

Academic Year 2024-25 (Odd Sem)

Innovation activities by the faculty members in teaching-learning

Sr.	Name of	Course Name /	Innovative	Short Description of the activity	Link
No.	Faculty	Sem / Course Code	/ Creative activity used		
1	Dr. Megha Trivedi	Discrete Structure and Graph Theory/III/CSC3 02	Audio- Video assignment	Students were asked to solve a puzzle using mathematical logic and record a video of the solution using illustration/animation.	<u>https://l1nk</u> .dev/sjYfg
2	Dr. Dinesh Patil	Software Engineering	Collaborati ve Incremental Problem- Solving (CIPS) Method	Groups of the students were created and each group of the students was asked to select a particular task. The students were asked to solve the task in an incremental way.	https://aces se.one/m0 MfH
3	Dr. Vikrant Agaskar	ARVR/VII/CSD C7021	Brain storming	During the lecture session interested students were asked to take one real life case of the project. Every group then explored and applied every new concept learnt from each module to their selected case and elaborated.	https://aces se.one/PSx V5
4	Dr. Swapna Borde	ML/VII/BE/CSC 701	Online Poll	Online Poll allows participants to see live results as they respond to questions. This activity adds to interaction in classroom and helps identify machine learning problems, comment, discuss and debate over it. Besides this, it gives an opportunity to the students to have a voice and take on an active role in their learning.	https://aces se.one/IGC Fj



n e e 1
e c e 1
c e 1
e 1
1
z
s
1
t
1 https://l1nk.
n <u>dev/lV2Hv</u>
e
-
1
C
y -
1
n
r
σ
3
e t
e t 1



	Dr. Anil	BE/VII/CSDC70	Thought	Thought Experiment: Building a	
	Hingmire	13/NLP	Experiment	Language Model Without a	
				Dictionary. This thought experiment	
				explores the challenges and innovative	
				approaches in building a language	
				model without dictionaries or labeled	
				data. Students tackle developing a	
				model using only unstructured text,	
				prompting critical thinking on	
				unsupervised and self-supervised	
				learning, distributional semantics, and	
				the complexities of understanding	
				language without predefined word	
				meanings.	
6	Ms. Smita	DS/III/SE-	Peer-led	A unique peer-led learning session was	https://l1nk
	Jawale	1/CSC303	LeetCode	organized to improve students'	.dev/qGgR
			Problem-	understanding of data structures,	<u>C</u>
			Solving	algorithms, and competitive	
			Presentatio	programming. Students chose a topic	
			ns	from LeetCode, presented it to the	
				class, and shared their approach to	
				solving coding challenges.	
		ADBMS/V/TE-	Fastest	In this Fastest Finger First activity,	
		1/CSDLO5013	Finger First	students are divided into different	
				groups. The faculty assigns sets of	
				queries on MongoDB to the students in	
				classroom. Students have to raise	
				hands and give solutions.	
				The group that submits their answers	
				first is declared the winner.	



7	Mr. Sunil	CG/III/SE/CSC30	CrossWord	Crossword puzzles are engaging ICT	
	Katkar	5	Puzzle	tools for learning that promote active	https://aces
				participation and reinforce subject-	se.one/rwX
				specific vocabulary and concepts. In	<u>5k</u>
				an educational context, crosswords	
				encourage critical thinking, enhance	
				memory retention, and help students	
				learn in a fun, interactive way.	
8	Ms. Swati	DWM/V/TE-2	Mind Maps	The topic was explained to the students	https://l1nk
	Verma	and TE3/		first through the slides. Then they were	<u>.dev/L62f</u>
		CSC504		asked to sketch mind maps in groups	w
				using charts, colors, etc.	
9	Mrs. Sneha	ADBMS/V/TE-	Fastest	In this Fastest Finger First activity,	
	Mhatre	2/CSDLO5013	Finger First	students are divided into different	https://aces
				groups. The faculty assigns sets of	se.one/kTS
				queries on MongoDB to the students in	<u>Wx</u>
				classroom. Students have to raise	
				hands and give solutions.	
				The group that submits their answers	
				first is declared the winner.	
		BDA/VII/BE/CS	Collaborati	In this Activity, students asked to sit	
		C702	ve	equally in 4 rows in classroom.	
			Learning-	Assigned different types of NoSQL to	
			Debate	each row.	
				Course instructor allotted 45 minutes	
				time to the individual row to read the	
				topic from reference book or any other	
				material	
10	Ms. Neha	DLCOA/III/SE-1	Digital	Digital Flux is a real-time interactive	
	Surti	& SE-2/CSC304	Flux	polling which allows participants to	https://aces
				see live results as they respond to	se.one/nDt
				questions. It enables real-time	<u>bM</u>
				engagement with students offering	
				interactivity, ease of use, and	
				immediate feedback.	



