## **Students' Workshop**

Topic: AI and Robotics Workshop (Session-1)

Date: 24/04/2024

Venue: MP Hall

Organised by: Autobot Robotics

Resource Person: Mr. Sarhan Siddiqui

**Introduction:** Autobot Robotics, a leading organization specializing in robotics education, collaborated with Bal Bharati Public School Neelbad, Bhopal, to conduct an enriching workshop on Artificial Intelligence (AI) and Robotics. The workshop aimed to introduce students from classes 6th to 12th to the exciting fields of AI and Robotics, fostering curiosity, innovation, and hands-on learning.

## Workshop Agenda:

- 1. **Introduction to AI and Robotics:** The workshop commenced with an engaging introduction to Artificial Intelligence and Robotics, providing students with an overview of the principles, applications, and significance of these technologies in today's world.
- 2. **Exploration of AI Concepts:** Students delved into the fundamentals of Artificial Intelligence, learning about machine learning algorithms, neural networks, and the role of AI in various industries such as healthcare, finance, and transportation.
- 3. **Hands-on Robotics Activities:** Through interactive sessions facilitated by Autobot Robotics instructors, students participated in hands-on activities to build and program robotic systems. They learned about sensors, actuators, and programming languages used in robotics.
- 4. **AI and Robotics Demonstrations:** The workshop featured live demonstrations showcasing the capabilities of AI and Robotics. Students witnessed robots performing tasks such as object recognition, navigation, and collaborative interaction, gaining insights into the practical applications of these technologies.
- 5. **Ethical and Social Implications:** Discussions were held on the ethical and social implications of AI and Robotics, addressing topics such as privacy, job displacement, and the responsible use of autonomous systems. Students were encouraged to think critically about the impact of technology on society.

## **Key Takeaways:**

- Enhanced understanding of AI and Robotics concepts.
- Hands-on experience in building and programming robotic systems.
- Exposure to real-world applications of AI and Robotics.

• Awareness of ethical considerations in the development and deployment of autonomous technologies.

Feedback and Reflections: Feedback from both students and faculty members was overwhelmingly positive. Participants appreciated the interactive nature of the workshop, the expertise of the instructors from Autobot Robotics, and the opportunity to explore cutting-edge technologies in a supportive learning environment. Many students expressed a keen interest in pursuing further studies and careers in STEM fields, inspired by their experience at the workshop.

**Conclusion:** The AI and Robotics workshop organized by Autobot Robotics at Bal Bharati Public School Neelbad, Bhopal, provided students with a valuable opportunity to engage with emerging technologies and develop essential skills for the future. By fostering curiosity, handson learning, and critical thinking, the workshop aimed to empower students to become active contributors to the field of robotics and AI.

The Session-2 will be organized on based on the interests of the students.

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