



RAMCO INSTITUTE OF TECHNOLOGY

Approved by AICTE, New Delhi & Affiliated to Anna University
Accredited by NAAC & An ISO 9001: 2015 Certified Institution
NBA Accredited UG Programs: CSE, EEE, ECE and MECH

Department of Artificial Intelligence and Data Science

Academic Year: 2023- 2024 (Odd Semester)

Degree, Semester & Branch : B.Tech, V & AI & DS
Course Code & Title : CS3551& Distributed Computing
Name of the Faculty member : Mrs. C.Usharani, AP/AD

Innovative Practice Description-Flipped Class Room

Unit / Topic: III - DISTRIBUTED MUTEX AND DEADLOCK / Deadlock Detection

Course Outcome: CO3

Topic Learning Outcome: TLO 7

Date & Time: 11.10.2023 & 03.10 pm to 3.40 pm.

Activity Chosen: Flipped Classroom

Justification:

Flipping the classroom is an inverting the classroom approach to teaching. In this approach, the traditional in-class teaching is “flipped” to better meet the needs of individual learners. Students gain control of the learning process through studying course material outside of class, using readings, pre-recorded video lectures. It helps the faculty/lecturer to redefine in-class activities and include homework problems and keep the students engaged in the content.

Time Allotted for the Activity: 30 Minutes

Objectives:

- To encourage students to take responsibility for their learning by preparing in advance.
- To create a more engaging and interactive learning environment during class time.
- To promote deeper understanding and critical thinking through discussions and hands-on activities.

Details of the Implementation:

Plan: Basics of Deadlock are already learnt in the subject operating systems and few topics related to deadlocks are given as self-learning through self-exploration.

Identify and Share: Related materials/notes of deadlock handling strategies and deadlock detection algorithms are shared via email and Canvas.

Class Activities: During the class session, I have asked a few students to prepare the PPT related to the content shared and make the students to present in class.

Images / Screenshot of the practice:



Reflective Report:

- Preparing and Sharing Content: The related topics were covered through reading materials and video lectures that were produced. Well in advance of the related class sessions, these materials were distributed to the students via the appropriate platforms.
- Class Sessions: During the class sessions, students were divided into groups to discuss and apply the concepts covered in the pre-recorded lectures. Facilitators were present to guide and support the students' learning process.
- Assessment: Assessments were given in class to see how well pupils understood the material and to get feedback on time.
- Feedback Collection: Students were asked to provide feedback on the flipped classroom experience; highlighting the aspects they found beneficial and suggesting potential improvements.

Observations:

It was effective to increase student engagement, foster deeper comprehension, and create a more dynamic learning environment by using the flipped classroom activity. Students were encouraged to take charge of their education and actively engage in class activities by employing this method.

Students Response:

- Intelligent students actively contributed to the preparation of concept notes and topic-specific questions.
- Slow learners expect to assist the topic towards searching online and also understanding the questions
- Most of the students were enjoyed the session.

References:

- ❖ <https://bokcenter.harvard.edu/flipped- classrooms/>
- ❖ https://en.wikipedia.org/wiki/Flipped_classroom
- ❖ <https://omerad.msu.edu/teaching/teaching-skills-strategies/27-teaching/162-what-why-and-how-to- implement-a-flipped-classroom-model>



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Department of Artificial Intelligence and Data Science
Academic Year 2022 – 2023 (Even Semester)

FEEDBACK Active Learning Best practices: Flipped Classroom

Degree, Semester & Branch : B.Tech, V & AI / DS

Course Code & Title : CS3551 & Distributed System

Name of the Faculty member : Mrs.C.Usharani, AP/AD

Theme of discussion : Deadlock Detection

Date and Time : 11.10.2023 & 03.10 pm to 3.40 pm.

Feedback collected in class and also through online

FEEDBACK QUESTIONS

1. Does the activity encourage cooperative learning among yourself?
Yes / No
2. Do you have a clear understanding about the Deadlock detection algorithm concepts?
Excellent /Very Good /Good /Satisfactory
3. Did the active learning method encourage active participation and communication?
Yes / No
4. Did the active learning method prompt you to think more deeply or critically about the topic?
Yes / No

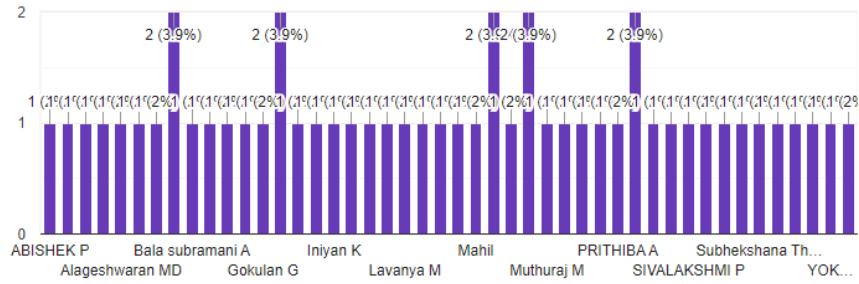
Googleform Link: <https://forms.gle/2t1eTm81xNQLsaFZ8>

Feedback Analysis:

Name of the student:

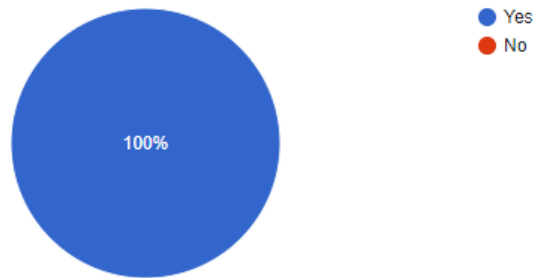
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51 responses



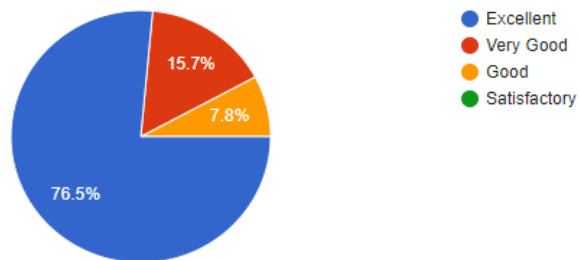
1. Does the activity encourage cooperative learning among yourself?

51 responses



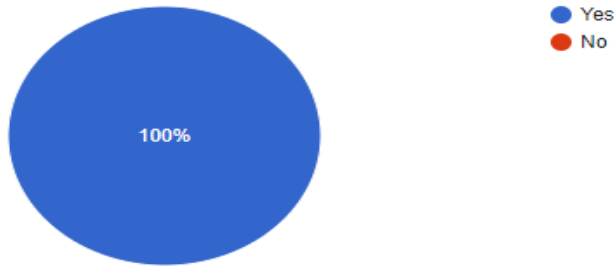
2. Do you have a clear understanding about the Deadlock detection algorithm concepts?

51 responses



3. Did the active learning method encourage active participation and communication?

51 responses



4. Did the active learning method prompt you to think more deeply or critically about the topic?

51 responses

