



A REPORT OF

ONE WEEK FACULTY AND STUDENT

DEVELOPMENT PROGRAM

ON

GENERATIVE AI

ORGANIZED BY

DEPARTMENT OF COMPUTER SCIENCE

AND APPLICATION

ATAL BIHARI VAJPAYEE VISHWAVIDYALAYA,

BILASPUR (C.G.)

IN ASSOCIATION WITH

E & ICT ACADEMY, IIT KANPUR

(UNDER MoU)

FROM

14-19 NOVEMBER, 2024

GLIMPSES

The Department organized a one-week Faculty and Student Development Program (FSDP) on *Generative AI*, which was held from 14 to 19 November 2024. This program, conducted in association with the E & ICT Academy, IIT Kanpur, under a Memorandum of Understanding (MoU), aimed at enhancing the understanding of Generative AI concepts and practical applications among both faculty and students. The program was inaugurated by Dr. H.S. Hota, Head of the Department, and Dr. Shriya Sahu, Assistant Professor, who highlighted the significance of emerging technologies like Generative AI in academic research and industry applications.

The main objectives of the program were to provide participants with a comprehensive understanding of Generative AI, explore its applications in fields like natural language processing, image generation, and content creation, and enhance the research capabilities of faculty and students in artificial intelligence. The program also aimed to facilitate hands-on experience with various Generative AI models such as GPT, DALL·E, and others, while fostering discussions on the ethical implications of these technologies.

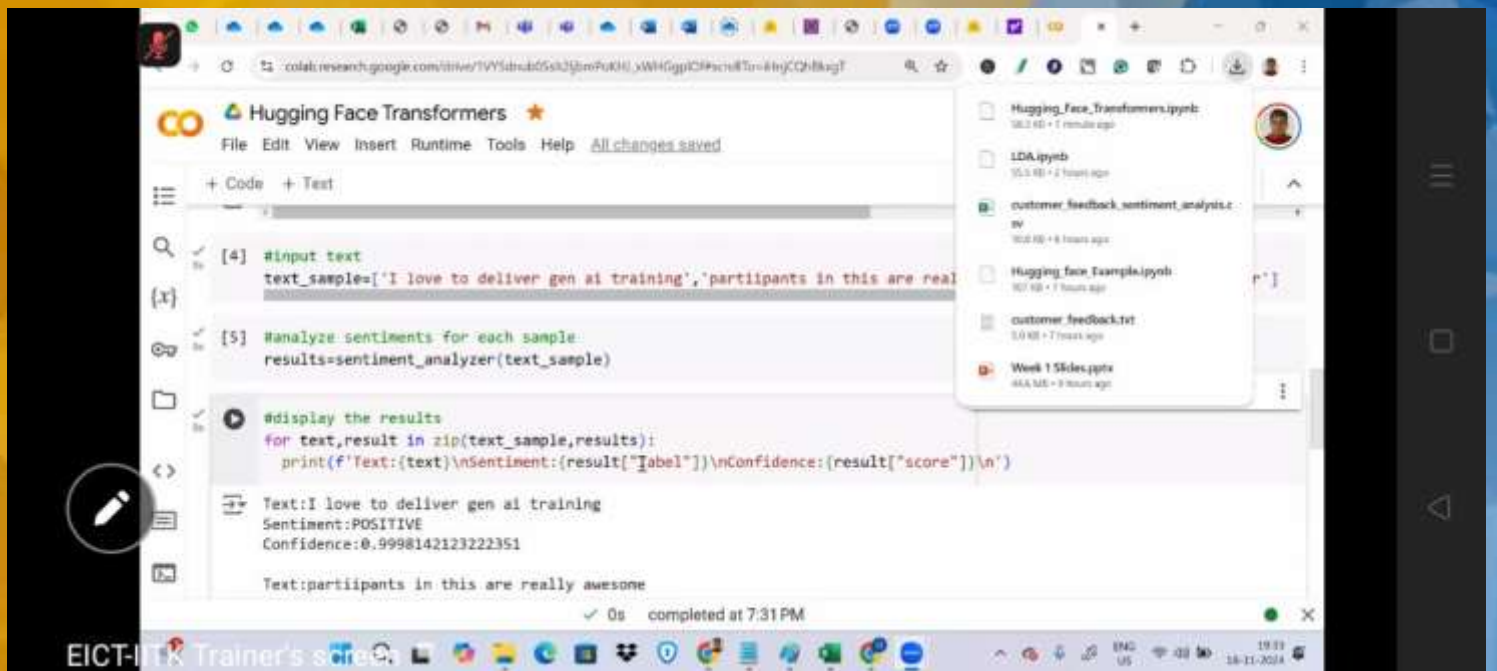
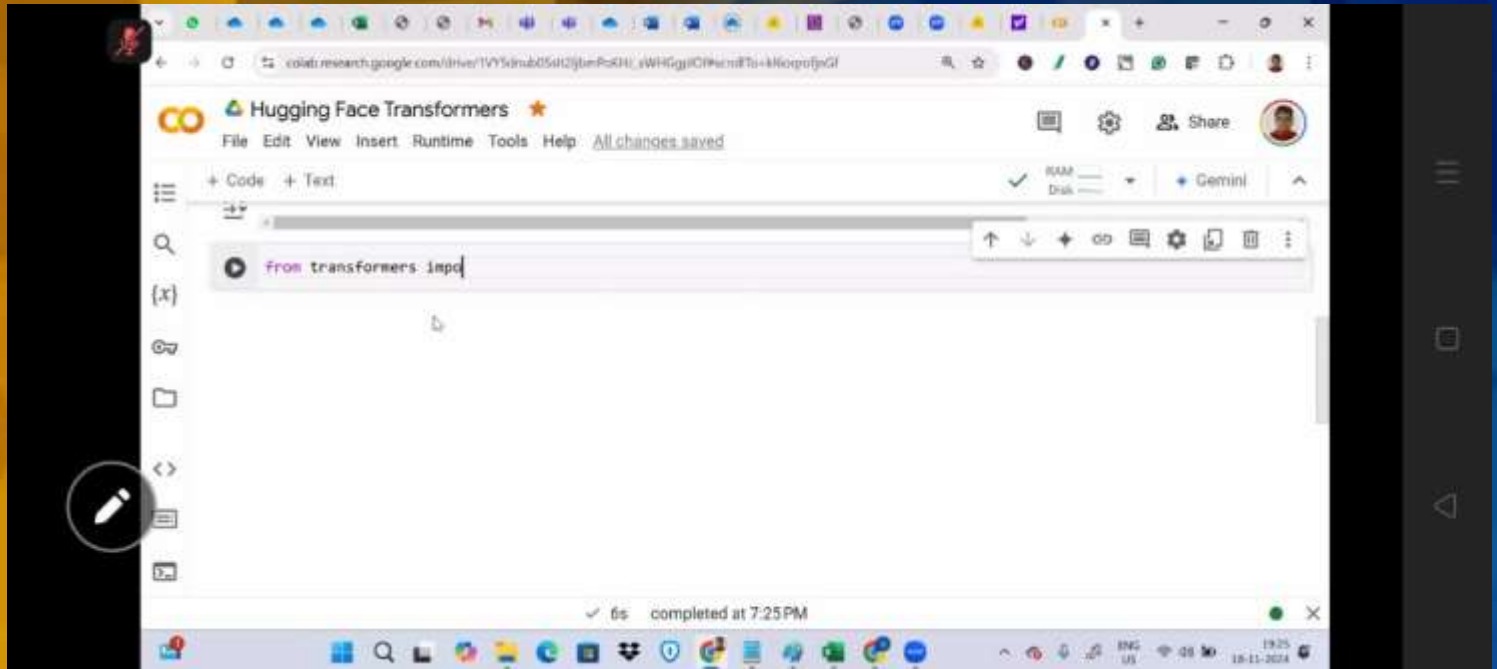
The program was structured over six days, with a combination of theoretical sessions and practical workshops. On Day 1, the inaugural session introduced participants to Artificial Intelligence and Generative Models, providing a foundation for the following sessions. The subsequent days focused on specific aspects of Generative AI. Day 2 covered Natural Language Processing (NLP) with a detailed session on language models like GPT, where participants engaged in hands-on tasks related to text generation. On Day 3, the focus shifted to Generative Adversarial Networks (GANs), and participants learned how GANs are used to generate realistic images and other forms of media, with practical exercises using DALL·E. Day 4 explored Deep Learning Models for Content Creation, where attendees experimented with models like VQ-VAE and StyleGAN to generate images, music, and other content.

The fifth day of the program was dedicated to discussing the ethical and societal impacts of Generative AI, exploring challenges such as plagiarism, deepfakes, and biased algorithms. This session was followed by an engaging panel discussion on the ethical responsibilities researchers and developers must consider when working with AI technologies. On the final day, Day 6, the program concluded with a session on the future of Generative AI, examining emerging trends in AI, including its applications in creative arts, healthcare, and autonomous systems. The program closed with a thank-you session, acknowledging the efforts of the participants, speakers, and the organizing team.