11	Ms. Aarti	TCS /V/TE-	Educational	In this game each student receives a	https://l1nk
	Puthran	2/CSC501	Tambola:	Tambola ticket. The faculty begins the	.dev/fx0h0
			A Fun Way	game by randomly selecting and	
			to Learn	announcing a number (or	
				word/symbol/letter) from the pool. For	
				each announced number, the faculty	
				asks a question that is linked to it. The	
				question could be related to key	
				concepts, definitions, problem-	
				solving, or course-related scenarios.	
		DS/III/SE-	Peer-led	In order to enhance students'	
		2/CSC303	LeetCode	understanding of data structures,	
			Problem-	algorithms, and competitive	
			Solving	programming, a unique peer-led	
			Presentatio	learning session was organized.	
			ns	Students were encouraged to select a	
				topic from LeetCode, present it to the	
				class, and share their approach to	
				solving specific coding challenges.	
12	Ms. Brinal	OOPM/III/SE-	Collaborati	Before the activity began, students	https://l1nk
	Colaco	3/CSL304	ve	were instructed to issue a Java	.dev/zpbBr
			Learning	textbook from the library. The class	
			through	was then divided into groups of 10, and	
			Textbook	each group was assigned two questions	
			Exploration	on exception handling to answer and	
				explain to the entire class. Each group	
				was evaluated and given a score out of	
				10 based on the quality of their	
				explanations.	
13	Mr.	DLCOA/III/SE-1	Digital	Digital Flux is a real-time interactive	https://aces
	Chintamani	& SE-3/CSC304	Flux	polling which allows participants to	se.one/Zny
	Chavan			see live results as they respond to	<u>bN</u>
				questions. It enables real-time	
				engagement with students offering	
				interactivity, ease of use, and	
				immediate feedback.	



		SE/III/R-19/Div- 2/OOPJ	Java Debugging Challenge: Find and Fix	In the Java Debugging Challenge, students work in small groups to debug Java code with intentional syntax, logical, or runtime errors. Each group is given a code snippet that appears to perform a specific function but contains several errors. Their task is to identify, explain, and fix these issues to make the program run correctly.	
14	Ms. Priti Rumao	TCS/V/TE-1 & TE-3/CSC501	TCS_Tamb ola	Tambola is a fun and easy game that can be played with numbers, letters or words. The organizer (faculty in our case) calls the number- one at a time and then asks a question associated with it. Once students have identified the answer for the said question then they need to strike Number/symbol/word/letter on their tickets.	https://aces se.one/2B <u>RsZ</u>



15	Mrs. Soniya	CN/V/TE-1 &	CN_Netwo	A "Computer Network Jigsaw Puzzle	
	Khatu	TE-3/CSC503	rk Puzzle	Game" designed for students uses	https://aces
			Game	visual, interactive components to teach	se.one/KF3
				foundational concepts like the TCP/IP	<u>ZI</u>
				and OSI models, along with basic	
				protocols (TCP, IP, DNS). Each puzzle	
				piece represents network layers or	
				protocol elements, challenging players	
				to assemble the models in the correct	
				order (e.g., OSI's seven layers or	
				TCP/IP's four layers). As students	
				complete levels, they explore each	
				layer's real-world functions	
				(application, transport, network),	
				gaining insight into data flow across	
				layers. Hints and feedback reinforce	
				understanding of layer dependencies	
				and protocol interactions, turning	
				complex network structures into	
				engaging, hands-on learning.	
				Developed by students using Flutter,	
				this project also tested their technical	
				knowledge.	
16	Ms. Bhakti	TE	Fastest	In this Fastest Finger First activity,	https://l1nk
	Jadhav	Div3/ADBMS/C	Finger First	students are divided into different	.dev/lCW
		SDLO5013		groups. The faculty assigns sets of	Ww
				queries on MongoDB to the students	
				on GCR. Students have to submit their	
				performed queries with output to the	
				faculty as early on GCR or WhatsApp.	
				The group that submits their answers	
				first is declared the winner.	



