



**Excelssior Education Society's**  
**K. C. College of Engineering and Management Studies and Research**  
**(Affiliated to University of Mumbai)**  
**Mith Bunder Road, Near Hume Pipe, Kopri, Thane (E)-400603**

Department of Computer Engineering							
Academic Year (2022-23)							
Innovative Teaching Learning Activity Details							
SR. No.	Name of Activity	Coordinator	Type Of Activity			Date	Duration
			Curricular	Co-Corricular	Extra Curricular		
1	Online wheeldecide.com Quiz	Nilima Patil	Curricular(DLC OA)			2022-23 odd sem	1 Hour
2	Quiz Assignment from available SWAYAM course	Neha Kale	Curricular(AOA)			2022-23 Even sem	2 weeks
3	Crossword Puzzle	Dr. Mahesh Maurya	Curricular (Natural Language Processing)	-	-	22-23 odd sem	1 Hour
4	Crossword puzzle	Kishor Salvi	Curricular(MP)			2022-23 Even sem	1 Hour
5	Sliding Window Protocol Class	Shraddha Shrivastav	Curricular(CN)			22-23 odd sem	1 Hour



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Department of Computer Engineering  
A.Y. 2022-23 (ODD SEM)

Name of Faculty: Mrs. Nilima Patil

Subject : DLCOA

Class: SE A and B SEM III

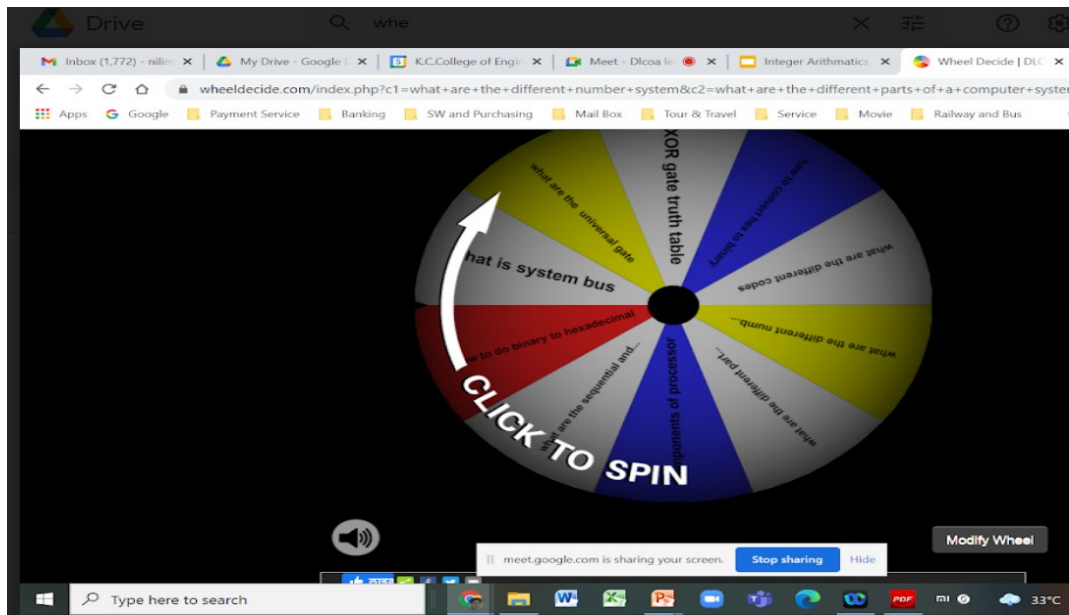
Methodology Followed: Google meet, Google classroom

**Difficulty faced:** Students do not get the exact understanding of the topic through regular online or offline classroom teaching and sometimes they get bored. So to make it interesting through some topic quiz

**New Method Identified:** Online wheeldecide.com Quiz

**Activity Report:**

**Wheel decide** is a free online spinner tool that allows you to create your own digital quiz. It is an amazing tool to make random choices. Use our Wheel Decide wheel and make random picks from your choices.



**Outcome:** This activity helped to understand the concept better through quiz activity



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**Department of Computer Engineering  
A.Y. 2022-23 (EVEN SEM)**

**Name of Faculty: Mrs. Neha Kale**

**Subject: AOA**

**Class: SE A and B SEM IV**

**Methodology Followed: NPTEL SWAYAM websites , Google classroom**

**Difficulty faced:** Sometimes students face difficulty in understanding topics of tough subjects and it becomes a challenge for them to get exact understanding of the topic through regular online or blackboard & chalk method of teaching. So for better understanding and to make the topics more graspable Swayam lectures were used and assignment was taken from that course.

