The Bishop Co-Ed School, Undri

Join the Robolution

Robotics Training Session 2023-24

Batch Details

- Senior student batch was formed for students from **Class VI to Class X.**

- 23 Students participated in the "New Product Development Life Cycle".

Course Details

- Course was specially designed for the Senior students in the age group of 12yrs. to 15yrs. to provide them with understanding on "How to design a Product" using CAD designing, 3D Printing and Electronics

- Students were given training based on the Invention Program consisting of classical 7-steps invention process which included Ideation, Designing, Prototyping, Testing, Feedback, Communication and Marketing.

- The company, IndiaFIRST Robotics Innovation and Research LLP, which conducted this course, brought various equipment's like Micro-Controllers, Sensors, etc.

- IndiaFIRST Robotics also brought in 3D Printer several times to the class to teach Additive Manufacturing to the students. The students were taught 3d Designing using Tinker CAD which is used for mechanical designing of various parts.

Training Schedule

- 30 hrs were designated for the training and it was conducted in a classroom of B4 building.

- Training was conducted on every Saturday along with the school activities.

- The training schedule was 2 hrs. at 11:30am to 1:30pm

- IndiaFIRST Robotics also conducted extra trainings towards the end to help students catch up with the syllabus after the Winter Vacation.

Trainers

- IndiaFIRST Robotics sent adequate number of trainers to train as well guide the students properly and in a very professional manner.

- The trainers were well trained in handling young kids and technically quite knowledgeable.

Student Engagement

- Students were seen enjoying the Robotics and Artificial Intelligence Course. Absentees too were at a minimum which indicates the interest students had in the activity.

- Some students also came up with their own robotics activities as they were practicing robotics at home as well.

- IndiaFIRST Robotics Trainers encouraged the extra activities and also helped them with their projects.

Student Outcomes

- Students learnt 3D CAD designing, i.e. Computer Assisted Designing using Tinker CAD software of Autodesk Inc. USA.

- Designing of various parts like nuts and bolts, gears, wheels, machine parts were taught to the students and were also given home work for practice and designing more parts.

- Students learnt about using the 3D Printer and printing various parts for optimised quality while using the slicing software.

- Students also learnt designing of products, 3d printing the designed products and applying electronics to these products for operations.

- IndiaFIRST Robotics provided various 3D printed products along with the electronics for exhibiting at the Science Day exhibition and also deputed their trainers for two days to help the students.

Student Unique Project

- Our students came together to work on a specific application idea which would be helpful for the society and came up with a project for Visually Disabled Person's Guiding Stick.

- The idea behind the Project is that when a visually disabled person is walking with this stick and any obstacle comes ahead of him, the ultrasonic sensor will sense it and activate the vibration sensor which will vibrate, indicating about the obstacle to the blind person and he will stop.

STUDENTS ENJOYING NEW TECNOLOGY IN THE CLASSROOM
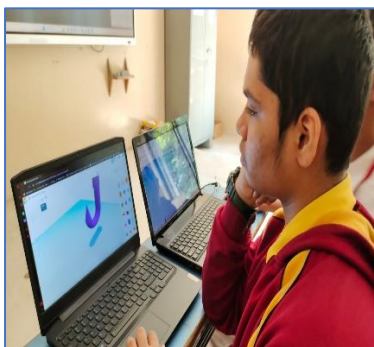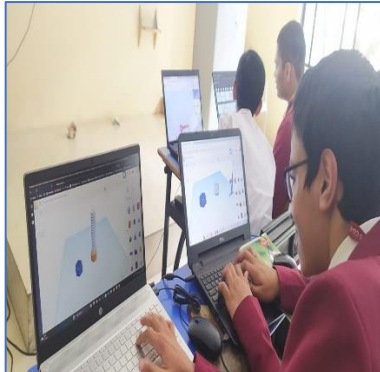
STUDENTS ENJOYING THE CREATIVE OUTPUT OF THEIR PROGRAMS
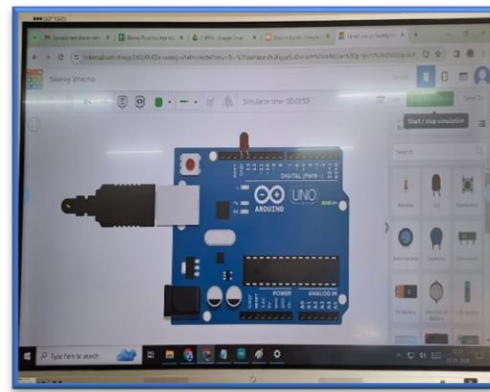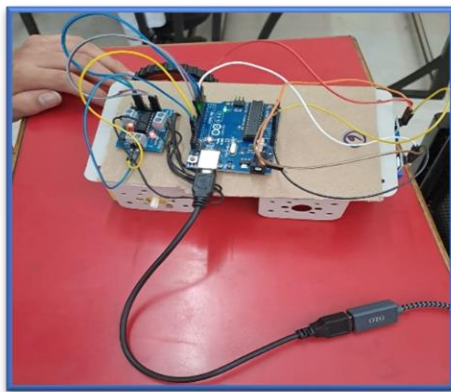
ROBOTICS BLIND STICK - ULTRA SONIC SENSOR DEVELOP BY OUR CHAMPS IN THE SESSION.

Report by-
Mrs Sharayu Philips