Caltech | Center for Technology & Management Education

Post Graduate Program in DevOps

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Configuration Management with Ansible and Terraform

DevOps

Cloud Computing

DevOps

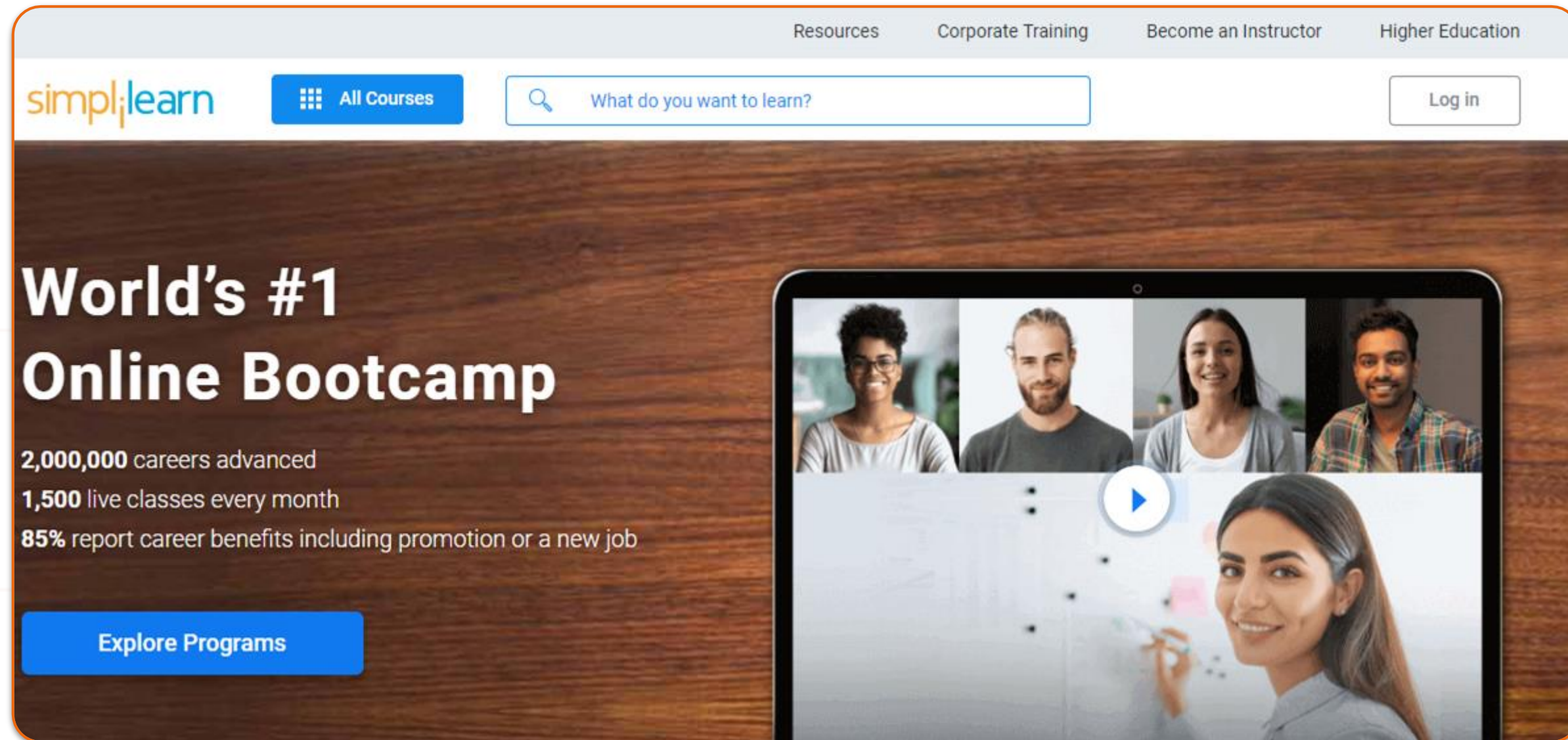**Course Introduction**

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About Simplilearn

About Simplilearn

For over a decade now, Simplilearn is focused on digital economy skills.
Now, Simplilearn has become **World's #1 Online Bootcamp.**

Simplilearn

At Simplilearn, we provide:

Live Virtual Classes

Self-Paced
Learning Content

Interactive Labs

Real-Time
Scenario-Based Projects

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Prerequisites

Prerequisites

Here is the prerequisite for this course. Please ensure that the fundamentals of the prerequisite are clear.

Basic Linux Administrator Skills

Introduction to Configuration Management

Configuration Management

Configuration management is a process for maintaining computer systems, servers, and software in a desired and consistent state.

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It ensures that a system continues to perform as expected as changes are made over time.

