

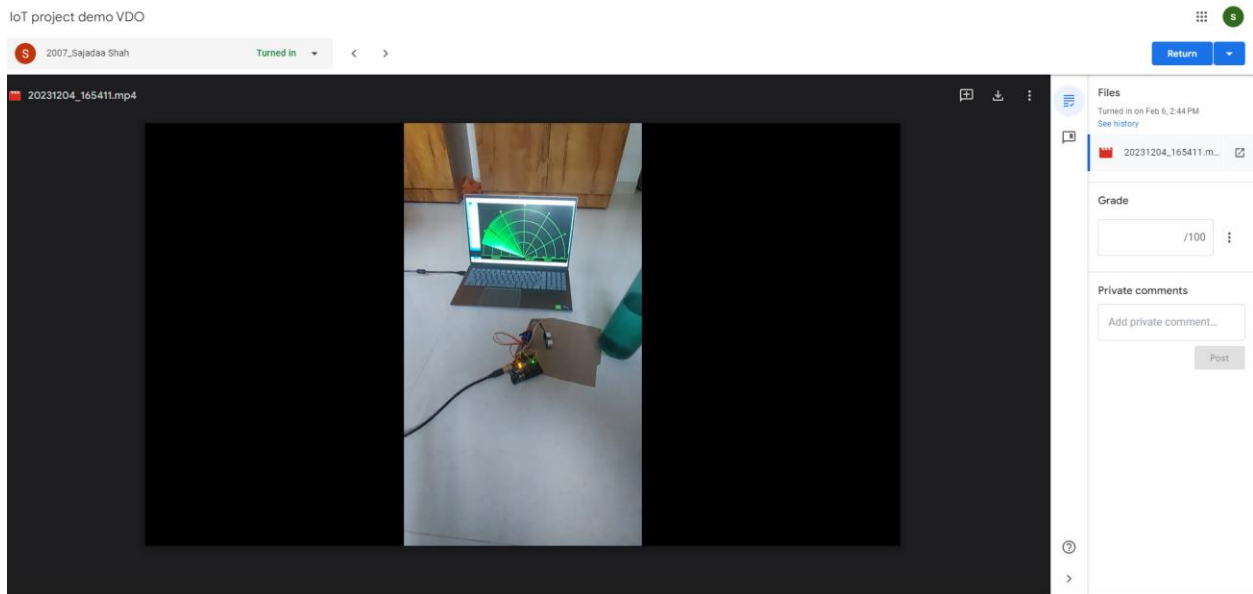
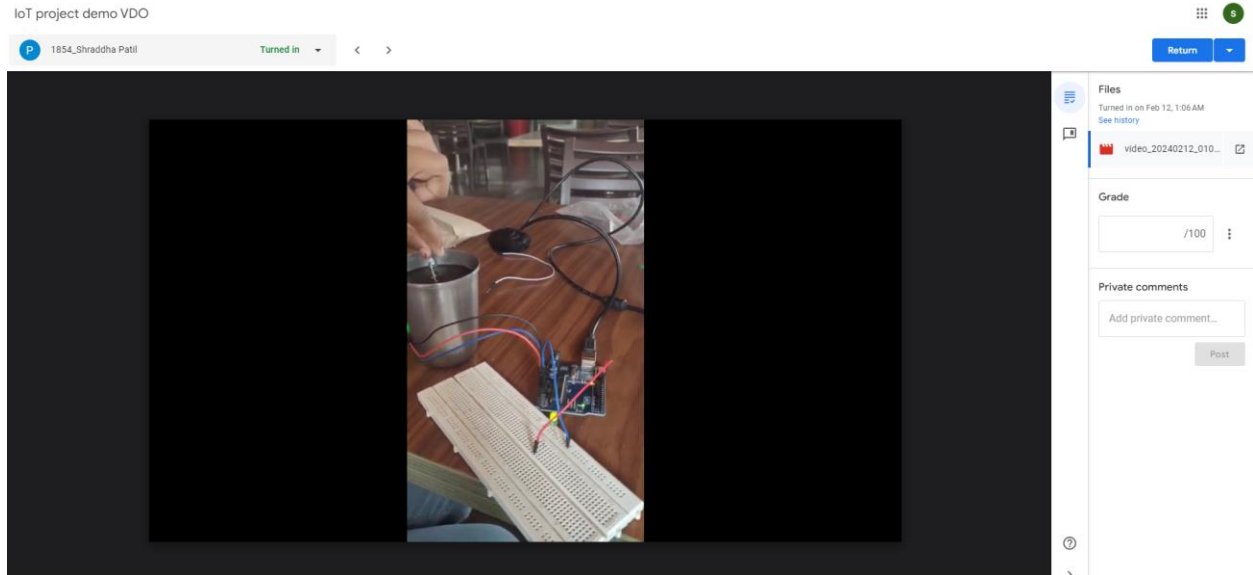
20 PEIT 502 B Internet of Things Project-Based Learning (PBL) for IoT