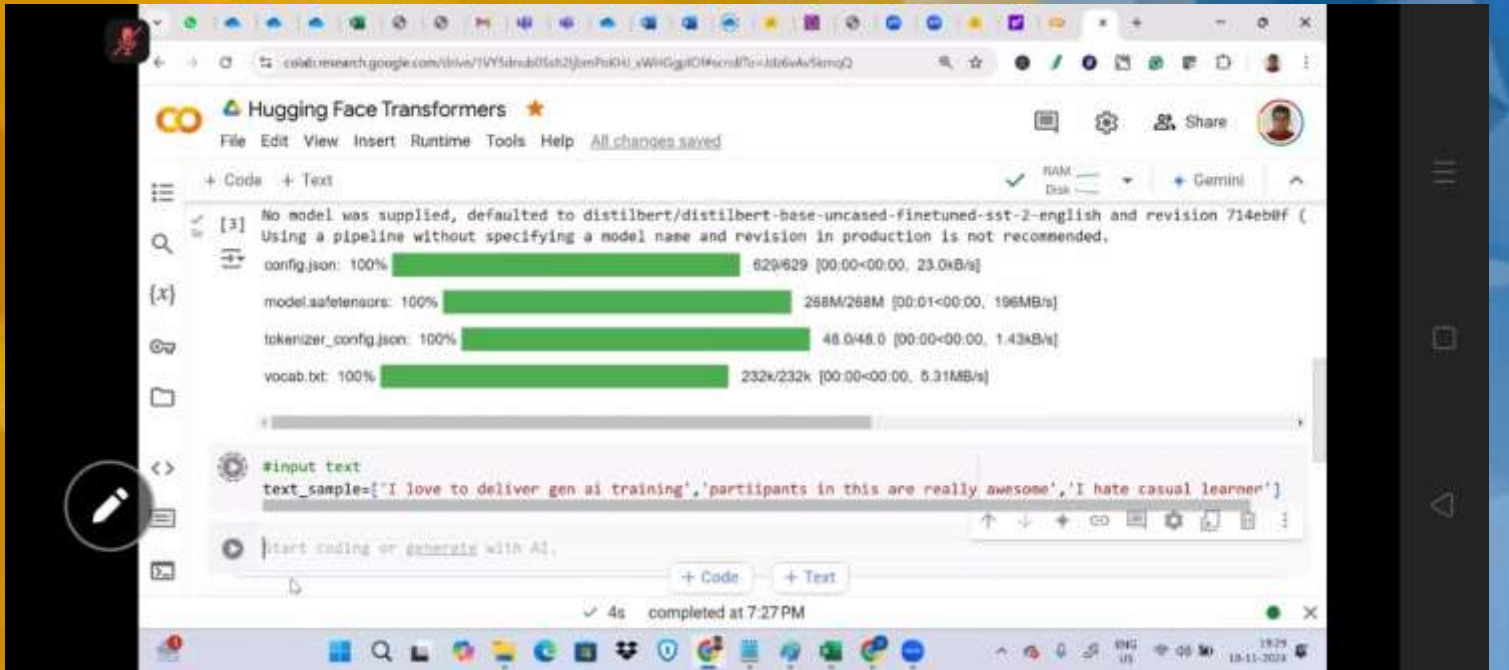
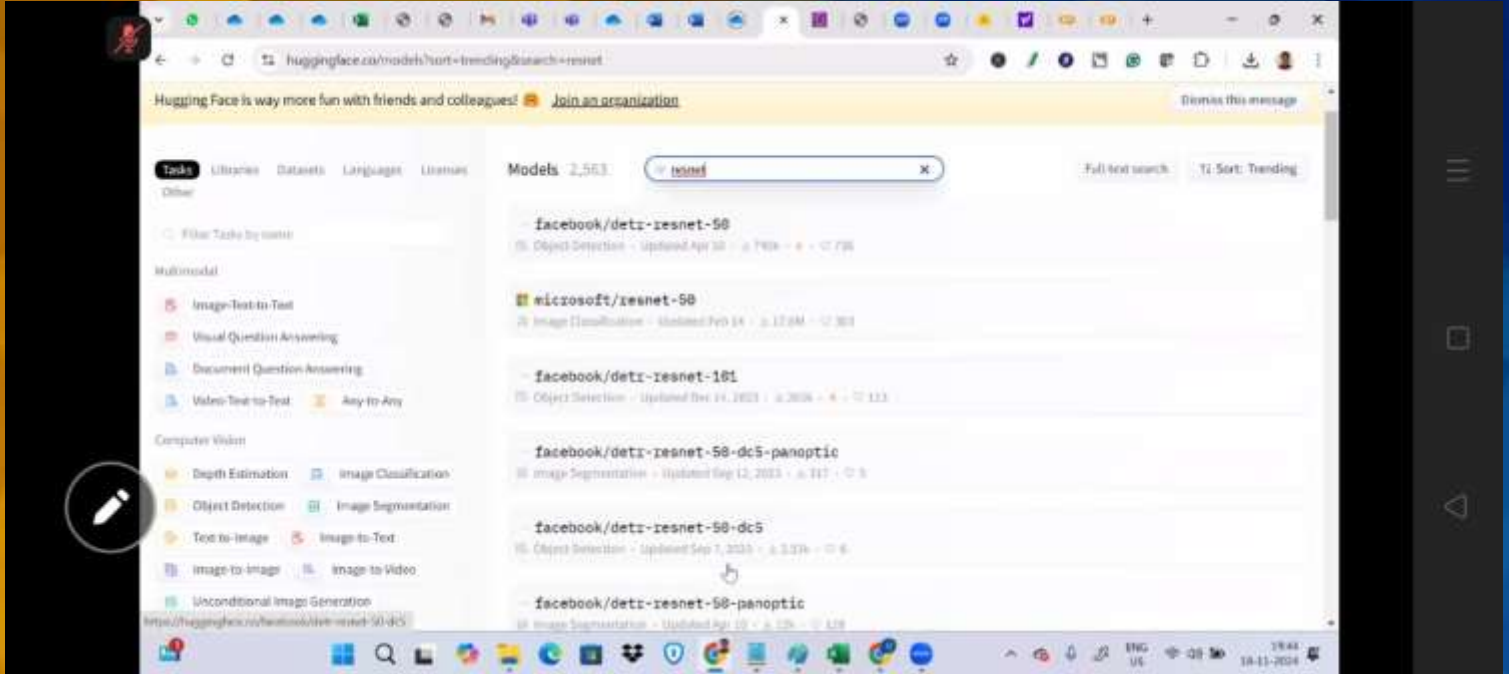
The event was highly successful, with participants gaining valuable insights into the practical applications and ethical considerations surrounding Generative AI. The hands-on workshops provided participants with the opportunity to interact with cutting-edge AI tools, and the collaborative nature of the program encouraged knowledge sharing among faculty and students. The program also sparked interest in further research in the field of AI, with many attendees expressing a desire to explore new areas of investigation. Networking opportunities during the program helped foster connections between students, faculty, and industry experts, thereby broadening the academic and professional horizons of the participants.

In conclusion, the One Week Faculty and Student Development Program on Generative AI proved to be an enriching experience for all involved. It provided participants with both the theoretical knowledge and practical skills needed to navigate the rapidly evolving field of Generative AI. The program also encouraged critical thinking about the ethical challenges posed by AI, and its successful completion underscores the commitment of Atal Bihari Vajpayee Vishwavidyalaya to staying at the forefront of technological advancements in computer science and AI.

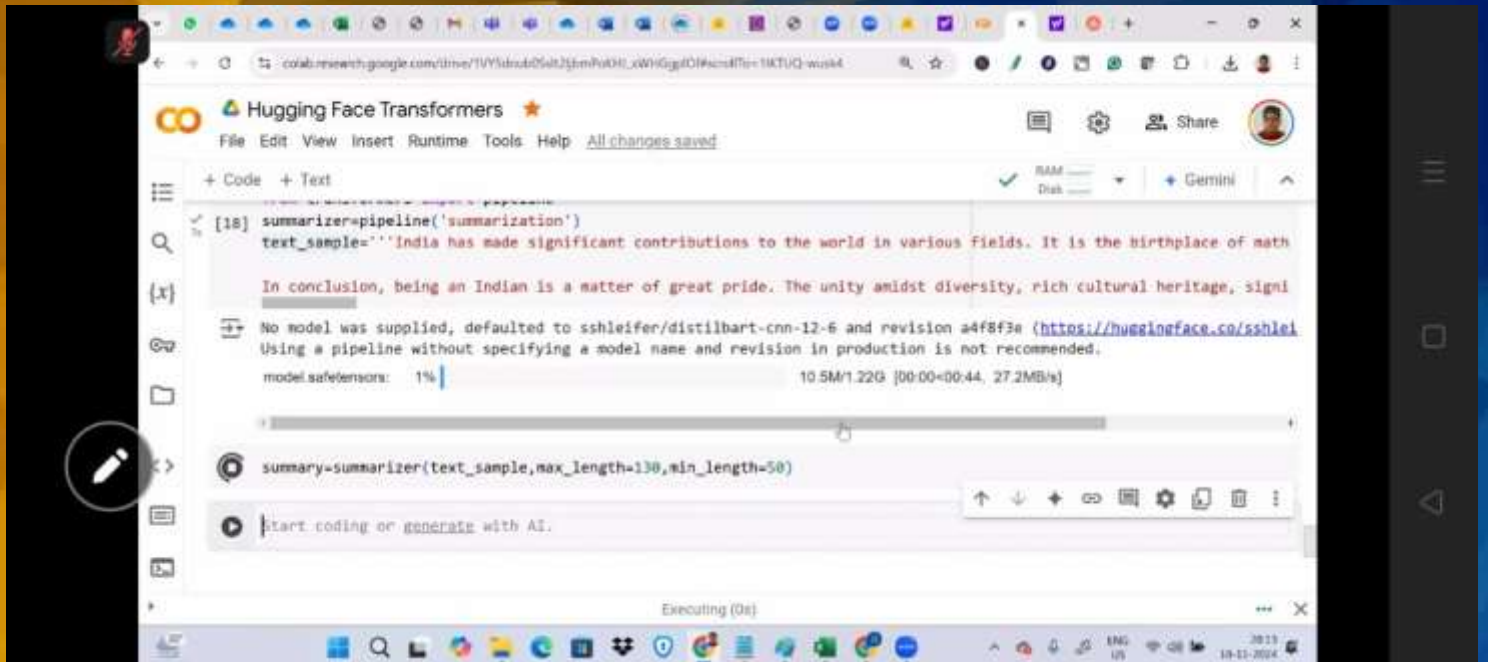
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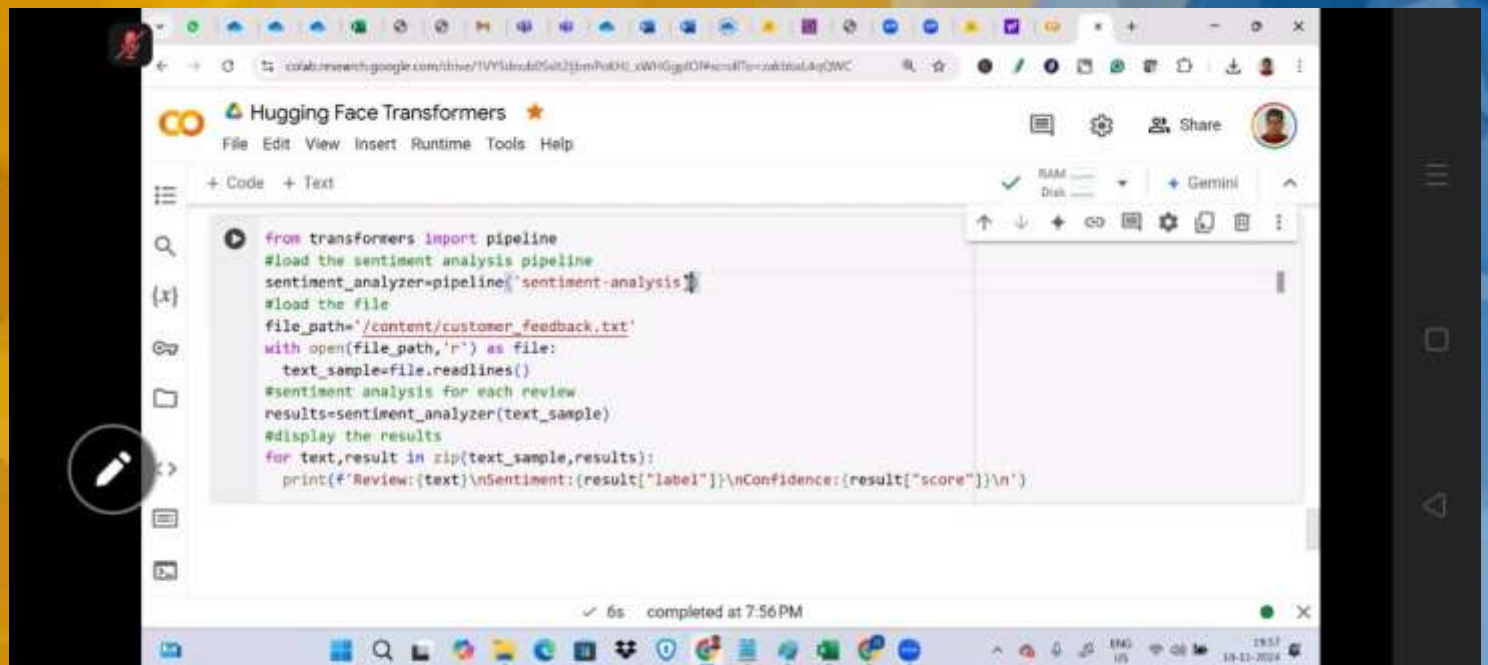
```
[18]: summarizer=pipeline('summarization')
text_sample='''India has made significant contributions to the world in various fields. It is the birthplace of math

In conclusion, being an Indian is a matter of great pride. The unity amidst diversity, rich cultural heritage, signi

No model was supplied, defaulted to sshleifer/distilbart-cnn-12-6 and revision a4f8f3a (https://huggingface.co/sshleifer/distilbart-cnn-12-6). Using a pipeline without specifying a model name and revision in production is not recommended.
model safetensors: 1% | 10.5M/1.22G [00:00<00:44, 27.2MB/s]

summary=summarizer(text_sample,max_length=130,min_length=50)
```

