

K D K College of Engineering, Nandanvan, Nagpur

Department of Information Technology

**Expert Lecture on Security Vulnerabilities in Database and
Mitigation**

Expert Lecture Report

Dated: 22/04/2026

Venue: B-213



Submitted by-

**Prof. R. R. Kolte
Program Co-ordinator**

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Expert Lecture on Security Vulnerabilities in Database and Mitigation

Dated: 22/04/2026

Expert Lecture Report

Objective – The objective of the guest lecture was to create awareness among students about common database security vulnerabilities and the techniques used to mitigate them. The session aimed to provide knowledge of database threats, security best practices, access control mechanisms, encryption techniques, and preventive measures to protect sensitive organizational data from unauthorized access and cyber-attacks.

Description- The Department of Information Technology, K. D. K. College of Engineering, Nagpur, organized a Guest Lecture on "Security Vulnerabilities in Database and Mitigation." The lecture was delivered by an eminent expert in the field of Cyber Security and Database Management.

The speaker explained the importance of securing databases in modern organizations where sensitive information such as financial records, healthcare data, and personal information is stored. The lecture covered various database security threats including SQL Injection, privilege escalation, weak authentication, insider threats, data leakage, malware attacks, and unauthorized access.

The expert demonstrated how attackers exploit database vulnerabilities and discussed practical mitigation techniques such as role-based access control (RBAC), encryption of sensitive data, authentication mechanisms, database auditing, regular patch management, backup strategies, firewall protection, and secure coding practices.

Real-world case studies of major database breaches were presented to illustrate the consequences of poor database security. The session was highly interactive, allowing students to ask questions regarding cyber threats, secure database design, and current industry practices for protecting critical data.

Outcome

At the end of this event students will be able to:

1. **Understand Database Security Risks** - Students learned about various database vulnerabilities and cyber threats affecting modern information systems.
2. **Identify Common Database Attacks** - Participants understood SQL Injection, unauthorized access, privilege abuse, malware attacks, and insider threats.
3. **Apply Database Security Measures** - Students gained knowledge of authentication, authorization, encryption, backup, auditing, and access control mechanisms.
4. **Develop Secure Database Practices** - Participants understood industry best practices for designing, managing, and maintaining secure databases.



KDK College of Engineering, Nagpur
Department of Information Technology
2025-2026

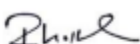
NOTICE

Date: 17-04-2026

All the Students of Third Year are hereby informed that Department of Information Technology is organizing **Guest Lecture** on the topic **“Security Vulnerabilities in Database and Mitigation”** on date 20th April 2026 at 10.45 am.

All students are encouraged to attend the session and gain valuable insights into database security and its best practices.


Prof. P. S. Dewalkar
Event Co-Coordinator
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Department of Information Technology
KDK College of Engineering,
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Prof. R. R. Kolte
Event Co-ordinator.
Assistant Professor
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Dr. Mrs. S.P. Khandait
(HOD, ITB)
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K D K College of Engineering, Nagpur
Department of Information Technology
Expert Lecture Report (Session: 2025-2026)

Category of the Activity:	Expert Lecture
Title of the Activity	Security Vulnerabilities in Database and Mitigation
Date of Activity	22 April 2026
No. of Students Involved:	Male: 38 Female: 31 Total: 69
Details of Invited Speaker	Dr. Needhi Lal, VNIT, Nagpur

Brief about an Activity	The Department of Information Technology organized a Guest Lecture on " Security Vulnerabilities in Database and Mitigation " by Dr. Needhi Lal, VNIT, Nagpur on 22/04/2026. It provide students with practical knowledge of database security challenges and mitigation strategies. The lecture focused on common security threats, attack techniques, secure database architecture, and industry-standard practices used to protect organizational databases.
Objectives	• To introduce database security concepts and vulnerabilities. • To explain common database attacks and cyber threats. • To demonstrate mitigation techniques and security best practices. • To create awareness about secure database management in industry.
Outcomes	• Students understood common database vulnerabilities. • Participants learned practical mitigation strategies. • Students became familiar with secure database administration techniques. • The lecture enhanced awareness regarding cyber security and database protection.

Faculty Coordinator	HoD/ Committee Incharge	IQAC Coordinator	Principal
 Prof. R. R. Kolte	 Dr. S.P.Khandait	 Dr. N.R. Dhange	 Dr. V.P. Varghese Principal

IQAC Coordinator, K. D. K. College of Engg.
KDK College of Engineering
Nagpur

Report



Learning Database Security from Industry Expert Dr. Needhi Lal

The Department of Information Technology successfully organized a Guest Lecture on **"Security Vulnerabilities in Database and Mitigation."** The session provided students with valuable knowledge regarding the importance of securing databases against modern cyber threats.

The resource person explained different database vulnerabilities including SQL Injection, weak authentication, privilege escalation, insider attacks, malware, and data breaches. Practical demonstrations highlighted how attackers exploit vulnerable database systems and how such attacks can be prevented through secure coding, encryption, authentication, authorization, auditing, regular software updates, and backup mechanisms.

