

Experience a learning path that resonates with you. Learn full-stack development, Cloud computing, DevOps, Automation, Artificial intelligence and much more ...



Live Classes



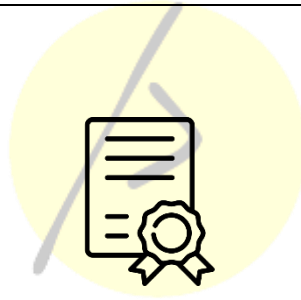
Practice Labs



Project Work



Assessments



Certifications



Recordings



Mentorship



Placement



Community

Classroom (Bengaluru) | Online (Global) | On-premise (Corporate)

Section 1: Python Essentials

Unit 1: Python Basics

1. Python Syntax
2. Features of Python
3. Variables
4. Operators
5. Basic input output statements
6. Keywords

Unit 2: Python Data Structures

1. Numbers: int, float, complex
2. Strings
3. List
4. Tuple
5. Dictionary
6. Set

Unit 3: Control-flow statements

1. Decision making with if conditions
2. if-elif-else
3. for loop
4. while loop
5. break and continue
6. for else loop
7. Comprehensions

Unit 4: Functional programming

1. Introduction to functions
2. Namespaces and scope
3. return keyword
4. Parameters and positional arguments
5. lambda function
6. map, filter and reduce

Unit 5: Exception handling

1. Errors and exceptions
2. Handling exceptions with: try, except, else and finally



3. Causing exceptions: raise and assert
4. Create your own exception
5. Logging
6. Logging levels and configuration

Unit 6: File handling

1. Introduction to files
2. File objects and modes
3. Opening and closing files
4. Read and write operations
5. Context manager – with

Unit 7: Working with directories

1. Directories and file path
2. os module
3. Making, changing and deleting directories
4. Listing directory and navigating file systems
5. Data compression and decompression with zipfile module

Unit 8: Regular expressions

1. Introduction to re module
2. Special characters for pattern making
3. re functions and flags
4. String matching and pattern filtering
5. Greedy and non-greedy match
6. Simple character matches
7. Special characters
8. Data extraction

Section 2: Selenium

Unit 1: Introduction to Selenium

1. Need for Automation
2. Testing Scope of Selenium
3. Selenium Components
4. Installing Selenium 4
5. Browser setup: chromedriver, geckodriver
6. Getting started with automation scripts

Unit 2: Drivers

1. Browser options
2. HTTP Client
3. Service
4. Remote WebDriver
5. Supported Browsers
6. Driver Sessions

Unit 3: Waiting Strategies

1. Implicit waits
2. Explicit waits
3. Customization



Unit 4: Web Elements

1. File upload
2. Locating strategies: ID, NAME, CLASSNAME, TAGNAME, LINK_TEXT, CSS, XPATH
3. Finding web elements
4. Information about web elements
5. Check Box
6. Text Box
7. Radio Button
8. Popups

Unit 5: Web elements interactions

1. Navigation
2. Alerts
3. Cookies
4. Frames
5. Windows

Unit 6: Commands

1. Navigational commands
2. Conditional commands
3. WebDriver commands

Unit 7: Actions API

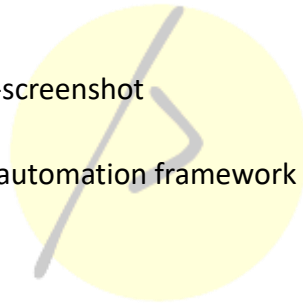
1. Keyboard
2. Mouse
3. Pen
4. Wheel

Unit 8: Data Driven Test

1. Reading and writing to Excel file
2. Test Report

Unit 9: Screen Shot

1. Screenshot using selenium-screenshot
2. Screen Recording
3. Reporting integration with automation framework full details pass fail and screen shots



Section 2: Robot Framework

Unit 1: Robot Framework Fundamentals

1. Install & Setup Robot Framework
2. The Settings Section of a Robot file
3. Importing Resources
4. Importing Existing Python Libraries (e.g., the Selenium Library)
5. Suite Setup & Suite Tear Down
6. Test Setup & Test Tear Down
7. Creating a Variables section in a Robot file
8. Creating a Keywords section in a Robot file
9. Basics of Robot Syntax
10. Using Existing Robot Keywords
11. Importing Python Libraries
12. Creating a Test Cases section in a Robot file
13. Test Cases naming convention
14. Documenting Test Cases with Documentation attribute
15. Tags attribute
16. Writing a simple Robot Test
17. Executing a Robot Test
18. Using the terminal execute tests
19. Analyzing Results
20. Viewing the log file
21. Finding Root Cause of Test Script Failures
22. How to read and explain the Report File to your Project team

Unit 2: Locators / Finding Elements in a Web Application

1. Setting up a Locator file
2. How to find locators using Developer Console and XPath Helper
3. Using id's or CSS to find elements
4. When and how to use XPath Axes for Locators
5. Dealing with elements that have the same attributes

Unit 3: Enhancing Test Automation with Best Practices

1. Creating Test Automation Scripts that are adaptable for many testcases
2. Enhancing your project's utilities library
3. Reducing the number of locators, you have with "polymorphic" locators
4. Making scripts more robust with proper waits
5. Using Keyword args for Python Functions
6. When to use Exception Handling
7. Generating Robot Docs to help with Documentation

Section 4: API Testing

Unit 1: Fundamentals of API Testing

1. What is API Test Automation?
2. What are the benefits of API Test Automation?
3. When should I use API Test Automation vs. UI Automation?

Unit 2: API Test Automation

1. Setting up a simple API Test in Robot Framework
2. Creating an API Test Suite
3. Using API Tests to generate Test Data



About the trainer

Carrying an experience of over 10 years, I pride myself for experiential learning approach. A training path that consists of visual learning, hands-on learning, project work, periodic assessments and mentorship. With us, you can be sure about getting the knowledge, certificate and placement.



■ **Ram Kumar**

- ✓ **University: UVCE, Bangalore**
- ✓ 100+ Corporate Batches
- ✓ Python Certified Professional
- ✓ Certified Kubernetes Administrator
- ✓ **Last Employer: Amazon, India**
- ✓ 3000+ Students
- ✓ AWS Certified Cloud Architect
- ✓ AWS Certified Machine Learning

Top clients

