURSE CURRICULUM:

Week 3: Docker Networking

- Day 1-2: Docker Networking Basics
  - Overview of Docker networking.
  - Types of Docker networks (bridge, host, overlay).
- Day 3-4: Advanced Networking Concepts
  - Custom Docker networks and network drivers.
  - Connecting containers across multiple hosts.
- Day 5: Practical Networking Scenarios
  - Configuring and managing complex network topologies in Docker.

COURSE CURRICULUM:

Week 4: Docker Storage and Volumes

- Day 1-2: Docker Storage Overview
  - Introduction to Docker storage concepts.
  - Data persistence in Docker.
- Day 3-4: Working with Volumes
  - Creating and managing Docker volumes.
  - Using bind mounts and named volumes.
- Day 5: Backup and Restore Strategies
  - Implementing backup and restore strategies for Docker volumes.

COURSE CURRICULUM:

Week 5: Docker Security

- Day 1-2: Docker Security Fundamentals
  - Security best practices in Docker.
  - Understanding Docker security features.
- Day 3-4: Secure Image Management
  - Scanning Docker images for vulnerabilities.
  - Implementing secure image signing and verification.
- Day 5: Container Isolation and Hardening
  - Techniques for enhancing container isolation.
  - Hardening Docker deployments.

COURSE CURRICULUM:

Week 6: Docker Orchestration with Kubernetes

- Day 1-2: Introduction to Kubernetes
  - Overview of Kubernetes and its architecture.
  - Comparing Docker Swarm and Kubernetes.
- Day 3-4: Deploying Applications with Kubernetes
  - Writing Kubernetes manifests (Pods, Deployments, Services).
  - Hands-on with kubectl commands.
- Day 5: Advanced Kubernetes Features
  - ConfigMaps, Secrets, and Persistent Volumes in Kubernetes.

COURSE CURRICULUM:

Week 7: Advanced Docker Concepts and Tools

- Day 1-2: Docker Swarm and Docker Enterprise
  - Overview of Docker Swarm mode.
  - Managing Docker Swarm clusters.
- Day 3-4: Docker Enterprise Features
  - Introduction to Docker Enterprise.
  - Using Docker Trusted Registry and Universal Control Plane.
- Day 5: CI/CD with Docker
  - Integrating Docker into CI/CD pipelines.
  - Hands-on with Jenkins and Docker.

COURSE CURRICULUM:

Week 8: Final Project and Presentations

- Day 1-4: Project Development
  - Students work on a comprehensive final project that integrates multiple aspects of the curriculum.
- Day 5: Project Presentation and Evaluation
  - Students present their projects.
  - Feedback and evaluation.

Our Partners Company's

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THANK YOU

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