**CENTRE FOR INTERNET OF THINGS**
## Event Report

## *Virtual Lab Workshop*

### Event Summary:

**Date of Event:** 22/03/2024
**Time of Event:** 02:00 PM to 06:00 PM
**Location:** Centre for IoT Lab
**Organizer(s):** Centre for Internet of Things
**Target Audience:** B.Tech. students of Internet of Things and Internet of Things (IOT)
**Total Participants:** 48

### Major Objectives of the Event:

➢ To promote the use of Virtual Labs among students, faculty, and other stakeholders.
➢ To create awareness about the Virtual Lab platform, its significance in enhancing learning experiences, and its alignment with practical IoT applications.

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### 1. Introduction

The Centre for Internet of Things (IoT) organized an induction program on **22/03/2024** to promote the use of Virtual Labs among students, faculty, and other stakeholders. The primary objective of this program was to create awareness about the Virtual Lab platform, its significance in enhancing learning experiences, and its alignment with practical IoT applications. This initiative aims to encourage the adoption of online labs, especially in the context of remote learning and the increasing integration of virtual environments in technical education.

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### 2. Objectives of the Program

The specific objectives of the induction program were as follows:

- To introduce Virtual Labs as an innovative learning tool for IoT experiments.

- To demonstrate the features and functionalities of the Virtual Lab platform.

- To highlight the benefits of virtual labs, including hands-on experience, accessibility, and the ability to conduct experiments remotely.

- To encourage students and faculty members to actively participate in virtual lab activities for enhanced practical exposure.

- To provide a platform for interactive discussions on integrating virtual labs into the curriculum.

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### 3. Program Outline

The induction program was structured into the following key sessions:

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**MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR (M.P.), INDIA**
**Deemed University**
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**3.1 Opening Address**

- The program began with a welcome address by **Dr. Murli Manohar**, **Dr. Aditya Dubey** who outlined the purpose and importance of the event. The speakers emphasized the growing need for virtual learning tools, especially in the rapidly evolving field of IoT.

**3.2 Introduction to Virtual Labs**

- A detailed presentation was made by the experts, introducing the concept of Virtual Labs. The session covered:

  - What Virtual Labs are and how they work.

  - The role of Virtual Labs in IoT education and experimentation.

  - The advantages of Virtual Labs in terms of accessibility, cost-effectiveness, and the opportunity for hands-on learning without the constraints of physical hardware.

**3.3 Demonstration of Virtual Lab Features**

- A live demonstration was conducted to showcase the functionalities of the Virtual Lab platform. This included:

  - Logging into the Virtual Lab portal.

  - Navigating through different IoT-based experiments and simulations.

  - Performing basic tasks such as initiating experiments, recording results, and analyzing data.

  - Q&A session for troubleshooting and clarifications.

**3.4 Interactive Discussion**

- An open discussion session was held to address any questions or concerns from the participants. Faculty and students shared their thoughts on how Virtual Labs could be integrated into the curriculum, and their suggestions for improving the platform were noted.

**3.5 Closing Remarks**

- The program concluded with closing remarks from Dr. Aditya Dubey, who thanked all participants for their active engagement and expressed hope for the future use and expansion of Virtual Labs in IoT-related courses.

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**4. Outcomes and Feedback**

The induction program was well-received, with active participation from students and faculty members. Key takeaways from the session included:

- **Awareness:** Participants gained a clear understanding of the concept and purpose of Virtual Labs.