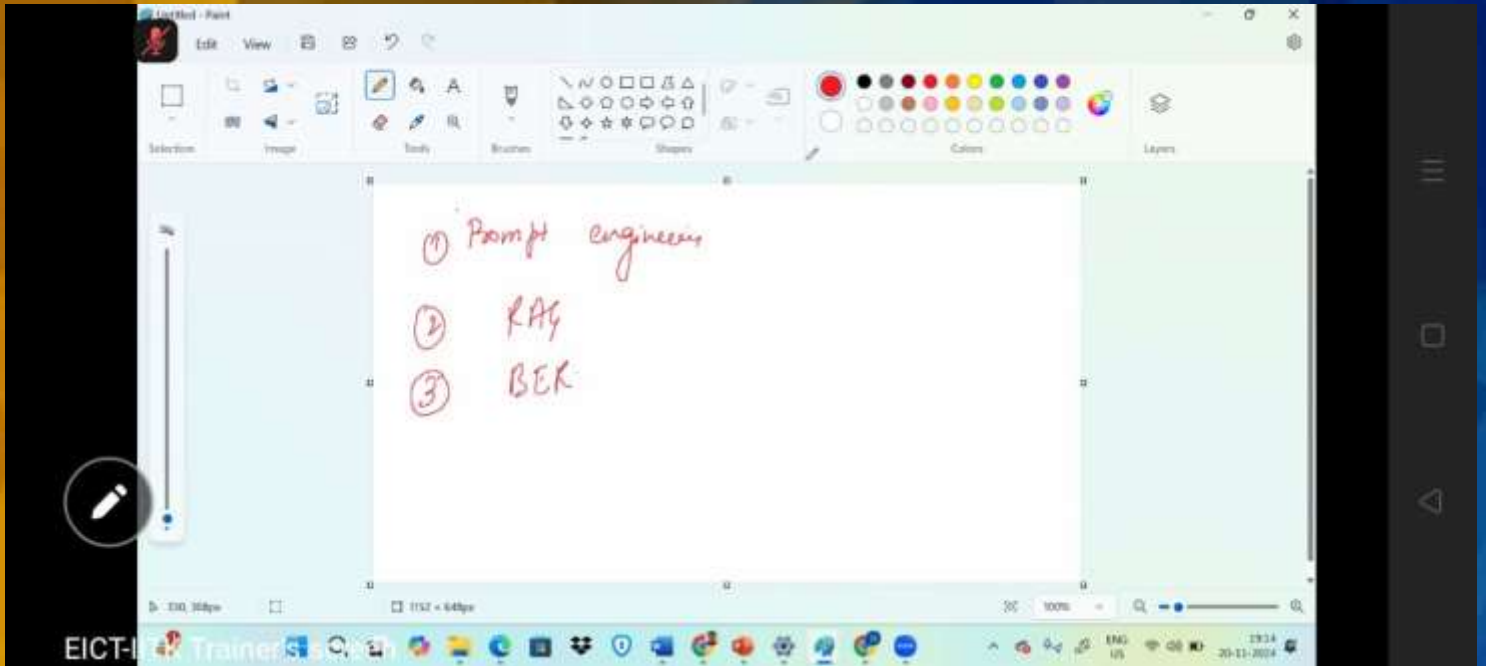
Executing (0s)



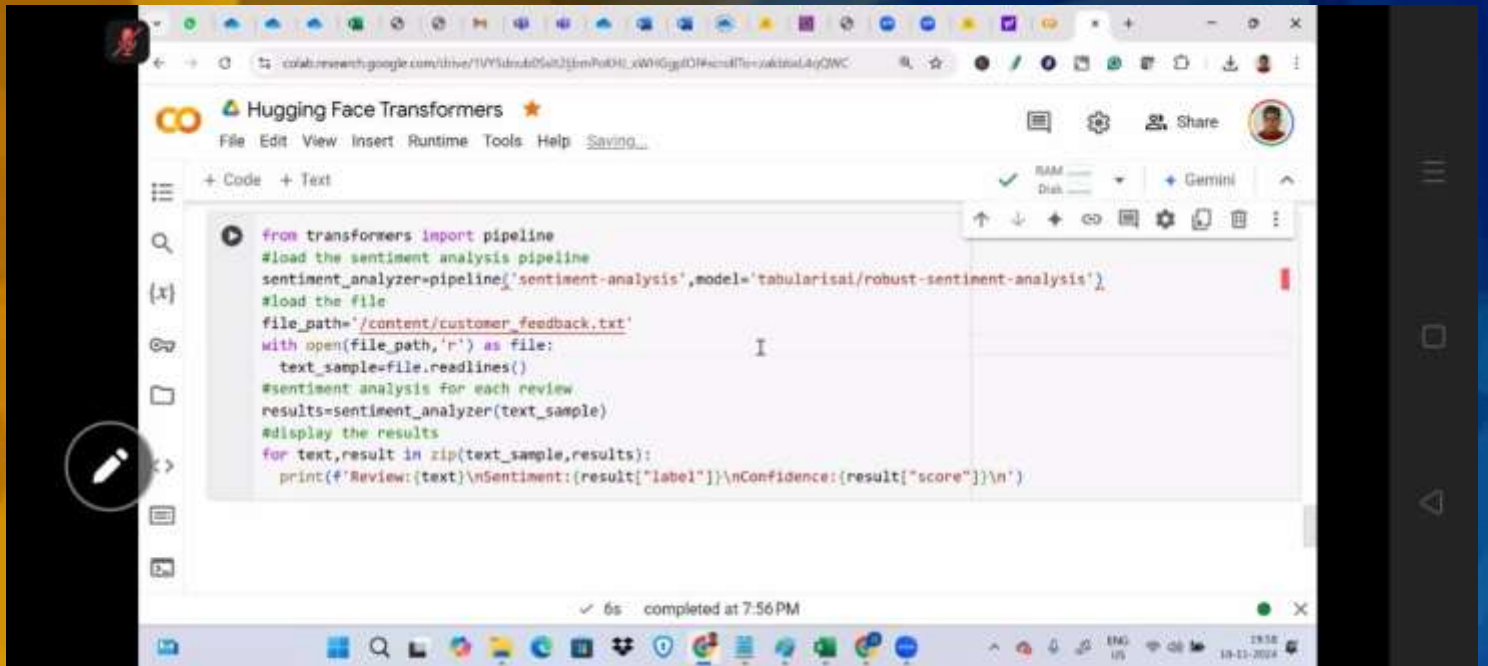
```
from transformers import pipeline
#load the sentiment analysis pipeline
sentiment_analyzer=pipeline('sentiment-analysis')
#load the file
file_path='/content/customer_feedback.txt'
with open(file_path,'r') as file:
    text_sample=file.readlines()
#sentiment analysis for each review
results=sentiment_analyzer(text_sample)
#display the results
for text,result in zip(text_sample,results):
    print(f'Review:{text}\nSentiment:{result["label"]}\nConfidence:{result["score"]}\n')
```

6s completed at 7:56 PM

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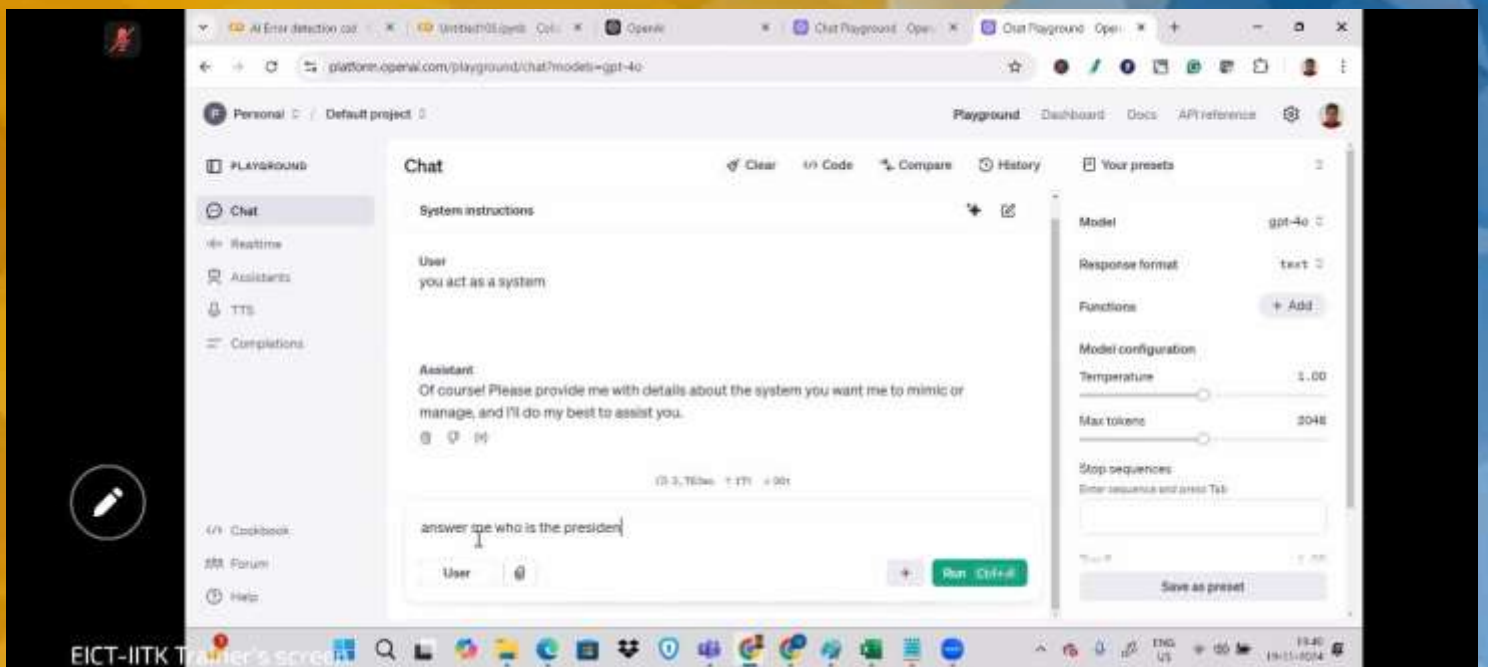


