A Report on

Edunet: CODE UNNATI TRAINING PROGRAM (In association with SAP and L&T)

Organized by:

Department of Training and Placement, with Electronics and Communication Engineering Department, SCET

Event Speaker: Mr Bassar M Patel, Edunet

Event Platform: AV Room, Electronics and communication department,

SCET

Event Date: 16th October 2023 to 21st October 2023

Event Time: **9:00 AM to 4:00 PM**

Event Accessibility: **BTech II year students** (**EC** + **IC**)

No of Participants: 70 students

Event Coordinator: Prof. Shabbir Ghadiali (TPO, SCET) and

Prof. Sarosh K. Dastoor (Asst. TPO, SCET)

HOD (EC Department): Prof. Chirag Paunwala

Objective: The primary objective of this training program is to equip students with comprehensive knowledge and practical skills in Python programming language. The program aims to empower students to leverage Python's versatility for various applications, including web development, data analysis, artificial intelligence, and automation.

Event Details:

Event type: Training of technical skills using Python

- Python basics
- Data Analysis with Python
- Artificial Intelligence
- SAP Conversational AI Chatbot
- Capstone Project

Day 1: Monday,16th October 2023

Introductory session was followed by the felicitation ceremony with the basics of python. The trainer Mr Bassar Patel provided Annaconda and MongoDb software to install it in our system and provided a lot of hands-on practices using Jupyter Notebook, an open source platform, with the best learning. In order to acquire knowledge and skills in Technical world, exercises and discussion on programming techniques were used to involve participants in learning. In addition, exercise and assignments were provided to simulate learning Module 1 (basics of python) with 2 labs accomplished and day 1 ended with some good and basic learning.

Day 2: Tuesday, 17th October 2023

It was all about practice and understanding with the large amount of hands-on practice and experiences in the first half with data analytics. We learned about the 'if and else' conditional statements and how to use them in the technical market and business followed by:

- Lab 1:-Performing data structures of python programming
- Lab 2:-Function and module creation
- Lab 3:- implementation of object oriented programming
- Lab 4:- exception and error handling

That's how the day 2 of training program ended with great enthusiasm and learning.

Day 3: Wednesday, 18th October 2023

Almost in the middle of the completion of the training program, a good expertise to apply in the technical world and gaining practical knowledge with day 3, was all about data analysis, data-

frames and series of different types of libraries introduced namely mongo dB, NumPy, matplotlib, pandas, and seaborn. The Lab performance was divided as follows:

- M2 U1 LAB1: Demonstrating python integration with mongo Db
- M2 U2 LAB2: Create NumPy array and perform I/O function with NumPy
- M2 U2 LAB2: Indexing and slicing
- M2 U2 LAB3: Working with structured array in Numpy

Day 4: Thursday, 19th October 2023

This day we learned about how to import the NumPy library and use it accordingly to plot graphs and charts and in order to obtain the same, we need to know the basics of python which we learned in the first two days of our training program. We also learned about how to add or delete any element from the given array and how to find the max and min from the same. Basically we learned about different functions and syntax to be used to find or to code for the same. The session was followed by the new library 'matplotlib' and 'pandas' for plotting the graphs and access different plotting methods from the library. Pandas is used to frame a data structure, analyze the same data and study its trend accordingly. The Lab performance was divided as follows:

- M2 U2 LAB4: Import NumPy as np
- M2 U3 LAB1: Importing pandas Library
- M2 U3 LAB2: Perform selection, reindexing and sorting in pandas
- M2 U3 LAB3: Working with text data and statistical functions and pandas
- M2 U3 LAB4: Indexing a data frame using indexing operator
- M2 U4 LAB5: Import matplotlib.pyplot as plt

Day 5: Friday, 20th October 2023

We learned a lot about data analysis and basics of artificial intelligence. We performed different labs with codes and functions to enhance our skills and also understood the working of AI and Machine Learning by engaging with group discussions. Also performed a fun activity using the site called 'teachable machine-learning' and hence, got to know how AI recognizes the object when we display it before the web cam. It was the fun and learnable activity about how AI machines and intelligence works. After that, we performed the plotting of different data in different

forms that are scatter, line, heatmap, bar chart, pie chart etc. using Matplotlib and seaborn library. The Labs task we performed are as follows: -

- M2 U4 LAB2: Matplotlib libraray
- M2 U4 LAB3: Matplotlib library
- M2 U5 lab1: Seaborn
- M2 U5 lab2: Plotting of Categorial data
- M2 U5 lab3: Plotting of categorial data

Day 6: Saturday, 21st October 2023

The very last day of our training program, where we got to know about SAP Systems Applications, products in data processing and working, followed by developing a chatbot. The program ended with the words of motivation and career guidance from TPO prof. Shabbir Ghadiali, Asst TPO Prof Sarosh Dastoor and vote of thanks to the trainer Mr. Bassar Patel and his team. Student feedback was provided by Hardik Suthar (II year student). Students found the hands-on program completely productive for their career and they asked for the next level of it. Mr. Bassar Patel enlightened us with the capstone project that is required to be executed in the next 3 months. Each one will be provided with the mentors to help in the working project.

This is how an entire week of dedicated learning ended and this session was one of the best sessions that were conducted, with skillful ability, will definitely lead us to our better future building.

Outcome of the Program:

- Gaining practical skills and knowledge in Python programming.
- Competence in Data Handling and Analysis
- Basic understanding of AI and ML concepts, leading towards the implementation of algorithms and models using Python.
- Developing confidence and ability to tackle coding challenges, work on projects, and potentially pursue further studies or careers in fields related to Python programming.

The program fully aims to enhance their employability and open up opportunities in the tech industry. Some glimpse of the program is included in the form of snaps below.



























Report Compiled by: Hardik Suthar and Manasvi Mehta Edited by Prof. Sarosh K. Dastoor