

# **Unix Shell Scripting Certification Training**

Course Curriculum: Your 10 module Learning Plan

https://www.edureka.co/unix

#### About Edureka

Edureka is a leading e-learning platform providing live instructor-led interactive online training. We cater to professionals and students across the globe in categories like Big Data & Hadoop, Business Analytics, NoSQL Databases, Java & Mobile Technologies, System Engineering, Project Management and Programming. We have an easy and affordable learning solution that is accessible to millions of learners. With our students spread across countries like the US, India, UK, Canada, Singapore, Australia, Middle East, Brazil and many others, we have built a community of over 1 million learners across the globe.

#### **About Course**

Become an expert in Unix/Linux & Shell Script by mastering the fundamentals, architecture and automation with Shell Script. Also, learn monitoring by working on live real-life projects.

#### Curriculum

#### Fundamental of Unix

**Learning Objectives** - In this module, you will get an overview of the Unix Operating System, its Architecture, Directory Structure and Command Usage and learn how to connect Unix Server using the Putty tool.

**Topics** - Introduction to the UNIX Operating System, Features of UNIX, Unix vs Windows and DOS Operating System, Differentflavorsof Unix, Unix System Architecture, File System Layout in Unix, Unix Command Usage, Unix Directory Structure/Hierarchy, Advantages and Disadvantages of Unix OS, Accessing Unix Server.

#### General Utility Commands

**Learning Objectives** - In this, you will learn how to write and use commands, message print on screen and get hands-on experience on basic commands in the Unix box by using the Putty tool and Ubuntu.

**Topics**- Getting started: Ubuntu, Special commands in Ubuntu (like apt-get, apt-cache, etc), Basic useful Unix commands (like sleep, passwd, date, cal, etc), Login related commands, Terminal related commands, Online Manual, Displaying Message, Disk related commands, Command for Unix OS details, Control Terminal Colour and Cursor.

#### Files and Directories

**Learning Objectives** - In this module, you will learn how to create, delete, rename, copy, move, display files along with Redirection and Piping concepts.

**Topics** - What is Files, Directories and Sub-directories, Types of Files, Namingconventionof Files, Directory related terms, Wildcard Character used in Files, Commands to manage Directories, Commands to create, display and delete Files, Commands to Managing Files (cp, mv, wc, lp, etc), Piping, Input/Output Redirection.

## Handling Ordinary Files and Filters

**Learning Objectives** - In this module, you will learn how to handle files and directories by using different commands and also learn Filter commands.

**Topics** - Splitting File Horizontally, Splitting File vertically, Useful File related Commands (like paste, tee, tr, cmp, comm, diff, alias, etc), File Search, Compressing and Archiving Files, In: Linking Files, Filter related Commands (like grep, sort, uniq, awk, etc).

#### File Attributes and Networking

**Learning Objectives** - In this module, you will learn the different types of file attribute, how to change file permission, communicate within a network using Unix command, Upload/Download files from Local to server and vice versa.

**Topics** - Categories of Users and Permissions, Changing File Permission, Changing File Ownership, What is Superuser, Use of umask Command, Communication Commands in Network, Network related Commands, Transferringfiles between Local and Server, Copy files from server to server.

#### Editor

**Learning Objectives** - Metrics and trend charts will help you to demonstrate that your requirements gathering process is improving. The learning from this module will help you to manage the change requests that come into your project, using brainstorming, negotiation or Agile development methodology.

**Topics** - Different types of Editors (like ed, sed, gEdit, emacs, nano, vi, vim), Different modes of the vi editor, Screen Control, Navigation, Cursor Movement, Commands for saving and exit, Insert and Delete operation in vi, Searching for a pattern, Replace/Substitute, Joining Lines, Copy and Paste, Block Copy, Move and Delete, Special features of vim editor, sed: Stream Editor, Use of xargs command.

#### Entering to Shell Script

**Learning Objectives** - In this module, you will understand the general idea of a Shell Script, where and how to use and the pre-requisites to work on Shell Script.

#### edureka!

**Topics** - Different types of shell, What is Shell Scripting?, How to write and execute a Shell script file, Scripting Language vs Programming Language, Process, Running jobs in the background and foreground, Scheduling Job (at, batch, cron, nice), TerminateProcessEnvironment Variable, Local and Global Variables, Positional Parameter.

## Shell Script operation

**Learning Objectives** - In this module, you will learn the approach of writing Shell Script with some basic programs.

**Topics** - Escape and Quoting Mechanism, Batch Script vs Shell Script, Advantages and Disadvantages of Shell Script, ShellArithmeticBasic Operators, Arrays, Shell Function, Decision Making Statement.

#### Shell Programming

**Learning Objectives** - In this module, you will learn how to debug a Shell Script Program and more hands on of important programs with assignment for own practice.

**Topics** - Debugging Shell Scripts, Shell Loops, Loop Control flow, Some important Shell Script Programs.

## Project

**Learning Objectives** - In this module, we will discuss about FAQs, and project work with roles and responsibilities.

Topics - Objective/FAQ discussion, Queries/Doubt Clarification, Project.

## **Projects**

#### Which case studies will be the part of this course?

Project Title: 30 assignments on Unix Scripting

Description: The purpose of this project is to explore and master Unix Scripting by executing complex assignments. You will get to work on multiple assignments with varying degree of complexity that will enable you to become an expert Unix Administrator. After completing these assignments, you will be able to perform your day-to-day Unix activities with great ease. Most of the assignments are based on the following tasks:

- 1. Creating a user
- 2. Changing the ownership
- 3. Configuring disk and SSH service
- 4. Logical partitioning
- 5. Creating repository based on http service and many more

## How will I execute the practicals?

Installation guides are provided with the course. The detailed installation guides are also provided in the LMS for setting up the practical environment. Also, we'll provide an URL for online practice and guidance. Your queries will be promptly answered by the Edureka 24\*7 support team.

# What are the system requirements for this course?

Typical hardware requirements are: RAM 4 GB and Disk Space 10GB with dual core CPU. Requisite software can be downloaded from edelivery.oracle.com