A REPORT ON
Python 101

Date: 28th - 29th March, 2024
Venue: EA-820, Silver Oak University

PYTHON 101

Introduction:

Silver Oak University IEEE Student Branch organised a two-day hands-on workshop titled **"Python 101"**. The workshop's objective was to provide foundational knowledge and practical insights into Python, thereby enhancing participant's proficiency in the language.

About the speaker:

The event was held by the distinguished experts:
- Prof. Parimal Patel, Assistant Professor, Department of Computer Engineering, SOCET
- Prof. Monali Suthar, Assistant Professor, Department of Computer Engineering, SOCET
- Prof. Sanket Shah, Assistant Professor, Department of Computer Engineering, SOCET

About the session:

Date: 28th - 29th March, 2024
Time: 10:30 AM - 02:30 PM
Venue: EA-820, Silver Oak University
Participants: 45

DAY – 1

The workshop commenced with an engaging introduction by Prof. Parimal Patel, emphasizing the relevance of programming in problem-solving and its applications across various domains. He further expanded on the benefits of Python, notably highlighting its vast library and user-friendly nature.

Thereafter, Prof. Parimal Patel proceeded to provide a comprehensive overview of Python, covering its historical background, prominent organizations utilizing Python, while giving insights on Integrated Development Environments (IDEs) available for Python programming. He further elucidated on the basic definition of Python, highlighting its features, syntax, keywords, and variables.

On the closing note, the expert delved into the fundamental data types in Python, highlighting how data serves as the foundation for representation and manipulation within the language. He explored concepts such as integers, floats, strings, lists, tuples, and dictionaries, explaining their roles and characteristics in Python programming.

The session was also graced by Prof. Jaimin Dave, Vice-Principal, SOCET; with a mindful talk about programming languages, highlighting the crucial role of terminologies in programming languages and urging attendees to delve into practical exploration with various editors. Emphasizing clarity and comprehension, he introduced the "Career Pathways" initiative to

elevate students' learning experiences and tackled the "Phobia of Programming" through a Q/A session. Throughout the session, participants actively engaged in asking questions and exchanging ideas, fostering a collaborative learning environment conducive to knowledge sharing and acquisition.

DAY - 2

On the second day, Prof. Monali Suthar commenced explaining user-defined functions and their operations. She engaged participants in practical exercises to reinforce the concepts. Following that, participants delved into Python's Classes and Objects, gaining insights into their functionality.

Afterward, she handed the session over to Prof. Sanket Shah, who elaborated on concepts of overriding and overwriting in python code. Participants were given practical assignments to work on these concepts. Prof. Shah also discussed various concepts of Object-Oriented Programming including Inheritance, providing practical insights for participants to apply their learning.

Returning to the session, Prof. Suthar elaborated further on inheritance, providing practical insights to enhance understanding. Later, the session transitioned to MySQL integration with Python, exploring how to connect Python with databases.

In the closing moments, Prof. Suthar demonstrated the connection between Python and MySQL databases and delved into advanced topics such as querying databases, CRUD operations, and handling exceptions while interacting with the database. This comprehensive overview provided participants with a solid foundation for utilising databases within their Python projects.

Conclusion:

In conclusion, the "Python 101" workshop proved to be highly informative and enriching, equipping participants with essential knowledge and skills in programming language. The speaker's expert guidance and insightful explanations contributed significantly to the success of the event, and empowered attendees to explore Python with confidence all while furthering their academic and professional pursuits.

The success of the event was only possible with the guidance and support of Dr. Satvik Khara, Dean, Diploma Engineering, SOU; Head, Department of Computer Engineering, SOCET; IEEE Senior Member; Chairperson, SIGHT, IEEE Gujarat Section; Secretary, Computer Society, IEEE Gujarat Section; and Founding Member, Silver Oak University IEEE Student Branch.

Glimpses of the event:

Prof. Jaimin Dave giving insights on Programming Language

Prof. Parimal Patel introducing Python Programming to attendees

Prof. Monali Suthar offering hands-on guidance to participants

Prof. Sanket Shah educating attendees on OOPS concepts