

Lab Assignment 1 - Introduction to Databases

Instructions

1. Answer the below question in the boxes.
2. Please submit the assignment through TalentLabs Learning System.

Database 101

1. Suggest 3 applications/softwares/apps which can utilize Database.

1. Facebook
2. Twitter
3. Youtube

2. Consider a payment application (Like Paypal or a banking app). How would a database play a role in the payment system? Can you mention 2 user operations that rely on the database of a payment application?

The database stores sensitive user information, such as account details, transaction history, and payment methods.

1. Making a payment
2. Viewing Transaction History
3. Viewing account balance

Database Concept

Consider a movie rating website. The website is able to display movie details e.g. movie name, directors, actors etc. Also, users can rank and review the movies.

1. Suggest 3 data tables for the website.

1. Users Table – Table that stores information on users e.g. user ID, username, email address
2. Movies Table – Table that stores information on movies e.g. movie title, directors, actors, release date
3. Ratings Table – Table that stores information on rating of movies by user

2. Suggest 5 data fields that should be available on the database.

1. Movie Title
2. User ID
3. Rating
4. Date/Time
5. Review

Types of Databases

1. Name 2 Relational Database Software.

1. Oracle
2. MySQL

Roles of Database in Detail

Consider a user registering an account on a social media website (e.g. Twitter). Describe the role of the below elements when the user pressed the “Register” button.

1. App / Website

1. Collect user information
2. Validate user information
3. Create user account
4. Setting up user profile
5. Send confirmation/verification email on registration

2. Database

1. Store user information
2. Verifying user information
3. Authentication of user credentials when user tries to register

- End of Assignment -