Several real-world examples of database security incidents were discussed to help students understand the importance of implementing robust security policies in organizations. The interactive session encouraged active participation from students, who clarified their doubts regarding database protection and cyber security practices.

Overall, the guest lecture was highly informative and significantly enhanced students' understanding of database security, risk management, and mitigation strategies used in today's IT industry.



K. D. K. College of Engineering
Department of Information Technology
Session 2025-26
Guest Lecture on

"Security Vulnerabilities in Database and Mitigation"

Speaker: Dr. Nidhi Lal, VNIT, Nagpur

Date: 22/04/2026

Sr. NO.	Roll No.	Name of Student	Signature
1	11	Kurnisha D. Bhiskar	
2	2	Aranksha A. Sungwasankhi	
3	72	Aranksha D. Mendhe	
4	13	Prachi A. Gandhi	
5	27	Trishna G. Tikare	
6	06	Apurva P. Rode	
7	9	Dhanashri D. Fule	
8	7	Chhavi A. Pendam	
9	73	Tanushri H. Bhandarkar	
10	8	Devayantee C. Ghatolkar	
11	10	Khushi Y. Bhivgade	
12	03	Anagha K. Gawande	
13	02	Aditi K. Gawande	
14	17	Saniya S. Patil	
15	16	Priya R. Hardiya	
16	15	Priyanka S. Hajare	
17	21	Shruti P. Hoge	
18	19	Shivani P. Kumbhakar	
19	18	Sejal Gachane	
20	20	Shravan Kedar	
21	04	Anjali Tamhade	
22	23	Shital V. Bhandarkar	
23	12	Nikita S. Khurazi	
24	05	Ankita D. Waghmare	
25	28	Valishnavi H. Chauhan	
26	63	Shravan V. Borghavkar	
27	26	Tanaya N. Kharvade	
28	24	Ashwini Chavhan	
29	55	Gomti V. Nandke	
30	38	Arshant B. Meshram	
31	69	Shivish N. Walke	
32	64	Sameer C. Lambat	
33	25	Swara Sawarkar	
34	53	Shreyas Challe	



K. D. K. College of Engineering
Department of Information Technology

Session 2025-26

Guest Lecture on

"Security Vulnerabilities in Database and Mitigation"

Speaker: Dr. Nidhi Lal, VNIT, Nagpur

Date: 22/04/2026

Sr. NO.	Roll No.	Name of Student	Signature
35	34	Damshu K. Dhote	
36	33	Deep K. Sathurkar	
37	41	Karan G. Vaidya	
38	66	Prayag N. Kula	
39	51	Abdesh Pimpalkar	
40	48	Rahul Chauhan	
41	40	Harshwardhan Hirode	
42	36	Ethen Wankhede	
43	54	Sujal S. Kankekar	
44	47	Rahul Paudyal Chauhan	
45	46	Pranav Gondekar	
46	60	Yash Vyvalhore	
47	58	Vedant Jangjude	
48	44	Kishan A. Harale	
49	65	Darshan R. Mendhe	
50	45	Paawan D. Gupta	
51	43	Krushal M. Deogade	
52	68	Ayush B. Titare	
53	62	Ramnik P. Meshram	
54	49	Rohan D. Sakore	
55	57	Vedant J. Shinde	
56	67	Ahishuk Dongare	
57	71	Ayush S. Motghare	
58	52	Satish V. Ambekar	
59	32	Blupendingy Marbate	
60	39	Harsh T. Bopche	
61	29	Abhinav Lokbale	
62	50	Sameer Nayak	
63	61	Yukant Kamble	
64	30	Anuj Torwade	
65	31	Aya Besarkar	
66	37	Gaurav Vinod Goge	
67	35	Dinesh Vasant Pawar	
68	14	Bajakta R. Ghike	



K. D. K. College of Engineering
Department of Information Technology

Session 2025-26

Guest Lecture on

"Security Vulnerabilities in Database and Mitigation"

Speaker: Dr. Nidhi Lal, VNIT, Nagpur

Date: 22/04/2026

Sr. NO.	Roll No.	Name of Student	Signature
69	22	Archa. D. Jhokale	HL
70			
71			
72			
73			

Prof. P. S. Dewalkar
Event Cocordinator

Prof. R. R. Kolte
Event Coordinator



"SERVICE TO THE SOCIETY THROUGH QUALITY TECHNICAL EDUCATION"

K.D.K. COLLEGE OF ENGINEERING
AN AUTONOMOUS INSTITUTE
(ACCREDITED BY NAAC & NBA)



DEPARTMENT OF INFORMATION TECHNOLOGY

Expert Lecture on Security Vulnerabilities in Database and Mitigation

Speaker
Dr. Needhi Lal, VNIT, Nagpur

Date: 22/04/2026 **Venue: B-213**

Prof. P. S. Dewalkar
Event Cocordinator

Prof. R. R. Kolte
Event Coordinator

Dr. Mrs. S. P. Khandait
(HOD, IT)

Dr. A. M. Badar
Vice Principal, KDKCE

Dr. Valsson Varghes
Principal, KDKCE

Photographs





Students attending the Guest Lecture on Database Security