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## MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR (M.P.), INDIA
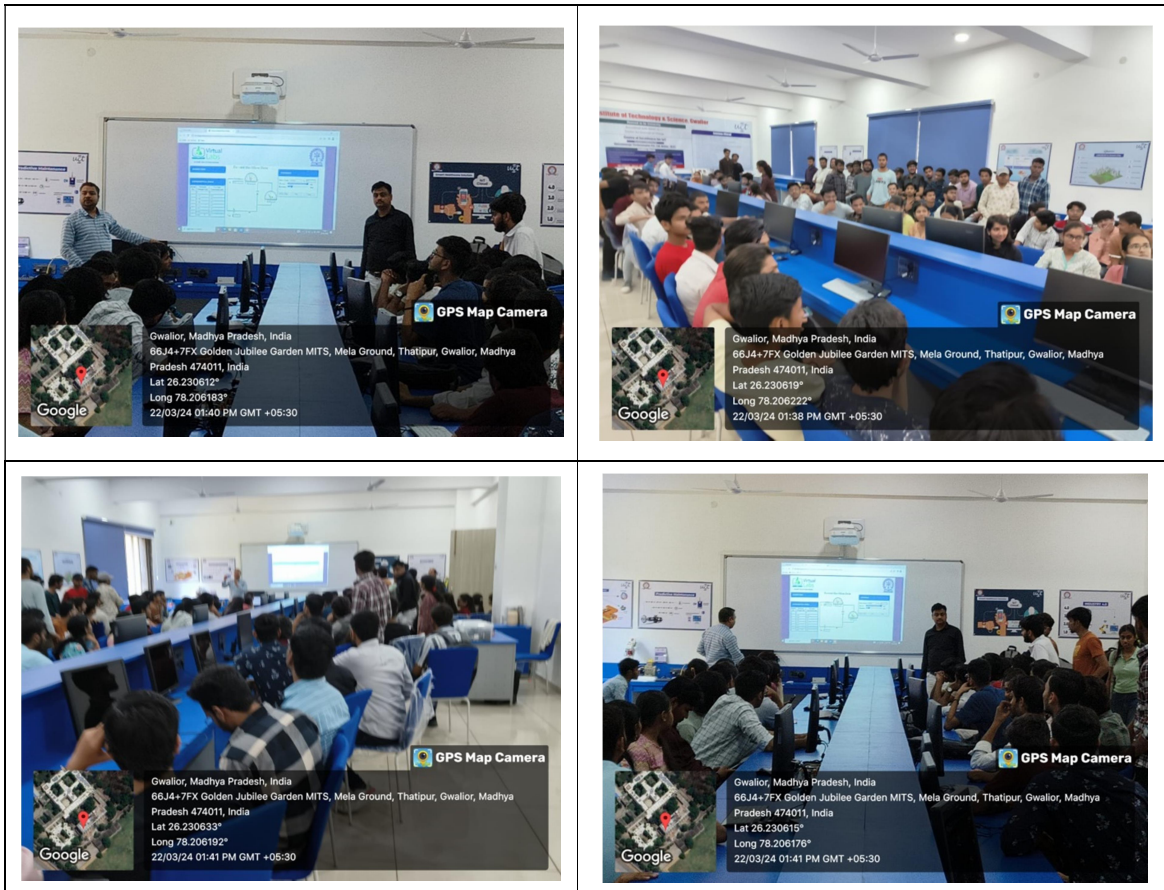### Deemed University
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- **Engagement:** The live demonstration helped students and faculty get acquainted with the Virtual Lab environment, fostering a deeper interest in exploring its capabilities.

- **Feedback:** The interactive discussion highlighted areas where improvements could be made, such as adding more IoT-related experiments and providing detailed tutorials for new users.

**Event Photographs:**



**Participant Feedback:**

A survey conducted at the end of the session revealed that:

- 90% of participants found the program useful in enhancing their understanding of Virtual Labs.
- 85% of respondents expressed interest in incorporating Virtual Labs into their academic work.
- Suggestions for improvement included expanding the range of available experiments and enhancing the user interface.