**New Method Identified:** Quiz Assignment from available SWAYAM course

**Activity Report:**

SWAYAM courses are available for almost all subjects and the quality of its content is non-questionable. The videos available are 90% matching to the Mumbai University Syllabus and use better learning and teaching method of applying , analyzing, examples from real world etc. The questionnaire formed after each module deeply assesses the knowledge gain of the student. Hence the assignment was the quiz assignments of each module matching with the academic syllabus.



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A8\_AOA Coursea quizzes.pdf x +

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1 of 5

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**SRUSHTI BHOSALE**

SE DIVA ROLL NO: 8

**Week 1:**

**Analysis of Algorithms**  
Latest Submission Grade 100%

1. What is the order of growth of the solution to the Diophantine equation  $F_1^2 + F_2^2 + \dots + F_n^2 = F_{n+1}^2$  with  $F_n = 0$ ?

2. Which of the following is a suitable analyzing algorithm by proving O upper bound on the worst case?

**Week 2:**

**Recurrences**  
Latest Submission Grade 50%

1. Which of the following is true of the number of comparisons used by MergeSort?

2. Suppose that  $T_n = 2T_{n/2} + n$ ,  $T_1 = 2$  with  $n, n/2, n/4, \dots, 1$ . What is the value of  $T_8$ ?

Activate Windows  
Go to Settings to activate Windows.

Type here to search

31°C Haze 10:42 AM 5/11/2022



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The screenshot shows a PDF document titled "A8\_AOA Course quizzes.pdf" open in a viewer. The document is for a student named SRUSHTI BHOSALE, SE DIV A, ROLL NO: 8. It contains two sections: "Week 1: Analysis of Algorithms" and "Week 2: Recurrences".

**Week 1: Analysis of Algorithms**  
Latest Submission Grade: 100%

- What is the order of growth of the solution to the Diophantine recurrence  $T_n = 9T_{n-1} + \sum_{i=0}^{n-1} T_i + 1$  with  $T_0 = 1$ ?  
Correct
- Which of the following is a drawback to analyzing algorithms by proving O upper bounds on the worst case?  
Correct

**Week 2: Recurrences**  
Latest Submission Grade: 50%

- Which of the following is not of the number of comparisons used by MergeSort?  
Correct
- Suppose that  $a_n = 10n - 20n_{n-1} + 9n_{n-2}$  for  $n \geq 2$  with  $a_0 = 1$  and  $a_1 = 0$ . What is the value of  $a_{10}$ ?  
Incorrect

Windows taskbar at the bottom shows the date as 5/11/2022 and time as 10:42 AM. A watermark "Activate Windows" is visible on the right side of the PDF content.

**Students enrolled: 77**

**Outcome:** This activity helped the students to gain better understanding of syllabus topics and also made them easier to retain.



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**Department of Computer Engineering**  
**2022-23(ODD Sem)**

**Name of Faculty:** Dr. Mahesh Maurya

**Sub:** Natural Language Processing

**Class:** B.E.Computer Engineering SEM:VII

**Methodology followed:** Powerpoint Presentation, Google meet, Google classroom

**Difficulty faced:** Students find difficulty in skills like reasoning, problem-solving and developing solutions.

**New method identified:** Crossword puzzle

**Activity report:** Crossword puzzles are given to students based on WordNet. Students had a Formed group of 3 to 4 students

R	E	A	M		F	E	L	L	S		B	R	A							
A	N	V	I	L		L	A	S	S	O		R	A	M						
J	O	E	S	A	T		T				U	R	D	A	Y		Y	I	P	
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N	O	T	E	S			E	D	E	N		E	D		E	D				
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R	E	X			P	L	O	D				U	N	M	E	T				
D	O	R	I	S	E	V	E	N	I	N	G									
					E	R	A		A	L	L	O	T		B	A	N			
T	A	L	E	N	T					E	T	R	U	R	I	A				
E	L	I			D	O	N	N	A	A	U	T	U	M	N					
A	G	E			Q	U	I	P	S			E	A	T	E	N				
R	A	F			S	T	A	R	T			H	E	D	Y					

**Across**

5. Cuts down

19. Puppy's bark

23. Like a wallflower

27. Lesser used PC key

36. Campus e-mail letters?

38. Former U.N. head Kofi

56. Region of pre-Roman Italy

62. Act your

**Down**

4. Kind of soup at a Japanese restaurant

12. Concert blasters

29. 100 Years: Abbr

30. Just loafing

40. Official lang. of Guyana

50. "Et tu, \_\_\_?"

53. Shred

55. Talk up

60. Actress Peeples

Figure 1: Crossword puzzle example. A few clues from the puzzle have been provided on the right, they are filled horizontally (Across) or vertically (Down) in the crossword grid. The clue number tells the player where in the grid the answer needs to be filled in. Some of these clue and their answers have further been highlighted with different colors which belong to different clue categories as described in Section 3.2, color-coded in accordance with Figure 2. Highlight colors denote distinct clue categories: red for word meaning clues, purple for fill-in-the blank clue, orange for synonym/antonym, blue for factoid question type, grey for abbreviation and brown for historical. Source: New York Times daily crossword which appeared on the July 7, 2009. Copyright of The New York Times, 2009.



