



XAVIER INSTITUTE OF ENGINEERING

Mahim, Mumbai 400016

Department of Information Technology

(NBA Accredited)

(Approved by AICTE, Govt. of Maharashtra and Affiliated to University of Mumbai)

Title of the event: Guest Lecture on “Industry Perspective on Connecting Frontend with Backend Technologies”

Event Date / Time: 30th September 2023 / 9:00 AM to 11:00 AM

Event Coordinators: Prof. Jyotsna More

Guest of Event: Mr. Varun Sheth

No. of Participants: 63

Class/Semester: SE-IT/III

Objectives:

- **Conceptual Clarity:** Ensure students grasp the fundamental role of JDBC in application development.
- **Practical Exposure:** Provide hands-on experience in developing a prototype shopping application using JDBC in PHP and MySQL.
- **Cross-Domain Applicability:** Demonstrate how JDBC is relevant in AI, optimization, and machine learning.
- **Problem-Solving Algorithms:** Explore the use of JDBC in designing efficient algorithms for problem-solving.
- **Interactive Learning:** Foster an engaging environment for active student participation.
- **Understanding API and Cookies:** Introduce the concepts of API and cookies in the context of web applications.
- **Database Functionality:** Showcase the practical aspects of database functionality, emphasizing real-time transactions.
- **Encouragement for Future Learning:** Motivate students to seek further guidance and support for continuous learning.

Description:

On September 30, 2023, a special lecture on Industry Perspective on Connecting Frontend with Backend Technologies unfolded at Xavier Institute of Engineering. Ms. Jyotsna More, the subject incharge of DBMS arranged the session to guide students through the intricacies of JDBC as a part

of Industry Perspectives. Mr. Varun Sheth conducted the session on a special request by Ms. Jyotsna More.

The session kicked off with a comprehensive introduction to JDBC connections, underscoring their central role in any application. Expert lights on the efficiency of databases, with a specific focus on PHP and MySQL guidance, using servers like Wamp and Xamp for database maintenance. Expert's efforts came to life as he led a practical demonstration. He not only crafted a prototype shopping application but also elucidated the relationship between frontend and backend. Students gained hands-on experience in establishing connections, understanding the role of API, and grasping the concept of cookies on websites.

Navigating through PHP and MySQL connection methods, expert demystified complex concepts with a basic example of PHP connection through a simple index.html file, making it accessible even to students with limited knowledge of PHP. Real-life examples were provided, introducing the concept of API and its role in application development. Despite varying levels of familiarity with PHP, expert's clear explanations enabled most students to comprehend intricate details.

The session showcased database functionality, with expert demonstrating a real-time balance check in transactions. The backend magic was revealed as he explained how the application automatically adjusted the account balance after an online payment, ensuring a seamless and efficient user experience. The latter part of the session focused on JDBC structure, detailing requirements, methods, and statements such as PreparedStatement and Connection. Expert provided an overview of how JDBC connections could be utilized efficiently. The session concluded with a brief introduction to media queries, leaving students with a holistic understanding of the topic.

Expert encouraged students to reach out whenever needed, assuring them of continued guidance. Ms. Jyotsna More actively assisted students during the session, creating a collaborative learning environment. In essence, the special lecture not only covered the technical aspects of JDBC but also provided practical insights, making it an engaging and enriching experience for the SE IT students at Xavier Institute of Engineering.

POs achieved: PO1, PO2, PO3, PO4, PO5, PO8, PO9, PO10, PO12

PSOs achieved: PSO1, PSO2

Event Photos:



Expert explaining about API Protocols



Discussing Overview of JDBC Connection



Students noting down the key aspects of JDBC



Clearing the concepts about backend

Ms. Jyotsna More
Event Coordinator

Dr. Jaychand Upadhyay
HOD-IT

Dr. Y.D. Venkatesh
Principal