17	Mrs. Manali	TE	The	It is an interactive quiz-based activity https://l1nk
	Patekar	Div2/CN/CSC50	Network	designed to enhance student .dev/4Z9d
		3	Mastermin	engagement and understanding the X
			d	basics of computer networking. Using
			Challenge	Kahoot, students participate in a
				competitive, fast-paced environment .
				The activity promotes active learning,
				peer collaboration, and instant
				feedback, helping students reinforce
				their knowledge and identify areas for
				improvement. The challenge fosters
				motivation and creates an enjoyable
				learning experience while assessing
				the students' grasp of essential
				networking principles.



Academic Year 2024-25 (Even Sem)

Innovation activities by the faculty members in teaching-learning

Sr. No.	Name of Faculty	Course Name / Sem / Course Code	Innovative / Creative activity used	Short Description of the activity	Link
1	Dr. Megha Trivedi	Optimization in Machine Learning/VIII/CS DC8021	Ant Behavior Simulation Game	Ant Colony Optimization (ACO) through interactive and engaging simulation game.	https://ac esse.one/ GhE4Y
2	Dr. Dinesh Patil	Operating System/IV/CSC4 04	Drama on Deadlock	The students were asked to create a deadlock situation and provide the ways to come out of it.	https://11 nk.dev/Js rTO



2			D '		1
3	Dr. Vikrant	PM/VIII/ILO802	Brain	During the lecture session students	<u>https://11</u>
	Agaskar	1	storming	were asked to take one real life case of	<u>nk.dev/Y</u>
				the project. Students proposed a few	<u>XsvV</u>
				cases and then with discussion	
				amongst themselves selected one case.	
				All the students then explored and	https://11
				applied every phase of the project	$\frac{1}{nk} \frac{dev}{V}$
				management process to the selected	hwKn
				case. This activity gave students	
				confidence to apply knowledge of	
				Project Management to any real-life	
				project.	
				Students were encouraged to deliver a	
			Door	lecture for an hour on the topic of their	
		101/VI/CSDL06	Peer	choice from the syllabus. A group of	
		011	Teaching	students voluntarily presented a topic	
				for around 45 minutes. The session	
				was interactive and the fellow students	
				were encouraged to ask doubts which	
				were colved by presenting students and	
				the subject teacher	
4	Dr. Swanna	Analysis of	Polo Dlov	Students were assigned some value	http://l1
4	Dr. Swapna	Analysis of	Role Play	Students were assigned some value.	$\frac{\text{nups://11}}{1 + 1 + 4}$
	Borde	Algorithm/IV/CS		Then they were told to arrange	<u>nk.dev/A</u>
		C402		themselves as per the steps of	<u>K3SX</u>
				Selection Sort and Insertion Sort	
				Algorithms. This method encourages	
				participation and improves	
				understanding of topics.	
5	Dr. Anil	Artificial	AI Riddles	The activity was conducted to	https://ac
	Hingmire	Intelligence/TE1	& Brain	reinforce AI concepts through an	esse.one/
		and TE3/VI	Teasers	interactive quiz format. Students were	<u>Sk7X4</u>
				presented with a series of riddles,	
				puzzles, and clues that hinted at	
				various AI tools, concepts, and	
				applications.	



6	Ms. Smita Jawale	SE/IV/ Database Management system/CSC403	Debugging Database Task	This task is to identify, analyze, and resolve errors or anomalies in database systems. This involves debugging SQL queries, correcting schema design issues ensuring data integrity.	https://l1 nk.dev/N Xf7E
7	Mr. Sunil Katkar	SE Sem-IV Div-1 Microprocessor	Treasure Hunt	This activity is designed as a treasure hunt where students will form groups and find hidden clues and collect them. Once all clues are collected as an output of clues they will write an assembly language program.	https://11 nk.dev/D OihR
8	Dr. Swati Varma	Distributed Computing/ BE/VIII/ CSC801	Autopsy of any distributed System	Autopsy of distributed systems like UBER, Amazon, Netflix and Google Search to identify the key techniques/methods used by them.	https://ac esse.one/ DFZMM
9	Mrs. Sneha Mhatre	Mobile Computing/TE 1 & TE 3/VI/CSC603	Written Test on GSM Abbreviatio ns	GSM System Architecture explained in the class. Then students were asked to remember the abbreviations of GSM. This method encourages participation and improves Understanding of topics.	https://l1 nk.dev/Jr VfP
10	Ms. Neha Surti	System programing and Compiler Construction / TE 1/ TE 3 CSC601	Pass the Mic	Pass the Mic is designed to make learning interactive and engaging on topics like Macro Processor and LL1. Students, divided into three groups, discussed assigned questions for 5 minutes and presented their answers as the mic was symbolically passed. This method encouraged participation, teamwork, and improved conceptual understanding.	https://ac esse.one/ 7eL35