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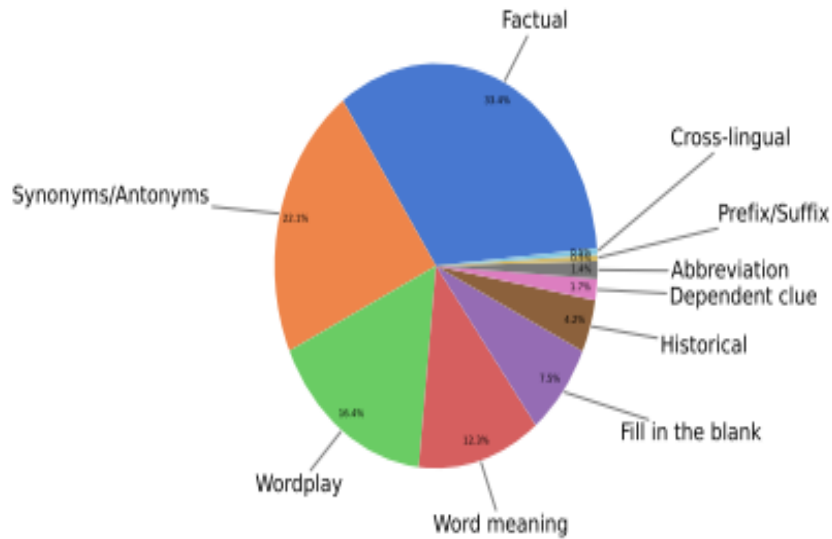


Figure 2: Class distribution of the 1000 manually annotated test examples.

**Outcome:** Students learned how to do collaborative study and problem solving



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**Department of Computer Engineering**  
**2022-23 (EVEN Sem)**

**Name of Faculty:**Kishor Salvi

**Sub:** Microprocessor

**Class:** S.E.Computer Engineering SEM:IV

**Methodology followed:** Powerpoint Presentation, Google meet, Google classroom

**Difficulty faced:** Students find difficulty in skills like reasoning, problem-solving and developing solutions.

**New method identified:** Crossword puzzle

**Activity report:** Crossword puzzle is given to students based on Introduction to Microprocessor. Students had a Formed group of 3 to 4 students. submitted their answers in Google meet and Google Classroom.





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crossword- Question.png

Name: \_\_\_\_\_

Complete the crossword puzzle below

Created using the Crossword Maker on TheTeachersCorner.net

**Across**

2. Used for temporary Storage of data
4. second generation computers used this
5. Performs operations like +, -, /, \*
6. To store data
8. To convert High level language to low level

**Down**

1. It is a brain of microcomputer
3. This unit gives input data to microprocessor.
7. Third generation computers used this

logo.jpg

Show all

MP SEM IV lab manual

me

Oct 16, 2021

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5/12/2022



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crossword- Answer.png

Complete the crossword puzzle below

Name: \_\_\_\_\_

2. Used for temporary Storage of data **register**

4. second generation computers used this (**transistor**)

5. Performs operations like +, -, /, \* (**alu**)

6. To store data (**memory**)

8. To convert High level language to low level (**decode**)

1. It is a brain of microcomputer (**microprocessor**)

3. This unit gives input data to microprocessor. (**input**)

7. Third generation computers used this (**ic**)

Created using the Crossword Maker on TheTeachersCorner.net

MP SEM IV lab manual

logo.jpg

Show all

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**Outcome:** Students learned how to do collaborative study and problem solving



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**Department of Computer Engineering**

**A.Y.2022-23 Odd Sem**

**Activity Report**

**Name of Faculty:** Prof.Shraddha Shrivastav

**Sub:** Computer Network

**Class:** T.E. Computer Engineering

**SEM:** V

**Methodology followed:** Class Room Teaching, Written Assignments, Remedial lectures

**Difficulty faced:** Students do not get the exact understanding of the topic through regular classroom teachings and basic written subject assignments.

**New method identified:** Sliding Window Protocol Class

**Requirements:**

Empty Sweet box used as networking packet – 40

Drawing Sheet - 1

Empty silver packing box used as ACK and NAK Packet – 12

In order to explain Go-Back N and Selective Repeat ARQ Protocols networking model was created using above mentioned requirements.

As these two protocols are bit complicated for students to understand, networking model makes understanding easier.



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**Model created to explain the concepts**

Various scenarios of protocols like success case, packet loss, acknowledgement loss, timer timeout, sliding window, receiver window was demonstrated using the model.



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Sliding window model and its explanation

**Outcome:** This activity helped to understand the concept better than regular assignments.