Description: involves students working in groups to apply theoretical concepts learned in class to real-world IoT solutions. In this pedagogy technique, students form small teams, brainstorm, and select a practical IoT project idea. Each team is tasked with designing, developing, and implementing an IoT system, such as smart home automation, environmental monitoring, or wearable devices. This hands-on approach fosters collaboration, critical thinking, and problem-solving, enabling students to understand the practical applications of IoT technologies and reinforcing their theoretical knowledge through experiential learning.

Students were asked to upload videos of their project demonstration in the Google classroom. Sample screenshots are shared below.

The image displays two screenshots of a Google Classroom interface. The top screenshot shows a video assignment titled "IoT project demo VDO" by student 1829_SAI INGOLE. The video player shows a scene with a white chair and a wooden structure. The right sidebar shows the assignment details, including the file name "20240206_132549.m...", a grade of "/100", and a private comment section.

The bottom screenshot shows another video assignment titled "IoT project demo VDO" by student 1811_SEJAL BHANDE. The video player shows a close-up of an IoT circuit board with various components. The right sidebar shows the assignment details, including the file name "VID_20231203_122900.m...", a grade of "/100", and a private comment section.



Objective: The objective of this activity is to enable students to apply IoT concepts in real-world projects, enhancing their technical and problem-solving skills. It fosters teamwork, innovation, and the practical integration of theory into hands-on IoT system development.

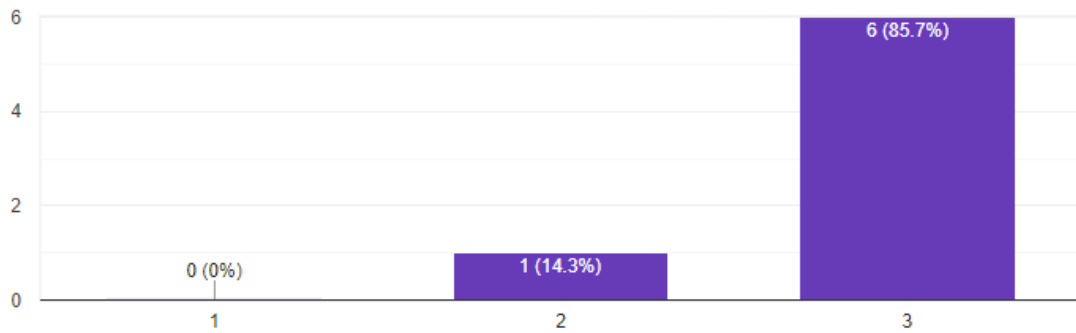
Impact: Students liked this new way of learning. The feedback was taken. It highlights a positive impact on students' learning experience. Students gained exposure to emerging IoT technologies and developed research skills through literature surveys, enhancing their understanding of the subject. The hands-on nature of the project provided practical knowledge of integrating sensors, hardware, and coding, giving them valuable technical expertise. Additionally, the scalability and future scope of their projects offered unique portfolio additions, boosting their resumes and preparing them for future industry roles. This approach fostered a deeper connection between theoretical concepts and real-world applications.

Feedback from students:

How would you rate your learning experience?

 Copy

7 responses



Any comment

7 responses

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Gained lots of learning

It was great learning upcoming new technologies in IoT, we also did a literature survey, which helped in gaining more insights and overall how a survey has to be written.

No

NA

Project helped us to get the hands-on knowledge of IoT

Unique addition to resume, interesting project integrating sensors, hardware and code with good scalability