Lab # 11: DBMS LAB Project – Complete Project & Deployment

OBJECTIVES OF THE LAB

This lab covers last part of DBMS Lab Project Submission that is complete project and its deployment.

- *Complete Project*
  - *Database Design*
  - *User Interface*
  - *Backend Development*
  - *Error Handling and Validation*
  - *Security and Authentication*
  - *Testing*
- *Deployment*
  - *Server Setup*
  - *Database Setup*
  - *Application Deployment*
  - *Configuration and Environment Setup*

COMPLETE PROJECT & DEPLOYMENT

The complete project consists of database design (i.e. conceptual schema and normalized relational schema), user interface, database (SQL/NoSQL), and backend development in Laravel or Django or Node, etc. The project must implement measures to ensure data security and user authentication. Also, it takes only the validated data and implement error handling mechanisms. Lastly, it must be tested thoroughly identify and fix bugs, ensure the application functions as expected, and meets the requirements specified for the lab project.

Deployment includes hosting on a server or cloud platform to make it accessible to users. This involves selecting an appropriate hosting service and configuring the server environment to support the DBMS project. The database used in the project should be set up and configured in the deployment environment. The project code is deployed to the target server or hosting environment. This typically involves transferring the necessary files, including the front-end code, back-end code, configuration files, and any other required dependencies. Tools such as Git or FTP can be utilized. The project's

configuration settings, such as database connection details, security settings, and system parameters, need to be appropriately configured for the deployment environment. After deployment, additional testing must be conducted in the production environment to validate that the project is functioning correctly.

----------Task 11.1----------

Submit the complete DBMS Lab project in soft form.

----------Task 11.2----------

Deploy your work. Follow the steps below to complete the deployment process:

1. Select an appropriate hosting service or cloud platform to make the DBMS project accessible to users. Consider factors such as scalability, performance, security, and cost-effectiveness.
2. Configure the server environment to support the DBMS project.
3. Set up and configure the database in the deployment environment. Create the necessary database instances, tables, and indexes. Configure the database connection details and access controls.
4. Deploy the project code to the target server or hosting environment. Transfer the required files, including the front-end code, back-end code, configuration files, and any other dependencies. Utilize tools such as Git or FTP for efficient and controlled code deployment.
5. Configure the project's settings for the deployment environment. Adjust the database connection details, security settings, and system parameters as required.
6. Conduct additional testing in the production environment to validate the functionality of your DBMS project. Test different scenarios, perform stress testing, and ensure that the system handles real-world data and user interactions effectively.