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Configuration Management Tools

Configuration management tools manage all configuration items in software for all environments.

Configuration management tools cover both software and server configurations.

They help in reducing the time taken to manage configurations manually on each server.

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Skills Covered

ANSIBLE

- Ansible is a simple IT automation platform that makes applications and systems easier to deploy and maintain.

- It implements configuration management with a master-slave approach and uses Terraform for infrastructure automation.

HashiCorp Terraform

- Terraform is an open-source infrastructure as a code software tool that provides a consistent CLI workflow to manage hundreds of cloud services.

- It is cloud agnostic and allows a single configuration to manage multiple providers, and to even handle cross-cloud dependencies.

Why This Course?

> To identify the properties enforced by DevOps and configuration management

> To apply Ansible fundamentals to automate the software tools and technologies

> To implement Configuration Management with the Ansible using a master-slave approach

> To work with Terraform and take infrastructure automation to the next level

Target Audience

System Engineer

CM helps by establishing and maintaining consistency of a product's performance, functional, and physical attributes.

Application Developers

CM helps to systematically manage, organize, and control the changes in the documents, codes, and other entities.

Solution Architects

Terraform is a cloud-based tool that helps in managing IaC and automate most system administration tasks.

Site Reliability Engineer

CM provides the understanding of configuration management database (CMDB), standardization, and automation.

Learning Path

Course Outline

01	Course Introduction
02	Getting Started with Configuration Management
03	Ansible Configuration
04	Ansible Ad-hoc Commands
05	YAML Basics

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Course Outline

06   Writing Ansible Playbooks

07   Ansible Jinja2 Templates

08   Working with Ansible Roles

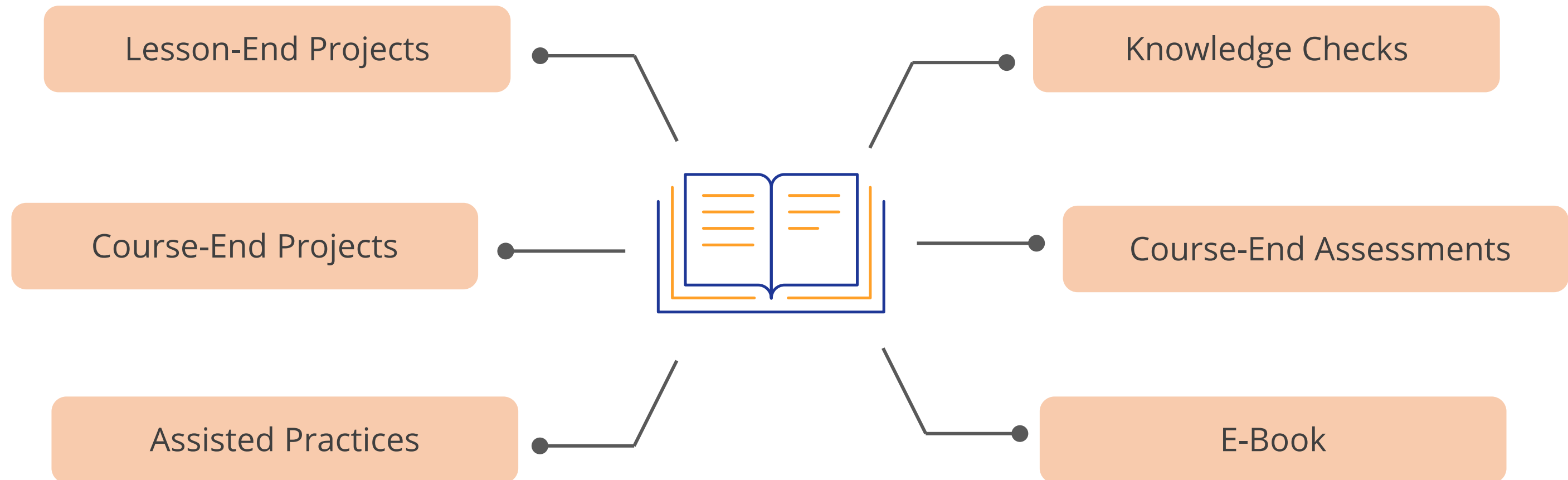**09**   Advanced Ansible

10   Terraform

11   Terraform Loops, Built-in Functions, and Provisioners

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Course Components

Course Components

Simplilearn's comprehensive learning platform will provide you an in-depth understanding of the key concepts with the help of the following course components:

Lesson-End Projects

Knowledge Checks

Course-End Projects

Course-End Assessments

Assisted Practices

E-Book

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Course Completion Criteria

1

Attend one complete Live Virtual Class (LVC) in a batch

2

Score a minimum of 70% in course-end assessment

3

Submit at least one course-end project

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Let's get started

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