Shri Sant Gajanan Maharaj College of Engineering Shegaon

Department of Electronics and Telecommunication Engineering

Link of Video: https://www.youtube.com/watch?v=aj2DGMNZd9A

Course Title & Course Code: Cryptography and Network Security (7ETC01)

Class: Final Year (4U1)

Semester: VII

Name of the Course Teacher: Mrs. K. S. Vyas

Title of the innovative practice: You-tube Video

Objectives/Goals of the practice:

The primary goal of this innovative teaching practice is:

1. To enhance conceptual understanding about DES fundamentals including Key Generation, Substitution-permutation.

2. To Use visual animations to illustrate how DES encrypts and decrypts data step by step

Use of Appropriate Methods:

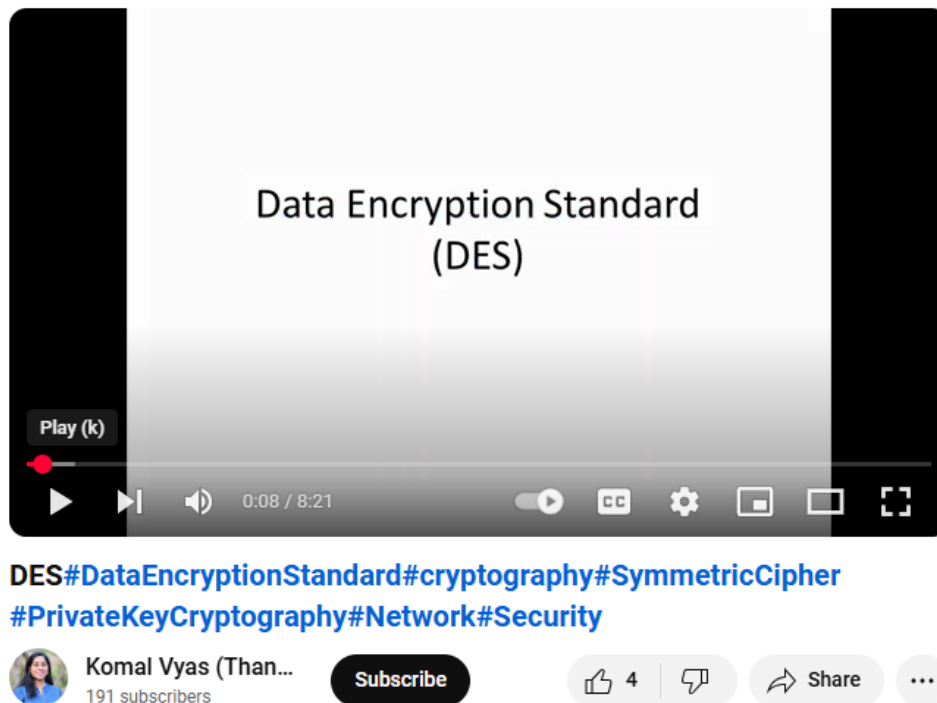To achieve the stated goals, the following methods were implemented:

1. Graphical animations are used to break down the Feistel structure, key expansion, and encryption rounds.

2. Step-by-step motion graphics depict how plaintext is transformed into ciphertext.

3. The Video was created using active presenter application and was uploaded on You-tube

4. Students were provided with the link of You-tube video prior to lecture

5. Students were informed to check the link before coming to class to enhance understanding.

6. Short quiz was conducted to do an assessment of student understanding

Significance of Results:

7. Enhances conceptual clarity and engages visual learners.

Effective Presentation:

1. Link was shared with all students

2. Short quiz was conducted to assess student understanding

Photo of the activity

PO's & PSO's Mapped:

PO1, PO2, PO3, PO5, PO12, PSO2

Reflective Critique:

The link of video was shared with other faculty members.

Mr. T. P. Marode suggested to add applications of DES.

Ms. Pallavi Bute suggested to provide a comparison of DES with AES.

Evidences of success:

Increased Student Engagement :75% of students have gone through the video and actively participated in the quiz**.**

Challenges faced during implementation:

It is hard to keep a track of who watched the video attentively.

If students don't understand part of the video, they may not ask questions, thus the advantage of real time support of live lecture is missing.

Link for peer review : https://forms.gle/WHFgTXekBHkE3eQ68