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```
from transformers import pipeline
#load the sentiment analysis pipeline
sentiment_analyzer=pipeline('sentiment-analysis',model='tabularisai/robust-sentiment-analysis')
#load the file
file_path='/content/customer_feedback.txt'
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```

6s completed at 7:56 PM



Personal / Default project

PLAYGROUND Chat

System instructions

User
you act as a system

Assistant
Of course! Please provide me with details about the system you want me to mimic or manage, and I'll do my best to assist you.

answer me who is the president

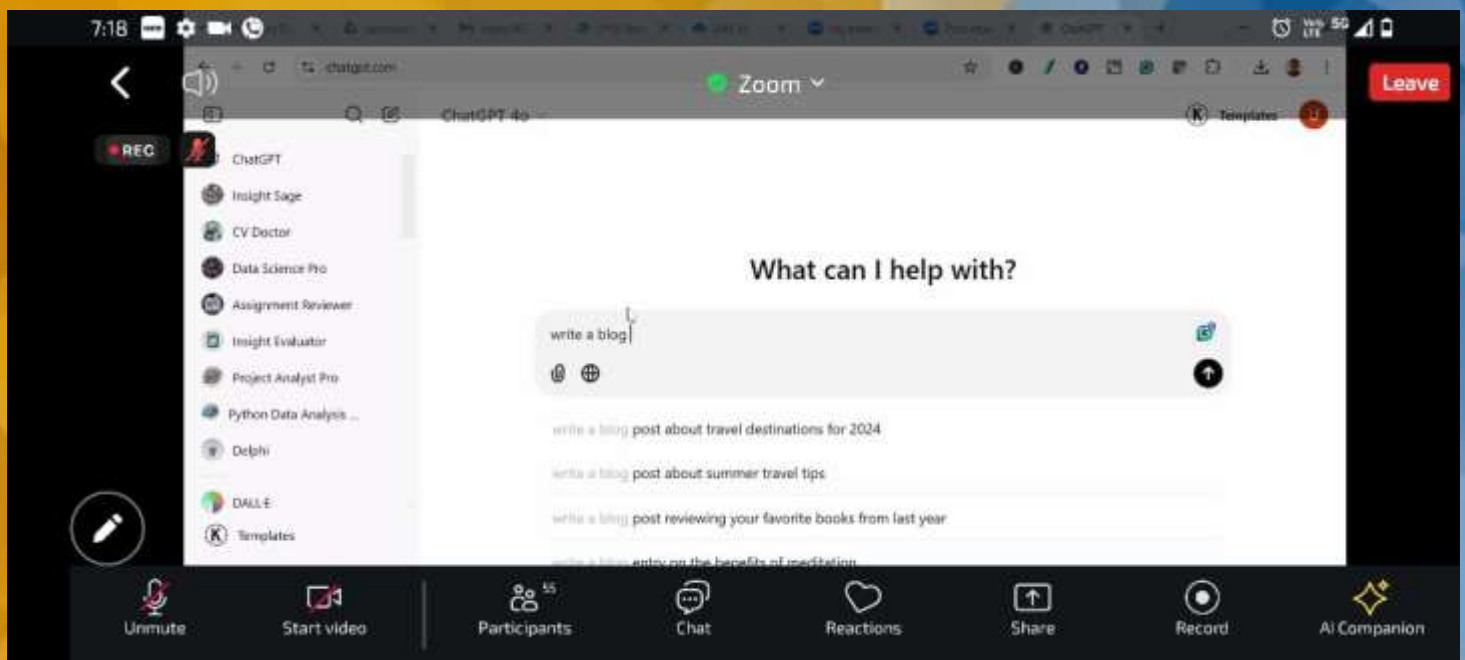
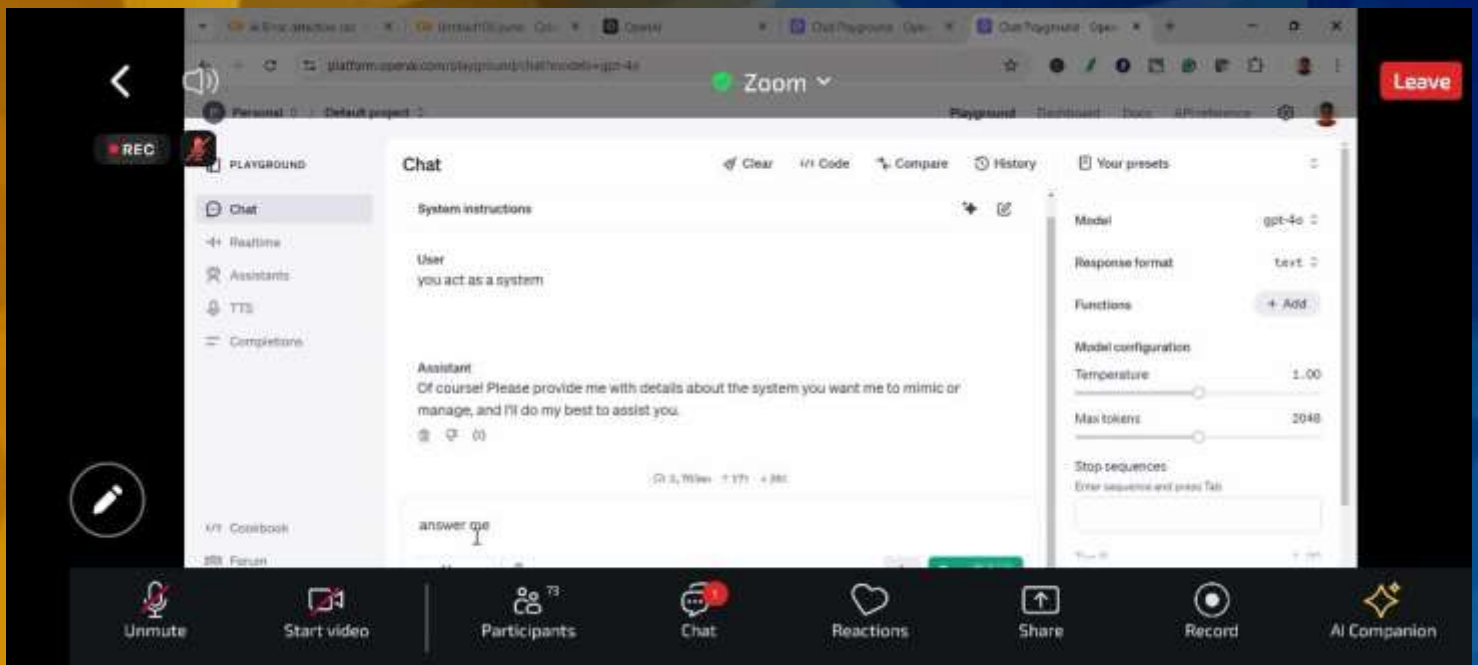
User

Run Ctrl+R

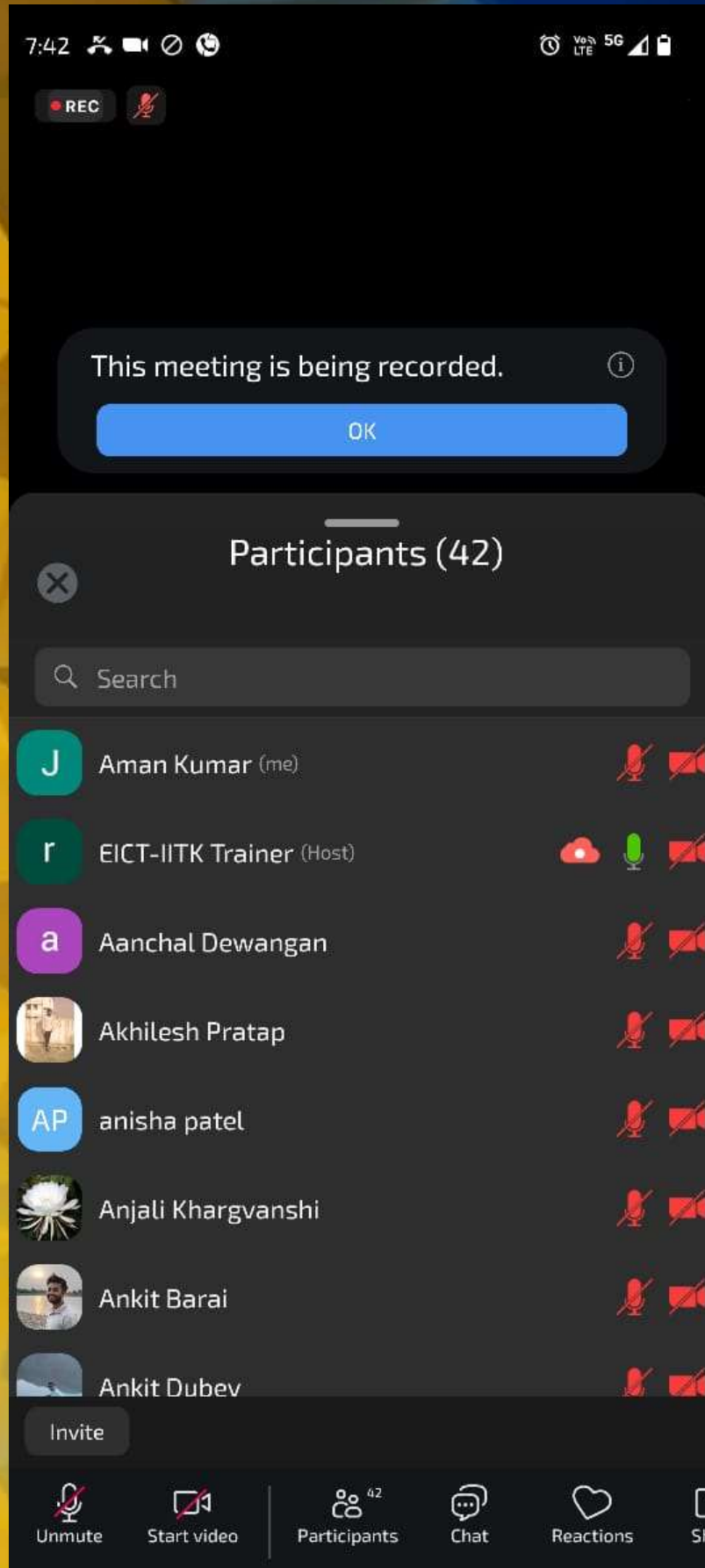
Model: gpt-4o
Response format: text
Functions: + Add
Model configuration
Temperature: 1.00
Max tokens: 2048
Stop sequences: Enter sequence and press Tab

