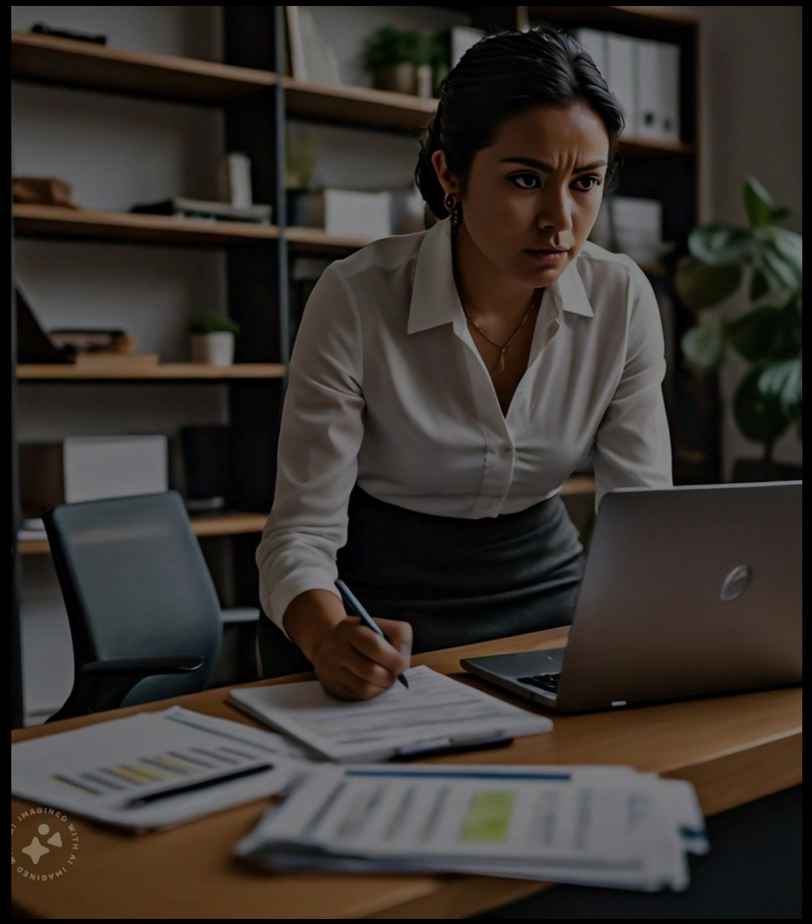
TS
TECH TEACH
EDUCATIONAL SOLUTIO

DevOps

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: Introduction to DevOps

- Day 1-2: Overview of DevOps
  - Introduction to DevOps concepts, principles, and practices.
  - History and evolution of DevOps.
  - Benefits and challenges of DevOps.
- Day 3-4: DevOps Culture and Collaboration
  - Understanding the importance of culture in DevOps.
  - Collaboration and communication strategies.
  - Introduction to Agile and Lean methodologies.
- Day 5: Tools and Technologies
  - Overview of DevOps tools and technologies.
  - Setting up a development environment.

COURSE CURRICULUM:

Week 2: Version Control with Git

- Day 1-2: Introduction to Git
  - Basics of version control.
  - Installing and configuring Git.
  - Creating repositories, committing changes, and managing branches.
- Day 3-4: Advanced Git
  - Merging and rebasing.
  - Working with remote repositories (GitHub, GitLab).
  - Handling conflicts and pull requests.
- Day 5: Hands-on Lab
  - Collaborative project using Git.

COURSE CURRICULUM:

Week 3: Continuous Integration (CI)

- Day 1-2: Introduction to Continuous Integration
  - CI concepts and best practices.
  - Benefits of CI in the development lifecycle.
- Day 3-4: CI Tools and Setup
  - Overview of CI tools (Jenkins, Travis CI, CircleCI).
  - Setting up a CI pipeline.
  - Hands-on: Configuring Jenkins for a sample project.
- Day 5: CI Best Practices
  - Writing effective CI pipelines.
  - Integration with version control systems.

COURSE CURRICULUM:

Week 4: Continuous Deployment and Delivery (CD)

- Day 1-2: Introduction to Continuous Deployment and Delivery
  - CD concepts and best practices.
  - Differences between continuous delivery and continuous deployment.
- Day 3-4: CD Tools and Setup
  - Overview of CD tools (Jenkins, GitLab CI/CD, Spinnaker).
  - Setting up a CD pipeline.
  - Hands-on: Configuring Jenkins for automated deployment.
- Day 5: Deployment Strategies
  - Blue-Green deployments, canary releases, and rolling updates.

COURSE CURRICULUM:

Week 5: Infrastructure as Code (IaC)

- Day 1-2: Introduction to IaC
  - IaC concepts and benefits.
  - Tools for IaC (Terraform, Ansible, Chef, Puppet).
- Day 3-4: Terraform Basics
  - Installing and configuring Terraform.
  - Writing and applying Terraform configurations.
  - Hands-on: Provisioning infrastructure with Terraform.
- Day 5: Ansible Basics
  - Installing and configuring Ansible.
  - Writing and running Ansible playbooks.
  - Hands-on: Configuring servers with Ansible.

COURSE CURRICULUM:

Week 6: Containerization and Orchestration

- Day 1-2: Introduction to Containers
  - Concepts of containerization.
  - Introduction to Docker.
  - Hands-on: Building and running Docker containers.
- Day 3-4: Docker Advanced
  - Docker Compose for multi-container applications.
  - Docker networking and volumes.
  - Hands-on: Creating and managing multi-container applications.
- Day 5: Kubernetes Basics
  - Introduction to Kubernetes.
  - Kubernetes architecture and components.
  - Hands-on: Deploying applications on a Kubernetes cluster.

COURSE CURRICULUM:

Week 7: Monitoring and Logging

- Day 1-2: Introduction to Monitoring and Logging
  - Importance of monitoring and logging in DevOps.
  - Tools for monitoring (Prometheus, Grafana).
- Day 3-4: Monitoring Setup
  - Setting up Prometheus and Grafana.
  - Hands-on: Creating monitoring dashboards.
- Day 5: Logging Setup
  - Tools for logging (ELK Stack: Elasticsearch, Logstash, Kibana).
  - Hands-on: Setting up and configuring ELK Stack.

COURSE CURRICULUM:

Week 8: Security and Final Project

- Day 1-2: DevSecOps
  - Introduction to DevSecOps.
  - Integrating security into the DevOps pipeline.
  - Tools and practices for DevSecOps.
- Day 3-4: Final 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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