

# **CMR ENGINEERING COLLEGE**

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#### **Department of Computer Science & Engineering**

**One day Workshop Report** 

On

"IOT Using Python"

Title of Event	: IOT Using Python
Date of Event	: 08/11/2019
No. of Participants	: 62
Venue	: B-207, LP Lab, Block -

Coordinators : Mr. K. Vijaya Babu, Assistant Professor Ms. N. Tejasree, Assistant Professor Ms. N. Navaneetha, Assistant Professor Mr. A. Anil Kumar Reddy, Assistant Professor of CSE Dept.

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Aim & Objective:

This FDP covers technologies required to build classic (traditional), IOT enabled virtualized data center environments using Python. These technologies include compute, networking and building the various application virtualizations using IOT with and python. Additional areas of focus include, Introduction to Raspberry PI, Cloud for IOT, web Server for IOT and security management related concepts.

#### Description

The Department of Computer Science and Engineering has conducted one day workshop on IOT Using Python on 11<sup>th</sup> November 2019 to meet out curriculum gap between Industry and Academics. This Program was conducted by the Synxa IT Pvt Ltd, in CMREC for one day. The total number of students participated was 64. The trainer, Mr. SATYA KUMAR PALLI, Senior Software Engineer, M.Tech in VLSI from NIT Calicut with 8+ years of experience in training field of IT Industry.

The programme is divided into 2 sessions including inaugural session. In the inaugural session HOD CSE Dr. Sheo Kumar, have shared the dais along with the resource person

followed by K.S. Reddy managing Director SYNXA IT Pvt Ltd. The inaugural session has started with handover the bouquet to the resource persons. The Mr. SATYA KUMAR PALLI, Senior Software Engineer addressed the gathering. The inauguration ceremony has concluded with the vote of thanks by Dr. Sheo Kumar HOD CSE.

In the workshop, Mr. SATYA KUMAR PALLI has addressed about the workshop, advantage and usefulness of the workshop of IOT using Python to the students.

#### **Topics Discussed**

- Inaugural Function
- > Introduction to Internet of Things –Definition and Characteristics of IoT
- Physical Design of IoT IoT Protocols, IoT communication models, IoT Communication APIs
- IoT enabled Technologies Wireless Sensor Networks, Cloud Computing, and Big data analytics Communication protocols, Embedded Systems, IoT Levels and Templates
- Domain Specific IoTs Home, City, Environment, Energy, Retail, Logistics, Agriculture, Industry, health and Lifestyle.
- Introduction to Python:
- Language features of Python
- Data types
- Data structures
- Loop control statements
- > Functions
- > Modules
- > Python packages JSON, XML, HTTP Lib, URL Lib, SMTP Lib.
- ► Example programs with Raspberry PI

Students participated for the workshop enriched with the knowledge on IOT using Python by installation, various IOT related web server, cloud based storage, RESTful web API, Python program with Raspberry PI with focus of interfacing external gadgets, controlling output, reading input from pins also explained about Python packages - JSON, XML, HTTP Lib, URL Lib, SMTP Lib with detailed practice sessions and motivated to apply the knowledge in their research work and their projects.

At the end of the workshop most of the students are satisfied with above discussed topics and feedback says that it will be quite helpful for them for future perspective.

Valedictory function followed by certificate distribution to all the participants by CSE HOD, and trainer. The workshop has ended with Felicitation and presenting memento to the resource person.

## **List of Participants:**

ONE DAY WORKSHOP ON IOT USING PYTHON List of Participants			
Sl No	H T No.	Name of the Student	
1	168R1A0510	Bayaram Divya	
2	168R1A0513	BOLLI BHAVYA SRI	
3	168R1A0514	DHATRIKA KEERTHI	
4	168R1A0517	GOLKONDA ALEKHYA REDDY	
5	168R1A0518	GATTU RAJA RAJESHWARI	
6	168R1A0520	GUNJI ANUSHA	
7	168R1A0521	Gurrapu Chandra Shekhar	
8	168R1A0533	MADHURI SUPRIYA	
9	168R1A0536	MITTAPALLY AKHILA	
10	168R1A0538	Myadam Supriya	
11	168R1A0543	ANJAN REDDY PAKALA	
12	168R1A0548	R NAVYA	
13	168R1A0555	SAGIRAJU MADHURI	
14	168R1A0561	A.TEJASWI	
15	168R1A0562	Bandari Akhil	
16	168R1A0563	Allani Sai Prasanna	
17	168R1A0567	BHANOOR NISHITHA REDDY	
18	168R1A0570	CHARUPALLI ARAVINDHKUMARREDDY	
19	168R1A0574	GANGAPURAM BHARGAVI	
20	168R1A0575	G.Aasmitha Goud	
21	168R1A0578	Jadam Pavithra	
22	168R1A0581	Kurva pavan	
23	168R1A0586	KATRAGADDA ANUHYA	
24	168R1A0588	K SATHWIKA REDDY	
25	168R1A0591	Mohammed Asad Aminuddin	
26	168R1A0592	MOHAMMED MUNEER	
27	168R1A0596	NOMULA DIVYA	

28	168R1A05A1	POODARI SRI TEJA
29	168R1A05A2	PENDAM YAMINI SHANKER
30	168R1A05A3	PAGADALA HRUTHIKA REDDY
31	168R1A05A8	Pullakhandam swetha
32	168R1A05B4	SURAM PRASANTH REDDY
33	168R1A05C0	VANKUDOTHU GANESH
34	168R1A05C7	Beemari Shravan
35	168R1A05D4	G. Om sri ramiya
36	168R1A05D7	GONE PRAVALIKA
37	168R1A05E1	KOMAKULA SAI SOMITH
38	168R1A05E6	M VISHWESH
39	168R1A05F5	Muda Mounashree
40	168R1A05F6	NETHI DIVYA
41	168R1A05F9	NANDI YASHWANTH SINDHU
42	168R1A05G5	PUSA SUNIL KUMAR
43	168R1A05G6	PUSALA SUBRAMANYA SUMANTH
44	168R1A05G7	RAVURI CHANDANA
45	168R1A05G9	SAINI PRIYANKA
46	168R1A05H3	Sheetal Patangay
47	168R1A05H4	Sudula Manasa
48	168R1A05I2	ABBAGOUNI SOUJANYA
49	168R1A05I9	BAINDLA INDRAJA
50	168R1A05J0	BANDARI POOJA
51	168R1A05K3	GANDLA VISHWATEJA
52	168R1A05K6	G.Santosh Mrunal Rao
53	168R1A05k9	J.A.VANEESHA
54	168R1A05M2	MOTHKURI DEEPIKA
55	168R1A05N7	V UMAMAHESWARI
56	178R5A0512	Chandra Mouli M V
57	178R5A0515	BAITHI PRASHANTH
58	178R5A0516	V MRUDULA
59	178R5A0517	B MURALI
60	178R5A0519	BOOTLA SAIRAJ
61	178R5A0528	JANGAM SANDEEP
62	158R1A0550	Chettukindhi Adithya Vinay

### Sample Photographs



5 Day FDP on "IOT using Python "Inauguration photos





#### During session



HOD Sir Interacting with Participants after completion of workshop



Valedictory to the Trainer



Certificate Distribution by Resource person