EICT-IITK Trainer's screenshot

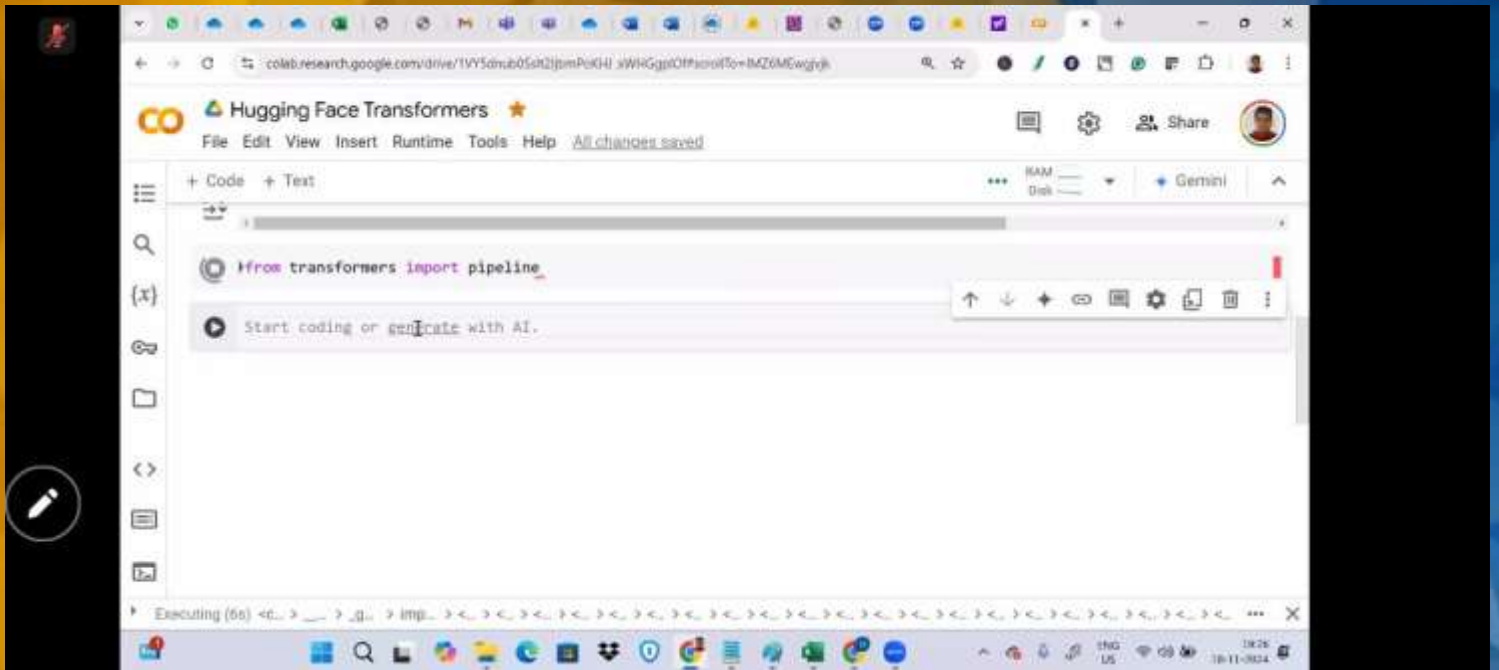
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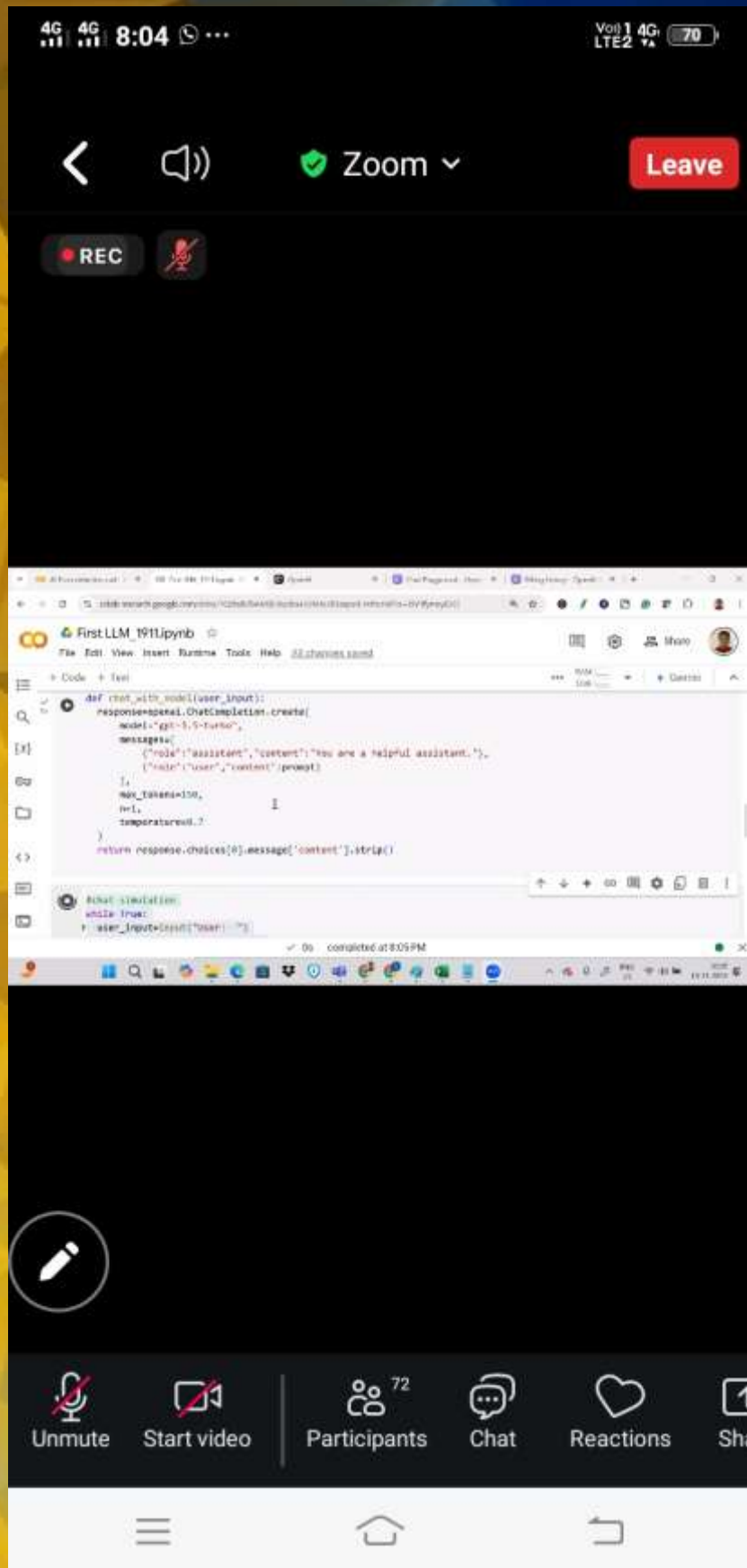
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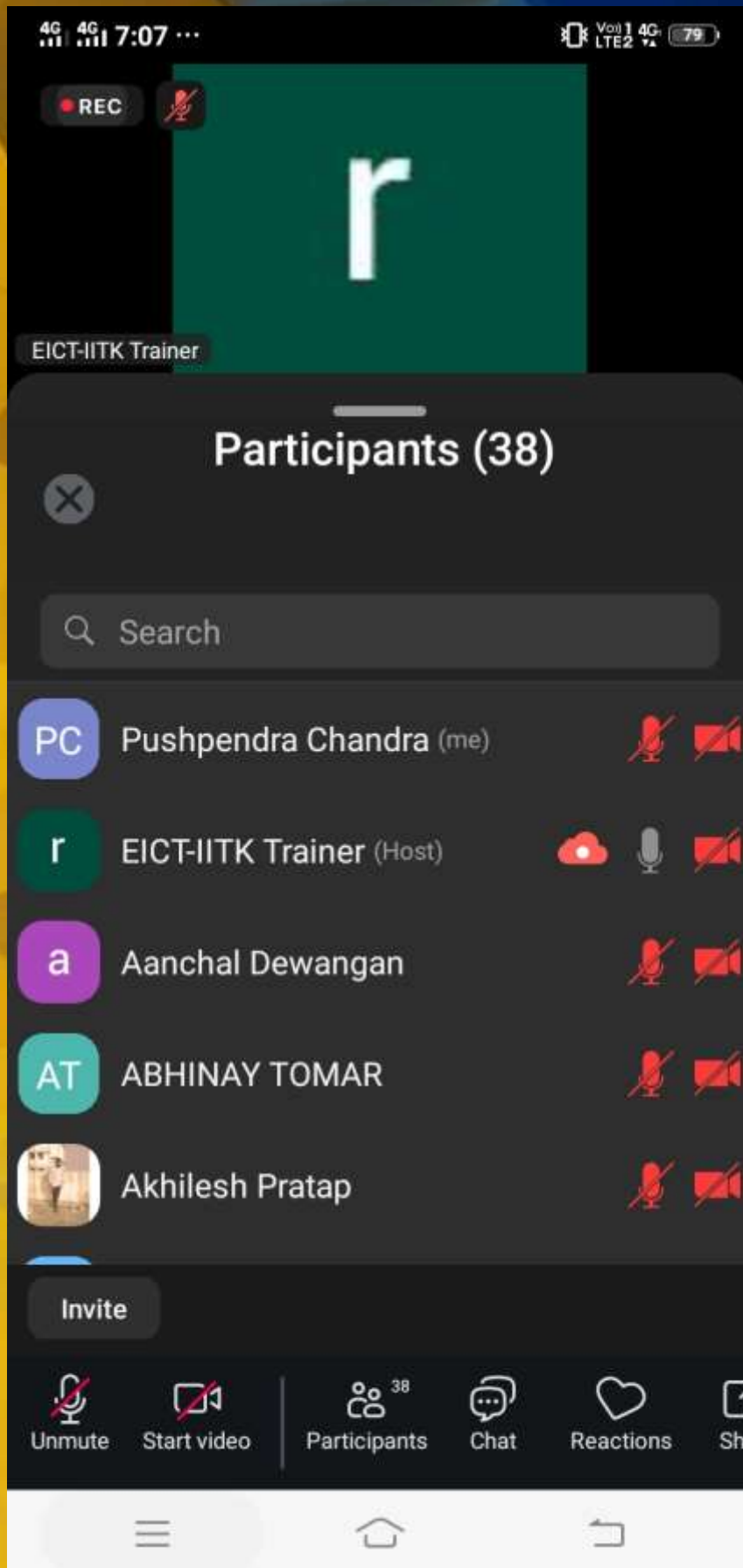
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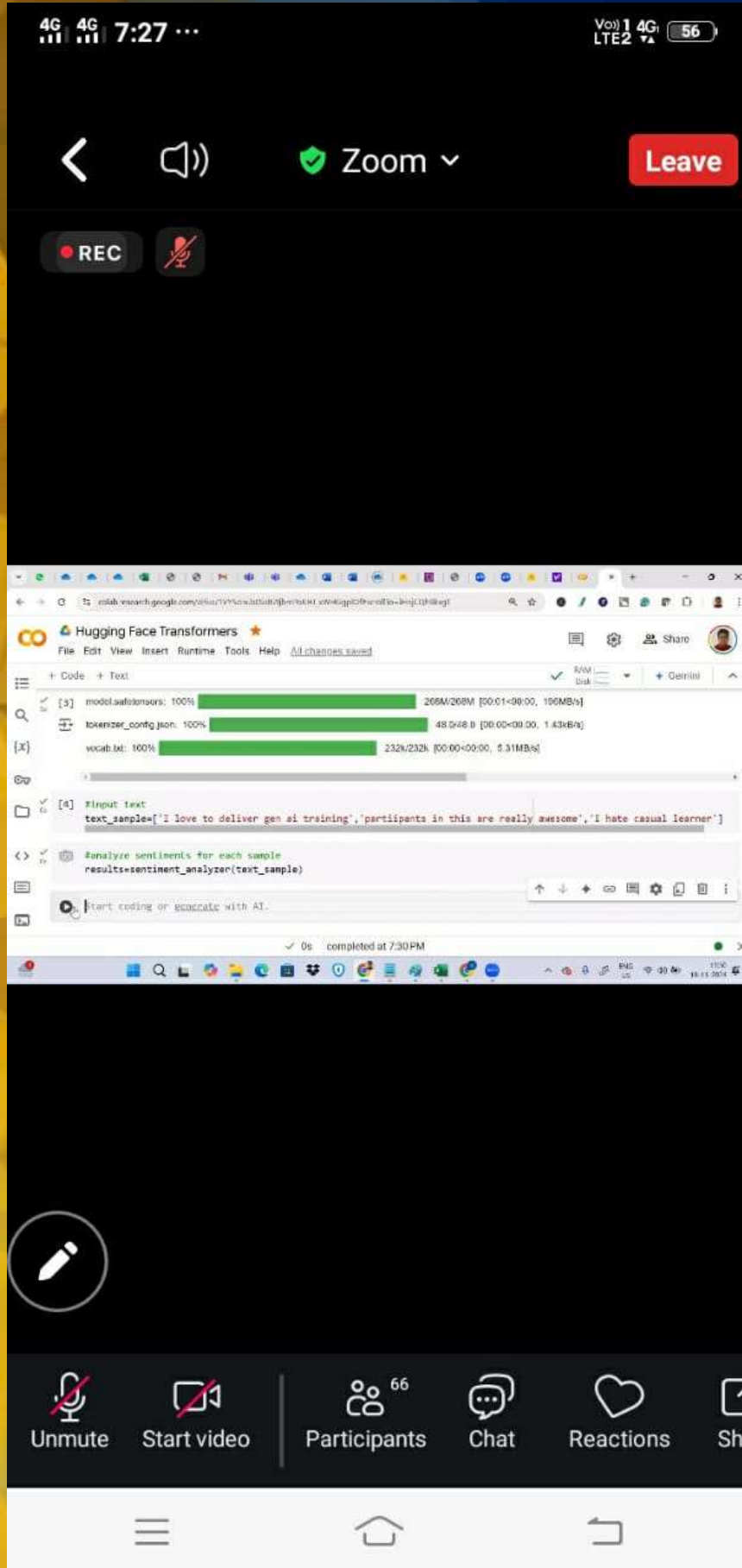