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**Attendance sheet:**



Madhav Institute of Technology & Science Gwalior
Deemed to be University, NAAC accredited with A++ Grade
Centre for Internet of Things
VIRTUAL LAB WORKSHOP    22|03|2024.

| S.N | Enrollment | Name | Sign |
|---|---|---|---|
| 1 | 0901E0231011 | Uttkarsh Singhal | |
| 2 | 0901J0231003 | Abhishek Singh Nawadariya | |
| 3 | 0901E0231052 | RAHUL RATHORE | Rahul |
| 4 | 0901E0231035 | Mohit Tiwari | |
| 5 | 0901E0231068 | Sumit Singh Baghel | Sumit |
| 6 | 0901E0231070 | Tarun Adhwaryu | |
| 7 | 0901E0231073 | Vedaant Lohri | |
| 8 | 0901E0231049 | Priyanshu Bandariya | |
| 9 | 0901E0231051 | Radhika Babsa | |
| 10 | 0901E0231648 | Paisha Khare | |
| 11 | 0901E0231060 | Sameeksha Dhakad | |
| 12 | 0901E0231054 | Rishabh Rangawat | |
| 13 | 0901E0231074 | VEDANT JAIN | |
| 14 | 0901E0231064 | Shubhank Tripathi | |
| 15 | 0901E0231015 | Chinmay Upadhaya | |
| 16 | 0901E0231014 | Ayush Rajput | Ayush |
| 17 | 0901E0231045 | Sneh Namavaria | Sneha |
| 18 | 0901E0231010 | Arpit Paliwar | Arpit |
| 19 | 0901E0231012 | Aryan Chowrey | |
| 20 | 0901J0231035 | Narayan Dwivedi | |
| 21 | 0901J0231030 | Lavanya Tiwari | Lavanya |
| 22 | 0901E0231028 | Kishan Shrivastava | Kishan |
| 23 | 0901E0231006 | Akshjeet Singh Solanki | |
| 24 | 0901E0231024 | Harshit Kadam | |

| 25 | 0901E0231025 | Jalaj Sharma | Jalaj |
| 26 | 0901E0231038 | Nitin Sharma | Nitin |
| 27 | 0901E0231040 | Ambaj Asna | |
| 28 | 0901E0231055 | Rishabh Singh Rajawat | |
| 29 | 0901E0231018 | Dilkash Khan | |
| 30 | 0901E0231052 | Mahak Bhadauria | |
| 31 | 0901E0231037 | Nishika Agrawal | |
| 32 | 0901E0231063 | Shrashti Agarwal | |
| 33 | 0901E0231041 | Parul Sharma | Parul |
| 34 | 0901E0231031 | Lubhanshu Kawadkar | |
| 35 | 0901E0231078 | Yug Shrivastav | Yug |
| 36 | 0901E0231075 | Vikas Jhade | Vikas |
| 37 | 0901J0231012 | Ayush Rajput | |
| 38 | 0901J0231077 | Yaseen Ahmad | |
| 39 | 0901J0231078 | Yashraj Singh | Yashraj |
| 40 | 0901J0231022 | Harshit Gupta | |
| 41 | 0901E0231033 | Manjeet Gupta | Man |
| 42 | 0901J0231041 | Pragya Singh | Pragya |
| 43 | 0901J0231045 | Preeti Gautam | Preeti |
| 44 | 0901J0231089 | Khushi Mishra | Khushi |
| 45 | 0901J0231013 | Dev Dutt Shukla | Dev |
| 46 | 0901E0231057 | Rishi Sharma | Rishi |
| 47 | 0901E0231014 | Ayush Rajput | Ayush |
| 48 | 0901E0231075 | Vinayak Mishra | |

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## 5. Conclusion

The purpose of organizing the program was successful in achieving its objectives of promoting Virtual Labs in the Centre for IoT. Given the positive feedback and interest shown by participants, it is recommended that the use of Virtual Labs be further integrated into the curriculum and practical sessions. Additionally, future programs should focus on advanced IoT experiments and hands-on training to maximize the potential of the platform.

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**Date:** 22/03/2024

**Prepared by:**

**Dr. Murli Manohar**
Assistant Professor
Centre for Internet of Things

**Dr. Aditya Dubey**
Assistant Professor
Centre for Internet of Things

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