

# **Capstone Projects:**

Real Time Business Scenario using Copilot Training for Software Tester



#### **Test Case Generation**

Use Copilot to automatically generate detailed test cases from software requirements or user stories, saving time in test design.



## **Bug Report Drafting**

Leverage Copilot to analyze logs, summarize defects, and draft clear bug reports with reproducible steps.



## **Test Script Automation**

Apply Copilot in VS Code to auto-suggest Selenium or Playwright scripts for functional and regression testing.



## **API Testing Assistance**

Use Copilot to generate API test cases, validate responses, and automate Postman collections or Python scripts.



### **Test Data Creation**

Generate realistic test data sets in Excel or databases with Copilot for boundary, performance, and negative testing.



## **Automation Framework Enhancement**

Improve existing test automation frameworks by using Copilot's AI suggestions for code optimization, refactoring, and documentation.

# **COPILOT TRAINING FOR SOFTWARE TESTER COURSE SYLLABUS**

## Section 1: Introduction to AI in Testing

- Evolution of AI in software testing
- GitHub Copilot role in test automation, debugging, bug detection
- How AI understands prompts in test cases and scripts
- Future of AI in QA and automation

## Section 2: Getting Started with GitHub Copilot for Testers

- Creating a GitHub account & enabling Copilot
- Installing Copilot extension in VS Code & JetBrains **IDEs**
- Configuring Copilot for test automation projects
- Managing permissions and test data privacy
- Understanding inline test suggestions (ghost text)
- Using block suggestions
- Shortcuts and hotkeys for faster test writing

# **Section 3: Prompt Engineering for Testers**

- Writing effective prompts for test scripts generation
- Converting requirements stories into test scripts
- Creating test scripts from comments
- Debugging prompts

## **Section 4: AI-Powered Code Generation**

- Writing manual test cases to automated scripts using Copilot
- Generating unit, integration,
- Regression tests
- Creating Selenium test scripts
- Using Copilot Chat to explain test scripts

- Generating mock data for testing
- Automating repetitive test patterns
- Generating API test automation
- Accelerating end-to-end test automation

## **Section 5 : Quality Assurance with Al**

- Auto-generating test documentation & reports
- Using AI for edge cases
- Al-assisted test plan reviews
- Using Copilot for performance & load testing scripts
- Reducing human error in test execution
- Al for regression suite updates

## Section 6: Debugging and Defect Analysis with Al

- Al-assisted bug detection
- Explaining test failures automatically
- Suggesting fixes for test script errors
- Optimizing slow-running test cases
- Detecting security
- Automating repetitive debugging workflows
- Learning debugging patterns

## Section 7: Multi-Framework Testing with Al

- Al-assisted scripting in Python
- Java automation with Copilot
- JavaScript and TypeScript testing
- Handling different syntax
- Using Copilot in UI, API, DB, and Mobile testing

# **Section 8: Real Time Projects**

- Employee Management System Test Automation Suite
- E-Commerce Ordering System End-to-End Test Automation
- Bug Tracker with Al-Assisted Testing
- API Integration & Automation



# **Tools Covered**

GitHub Copilot

GitHub Copilot Chat

Visual Studio Code

Visual Studio

Azure DevOps











GitHub Actions

Selenium

Postman

JUnit / NUnit / PyTest









# **Skills Covered**

Prompt Engineering



Test Data Creation



Exploratory Testing with AI











Code Review **Assistance** 

Automation **Script Support** 

Natural Language to **Test Script Conversion**  Al-Powered Debugging



Collaboration

with AI Tools





# **Earn your Copilot Training for Software Tester Course Completion Certificate**

Credo Systemz's certificate is highly recognized by 30K Global companies around the world.



# WHAT OUR TRAINEE SAYS?



### Libi charan

4.7 **\*\*\*** 

Excellent course! Clear explanations, step-by-step guidance, and practical examples. Learned to use Copilot effectively. Highly recommend for beginners and professionals..



## **Srivarshini**



Had a wonderful learning experience at Credo Systemz. The Copilot course was clear, easy, and effective. Trainers were very supportive and the proper coordination's. Thank you Credo Systemz



### Jason Israel

 $5.0 \star \star \star \star \star$ 

Highly recommended course! Trainers explained Copilot features simply. Learned real-world applications. Increased productivity immediately. Perfect for students and professionals alike.



#### Vasmitha



Credo Systemz delivered a wellstructured Copilot Training for software Tester. Trainers explained everything clearly. Gained useful knowledge. Very helpful for career growth.



## **Abinaya**



Credo Systemz provided a great Copilot Training for software Tester. Easy explanations, hands-on practice, and helpful trainers. Perfect for beginners and professionals alike.



#### **Padmesh**



Very helpful training! The course makes Copilot Training for Data Analysts easy to understand. Great for productivity. Learned tips I can apply daily. Highly recommended. Thank you Credo Systemz

# **CHENNAI**

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# **OVERSEAS**

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