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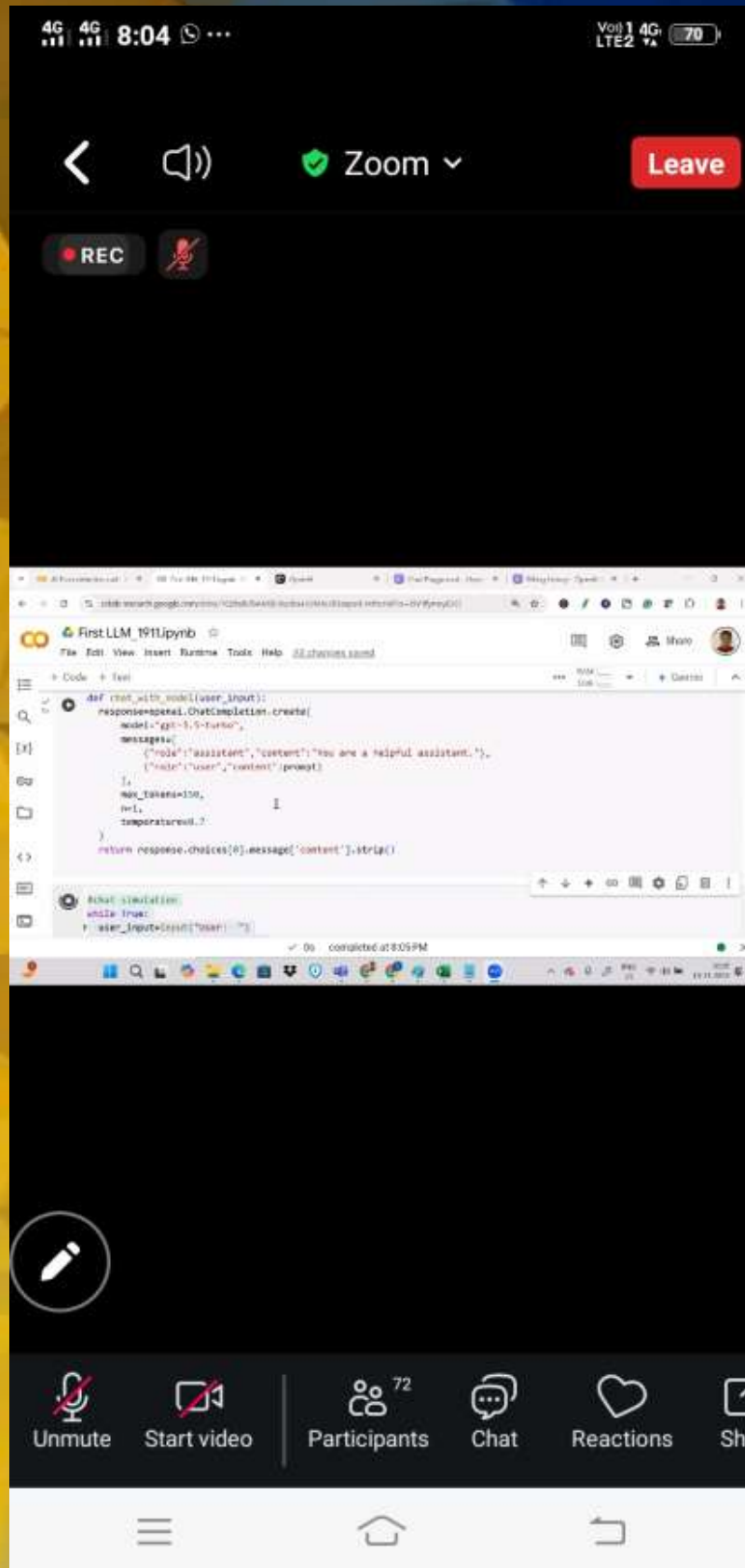
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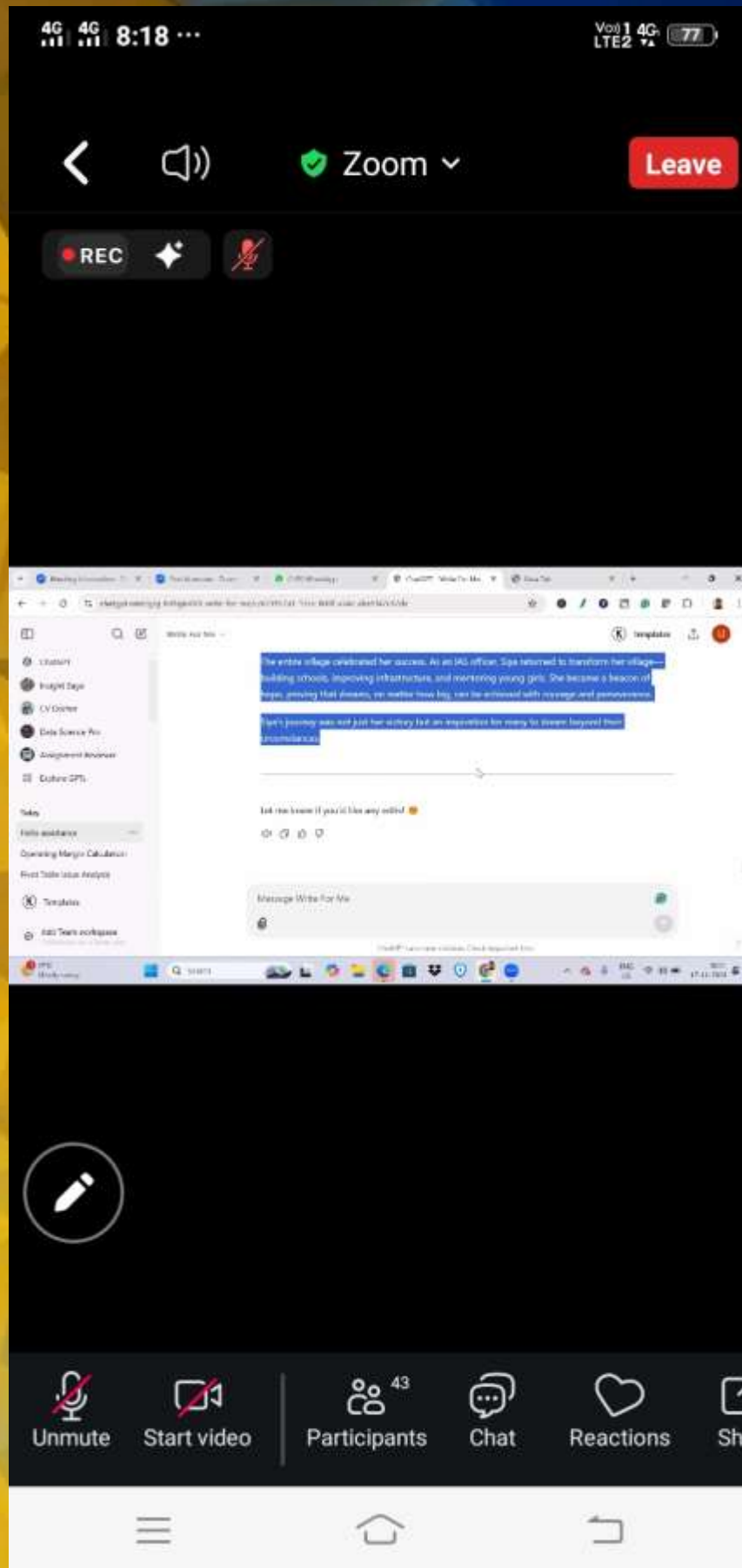
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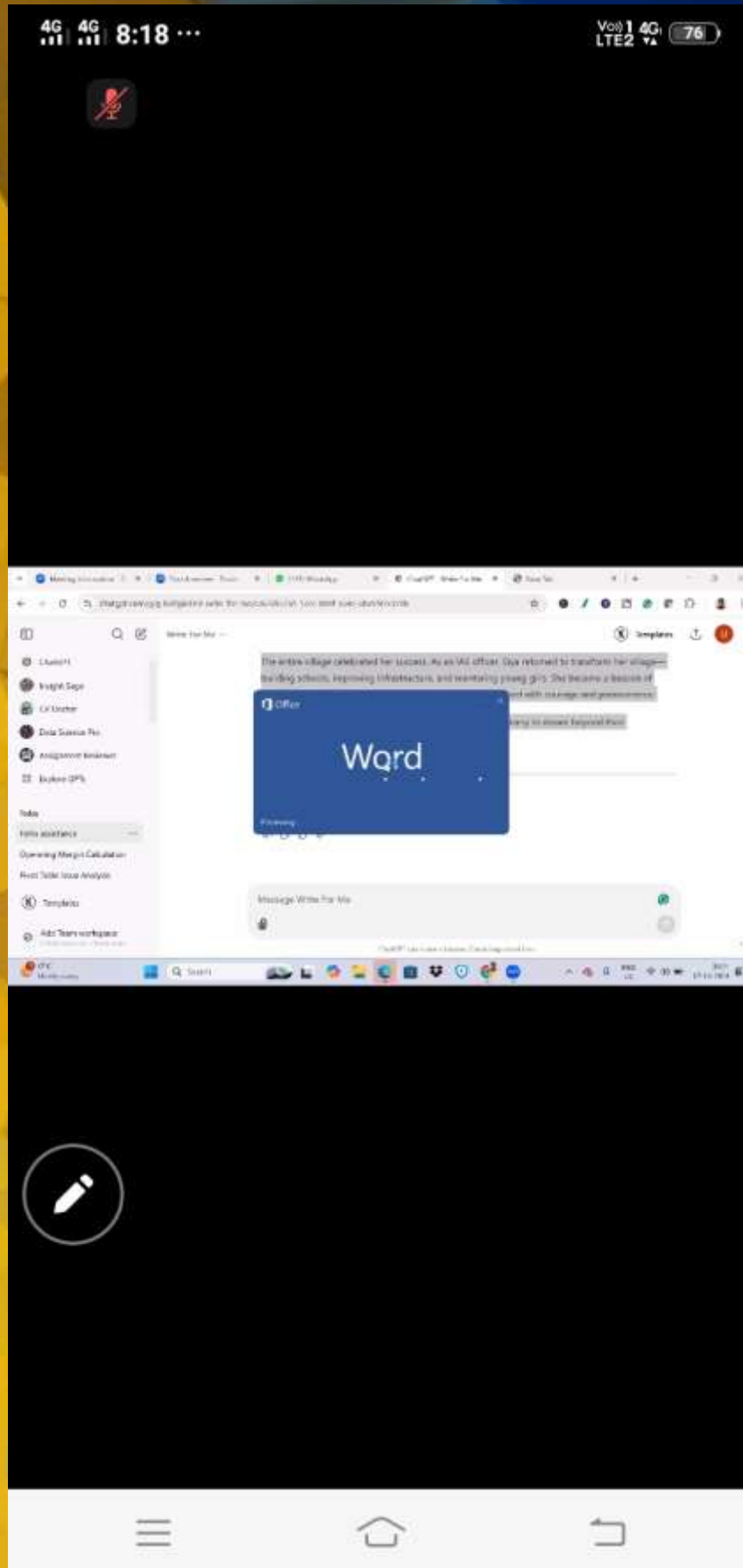
