A Report on One-day Alumni Hands-on Workshop
"Python Fundamentals for Automation: From Scripts to Solutions"
Organised by Department of Computer Science & Technology
In association with IIIC & AWA, MITS
on 14.09.2024

Organized by: Mr. D. Suresh, Assistant Professor, Department of CST & Mr. V. Naveen, Assistant Professor, Department of CST

Resource Person Details: Mr. T. Madhu Midhan, Data Engineer Associate, Accenture, Bengaluru & Ms. Shaik Nasreen, Data Engineer Associate, Accenture, Bengaluru.

Participants: III CST Students

Attendance: 190 participants

Venue: CST Department

Mode of Conduct: Offline

Department of Computer Science & Technology has organized One day Alumni Hands-On Workshop on "Python Fundamentals for Automation: From Scripts to Solutions" in association with IIIC & AWA-MITS on 14.09.2024 (Saturday) from 9:30 AM to 4:00 PM.

Welcome Address:

The event commenced promptly at 09:30 AM with a warm and engaging welcome address to all by Mr. D. Suresh, Assistant Professor, Department of CST, Madanapalle Institute of Technology & Science (MITS), Madanapalle. The main objective of a workshop on "Python Fundamentals for Automation: From Scripts to Solutions" is to introduce participants to Python's core concepts and its powerful automation capabilities. It aims to provide hands-on learning experiences, demonstrating how Python can automate repetitive tasks efficiently. Attendees will learn best practices and key libraries, empowering them to develop custom automation solutions.

Resource Person Lecture:

Mr. T. Madhu Midhan, Data Engineer Associate, Accenture, Bengaluru covered several important topics, such as:

· To Build a Strong Foundation: Introduce participants to the core concepts of Python programming, focusing on the essential syntax and constructs needed for automation tasks.

· Demonstrate Python's Automation Capabilities: Highlighted how Python can be effectively used to automate repetitive and time-consuming tasks, enhancing productivity and efficiency in various domains.

· Practical Learning Experience: Provided hands-on demonstrations and examples, allowing participants to see how Python scripts can be developed and executed to solve real-world automation problems.

· Empower Problem-Solving: Equip attendees with the knowledge and skills to identify tasks that can be automated and develop custom Python scripts to address those challenges.

· Introduced Key Libraries and Tools: Familiarize participants with important Python libraries such as os, sys, pandas, requests, and selenium, showcasing their roles in building more advanced automation solutions.

· Encouraged Best Practices: Teach best practices for writing clean, efficient, and reusable code, including error handling, code organization and documentation.

· Facilitate Interactive Learning: Encouraged questions and discussions to deepen understanding and provide personalized guidance on using Python for specific automation needs.

· Inspire Continued Learning: Motivated participants to further explore Python and its vast ecosystem, highlighting potential career paths and opportunities in automation and software development.

Ms. Shaik Nasreen, Data Engineer Associate, Accenture, Bengaluru covered the context of game programming, introduced participants to know how Python can automate and streamline game development tasks. This includes automating gameplay mechanics, testing, and asset management using Python scripts, enabling a more efficient game development process while also covering foundational Python concepts relevant to game programming.
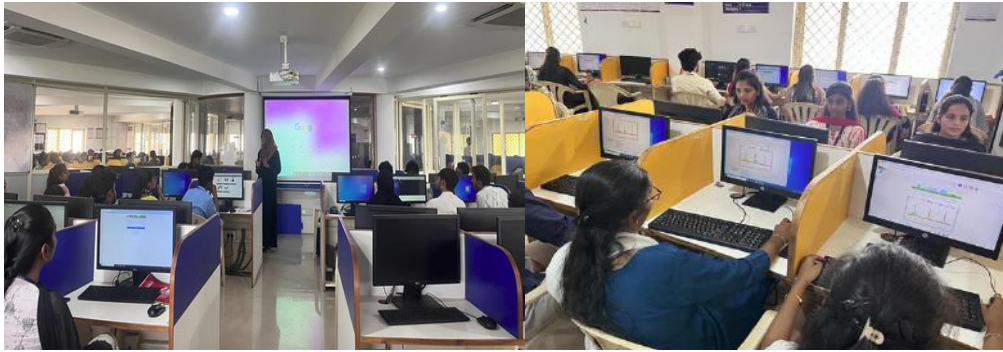
Vote of Thanks:

The workshop formally concluded with a vote of thanks delivered by, Mr. D. Suresh, Assistant Professor, Department of CST. In his address, he expressed sincere gratitude to resource persons for taking the time to share their expertise and inspired our students towards stepping their career path towards Python Programming.

Outcomes:

At the end of Program, Students can able to,

1. Understand the Python Basics on syntax, data types, and control structures.
2. Hands-on Automation Skills to create and execute Python scripts to automate tasks, enhancing their efficiency in various domains.
3. Knowledge of Key Libraries like os, pandas, and selenium for building advanced automation solutions.
4. Problem-Solving abilities to identify repetitive tasks that can be automated and develop effective Python scripts to address these challenges.
5. Best Practices in Coding including debugging and error handling.