11	Ma Dring1	DE/VIII/Amelia 1	Dolo	The chieving of this role planting	https://l1
	Colooc	Dete	Kole-	The objective of this role-playing	nttps://11
	Colaco		Playing	activity was to foster an interactive and	<u>nk.dev/o</u>
		Science/CSD080		innovative learning environment	<u>Tnrk</u>
		13		where students could take on specific	
				roles in a data science project—such as	
				data scientists, business stakeholders,	
				and end-users—and collaboratively	
				brainstorm key concepts and real-	
				world challenges in the domains of	
				Hypothesis Testing, Clustering, Time	
				Series Forecasting, Recommendation	
				Engines	
12	Mr.	Analysis of	Role Play	The students acted out the logic of	<u>https://l1</u>
	Chintamani	Algorithm/SE/IV/		sorting and searching algorithms by	<u>nk.dev/9</u>
	Chavan			taking on the roles of elements,	<u>dhg3</u>
				pointers, and comparators.	
				Students are physically engaged with	
				algorithmic logic which encourages	
				group problem-solving and teamwork.	
		A			
			AI Riddles	The activity was conducted to	
		Intelligence/TE2/	& Brain	reinforce Al concepts through an	
		VI	Teasers	interactive quiz format. Students were	
				presented with a series of riddles,	
				puzzles, and clues that hinted at	
				various AI tools, concepts, and	
				applications.	
13	Ms. Priti	Operating System	Open Book	The activity is designed to enhance	https://ac
	Rumao	/ SE2/ IV	Test	students' conceptual understanding of	esse.one/
				various CPU scheduling algorithms by	<u>CAVog</u>
				engaging them in an interactive,	
				practical, and experiential learning	
				environment.	



		Mobile	Open Book	The activity is designed to enhance	
		Computing/TE2/	Test	students' conceptual understanding of	
		VI		various CPU scheduling algorithms by	
				engaging them in an interactive,	
				practical, and experiential learning	
				environment.	
14	Mrs. Soniya	Microprocessor/	Treasure	This activity is designed as a treasure	https://ac
	Khatu	SE2 and SE3 /IV	Hunt	hunt where students will form groups	esse.one/
				and find hidden clues and collect them.	jJQ4T
				Once all clues are collected as an	
				output of clues they will write an	
				assembly language program.	
15	Ms. Bhakti	Cryptography and	Cryptocrac	The activity is designed as a crypto	https://ac
	Jadhav	System Security /	ker	challenge where individuals solve	esse.one/
		TE3/ VI		encryption and decryption codes using	<u>Qm48j</u>
				different classical and modern	
				cryptographic techniques	
		Operating System	CPU Wars:	The activity is designed to enhance	
		/ SE1/ IV	The	students' conceptual understanding of	
			Scheduling	various CPU scheduling algorithms by	
			Game	engaging them in an interactive,	
				practical, and experiential learning	
				environment.	
16	Mrs. Manali	Cryptography and	Cryptocrac	The activity is designed as a crypto	<u>https://l1</u>
	Patekar	System Security /	ker	challenge where individuals solve	<u>nk.dev/ts</u>
		TE2 & TE3/ VI		encryption and decryption codes using	MON
				different classical and modern	
				cryptographic techniques. This	
				innovative activity not only reinforced	
				core cryptography concepts but also	
				fostered a fun and interactive learning	
				environment.	



17	Ms. Joyce	Quantitative	Quantitativ	Quantitative Jeopardy is a game-based	https://ac
	Dsouza	Analysis/ TE1,	e Jeopardy	learning activity that follows the	esse.one/
		TE2 & TE3/ VI/		format of the classic Jeopardy! game	Ccm6y
		CSDLO6013		but focuses on quantitative reasoning,	
				mathematics, and numerical problem-	
				solving. It is often used in educational	
				settings to reinforce mathematical	
				concepts, data analysis, and logical	
				reasoning.	
18	Ms. Vinal	System	Pass the	Pass the Mic is designed to make	<u>https://l1</u>
	Waghela	programing and	Mic	learning interactive and engaging on	<u>nk.dev/A</u>
		Compiler		topics like Macro Processor and LL1.	<u>3ard</u>
		Construction / TE		Students, divided into three groups,	
		2 CSC601		discussed assigned questions for 5	
				minutes and presented their answers as	
				the mic was symbolically passed. This	
				method encouraged participation,	
				teamwork, and improved conceptual	
				understanding.	

Dr. Megha Trivedi HOD, Computer Engineering