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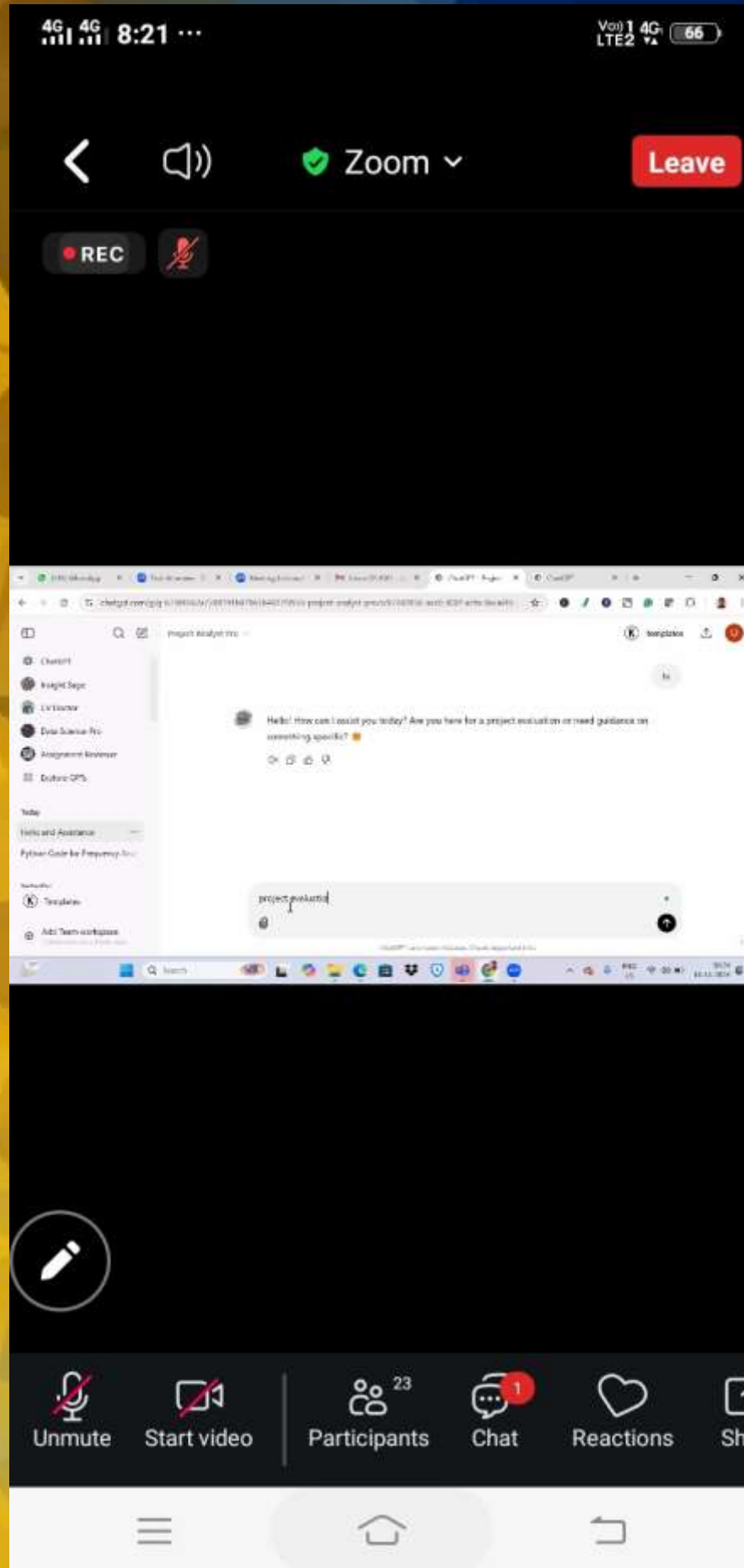
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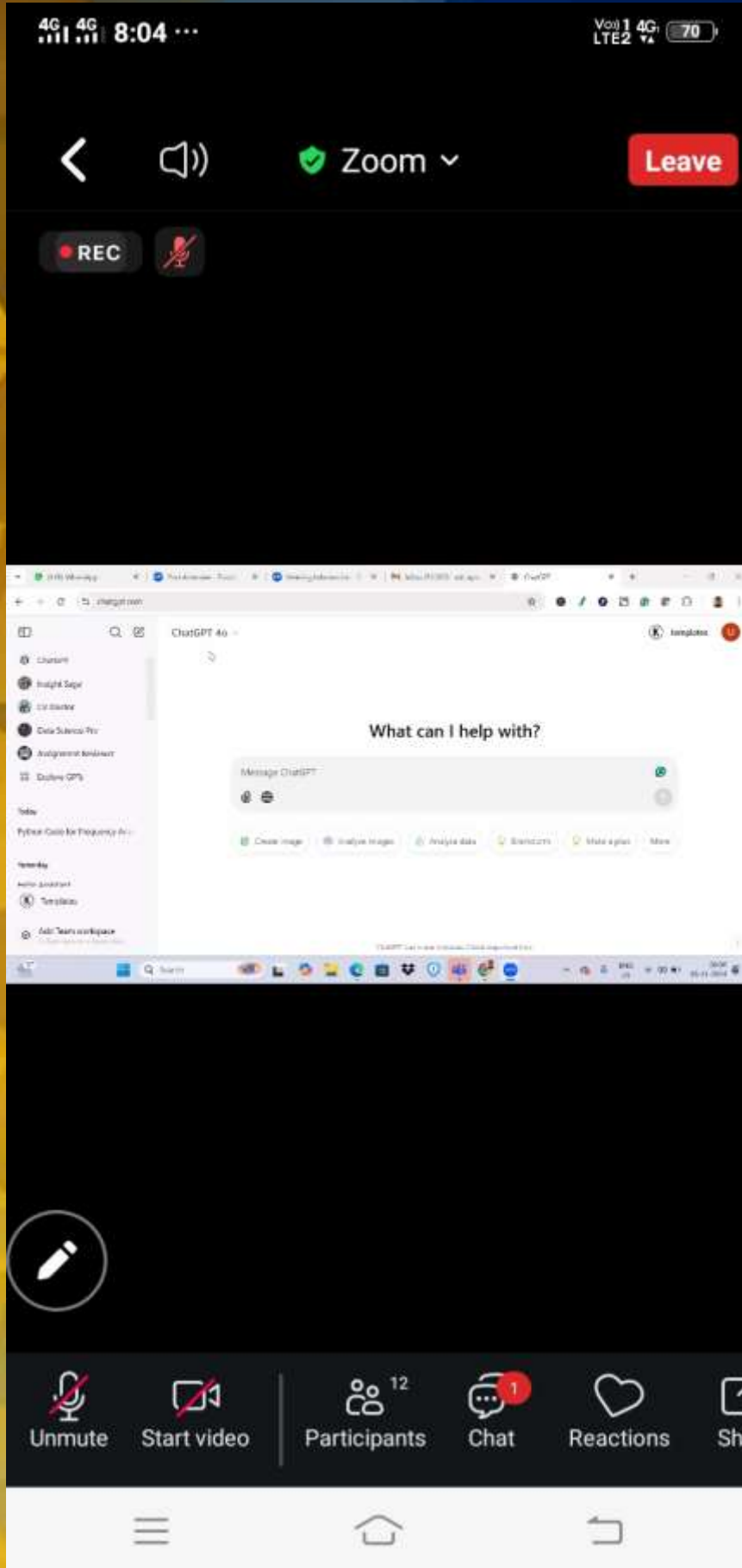
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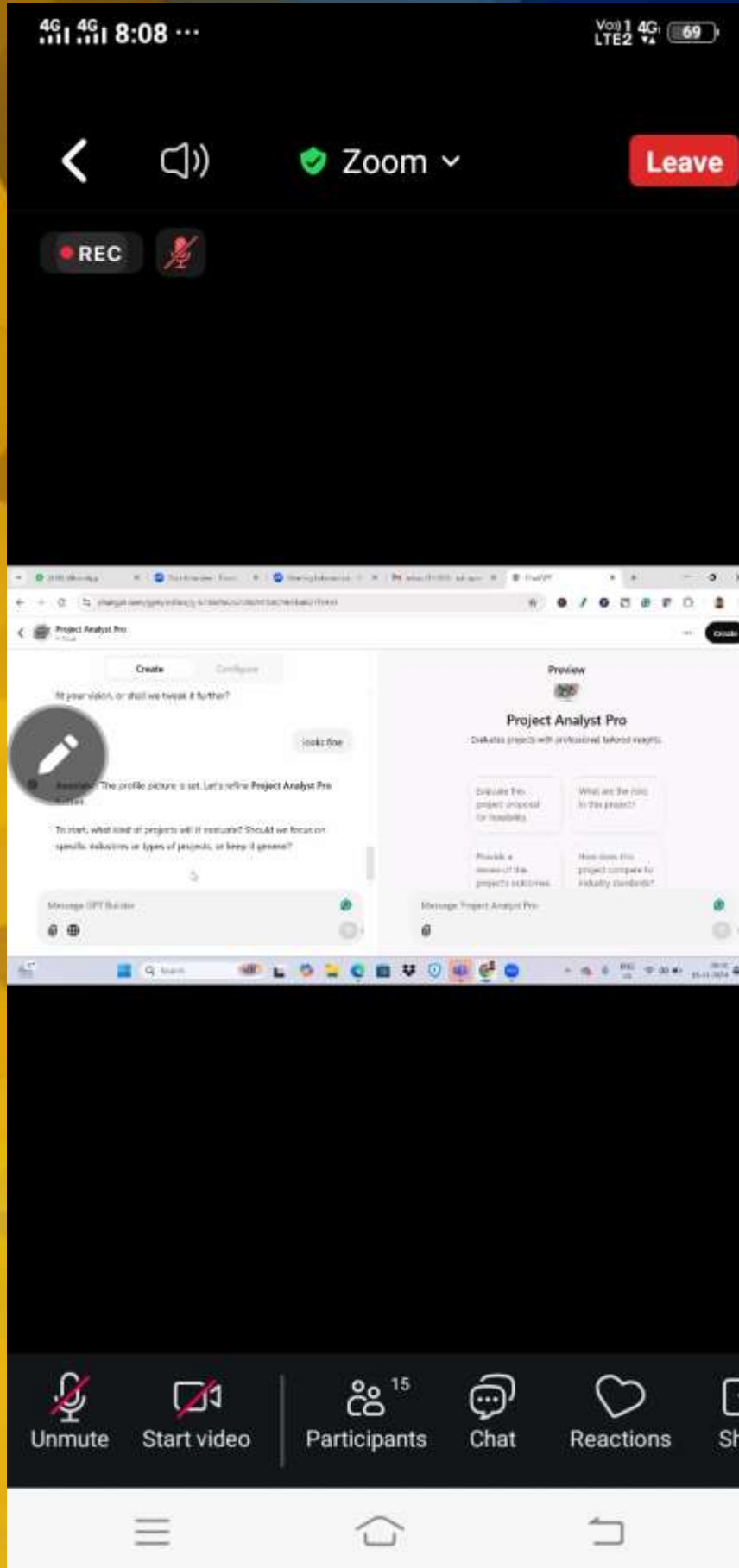
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Satwinder Kaur's screen

