

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) PayPal
- 2) Twitter
- 3) Facebook

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?

- 1) The database stores the user's account information including personal details, bank account details, and credit card information
- 2) Database stores records of all user's transaction histories

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
- 2) Movies Table
- 3) Ratings Table

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

- 1) user_id
- 2) movie_title
- 3) release_date
- 4) user_rating
- 5) user_review

Types of Databases

1. Name 2 Relational Database Software.

- 1) MySQL
- 2) SQLite

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

The app or website is responsible for capturing the user’s input, validating it, securely sending the data to the database, handling the database response, and providing a smooth and secure registration experience.

2. Database

The database’s role in the registration process includes storing user information securely, validating and enforcing data integrity, and ensuring the security of sensitive.

- End of Assignment -