GLIMPSES



GLIMPSES



PARTICIPANTS

S.No.	Candidate name	Class
1	Aanchal Dewangan	MCA-III Semester
2	Abhishek B Yadav	MCA-I Semester
3	Abhishek Kamal	M.Sc. (CS) – III Semester
4	Abhishek Kesharwani	MCA-III Semester
5	Akanksha Gautam	MCA-III Semester
6	Akanksha Singaur	MCA-III Semester
7	Akhilesh Pratap	MCA-III Semester
8	Aman Kurrey	MCA-III Semester
9	Anamika Kurrey	MCA-I Semester
10	Anisha Patel	MCA-I Semester
11	Anjali Khargvanshi	MCA-III Semester
12	Anjani Kashyap	MCA-III Semester
13	Anjali Barman	PhD Scholar
14	Ankit Barai	MCA-III Semester
15	Ankit Dubey	MCA-I Semester
16	Aseem Kujur	MCA-I Semester
17	Baldev Kaushik	MCA-I Semester
18	Bhushan Kumar Kashyap	PhD Scholar
19	Bhuwan Singh Karsh	MCA-III Semester
20	Chanchal Kashyap	M.Sc. (CS) – I Semester
21	Chandrashekhar Sahu	MCA-I Semester
22	Devlal Patel	M.Sc. (CS) – III Semester
23	Dhaneshwar Suryavanshi	PhD Scholar
24	Durga Kaushik	MCA-III Semester
25	Fareeda Pathan	MCA-I Semester
26	Gitesh Kumar	MCA-I Semester
27	Harish Kumar Patel	MCA-I Semester
28	Himanshu Rathore	MCA-I Semester

PARTICIPANTS

29	Himanshu Sao	M.Sc. (CS) – I Semester
30	Jitendra Dewangan	MCA-I Semester
31	Kamal Gavel	PhD Scholar
32	Khushi Dewangan	MCA-III Semester
33	Kirti Bareth	MCA-I Semester
34	Kishan Kaushik	MCA-I Semester
35	Kriparam Kanwar	MCA-III Semester
36	Kuldeep Sahu	MCA-III Semester
37	Lema Dewangan	M.Sc. (CS) – III Semester
38	Lilima Rathore	MCA-I Semester
39	Manish Tiwari	MCA-III Semester
40	Neetu Patel	MCA-III Semester
41	Nisha Kumbhkar	MCA-III Semester
42	Nitesh Kumar Dinkar	MCA-III Semester
43	Nutan Sahu	M.Sc. (CS) – I Semester
44	Omprakash Sahu	M.Sc. (CS) – I Semester
45	Poonam Kesharwani	MCA-III Semester
46	Pratibha Pathak	MCA-I Semester
47	Pravin Bhargaw	MCA-I Semester
48	Priti Kashyap	MCA-III Semester
49	Priyanka Sahu	MCA-I Semester
50	Pushpalata Sahu	MCA-III Semester
51	Pushpendra	MCA-III Semester
52	Puspesh Kashyap	PhD Scholar
53	Rajkumar Sahu	MCA-I Semester
54	Ramesh Kanwar	M.Sc. (CS) – I Semester
55	Ranu Kaushik	MCA-I Semester
56	Rohit Singh Thakur	MCA-III Semester
57	Sanskar Yadav	MCA-I Semester

PARTICIPANTS

58	Satya Prakash Banjare	PhD Scholar
59	Saumya Dewangan	MCA-III Semester
60	Shahista Nigar	MCA-I Semester
61	Shiva Kumar	MCA-III Semester
62	Shivam Sarthi	PhD Scholar
63	Shivangi Pandey	MCA-III Semester
64	Shivangi Pathak	MCA-III Semester
65	Shruti Dansena	MCA-III Semester
66	Shruti Soni	MCA-I Semester
67	Shruti Yadav	MCA-I Semester
68	Suman Nirmalkar	MCA-I Semester
69	Sumita Samanta	MCA-III Semester
70	Sunil Prajapati	PhD Scholar
71	Suprit Banerjee	MCA-III Semester
72	Svejal Gupta	MCA-III Semester
73	T Anisha	MCA-III Semester
74	Tanu Bharti	MCA-III Semester
75	Tanupriya Sao	MCA-III Semester
76	Tanya Gupta	M.Sc. (CS) – III Semester
77	Tikeshwar Singj	MCA-I Semester
78	Tiya Kesharwani	M.Sc. (CS) – I Semester
79	Tumesh	MCA-III Semester
80	Umakant	MCA-I Semester
81	Vasudev	M.Sc. (CS) – III Semester
82	Vikas Dewangan	MCA-I Semester
83	Vishal Jangade	MCA-III Semester
84	Vivek Tiwari	PhD Scholar