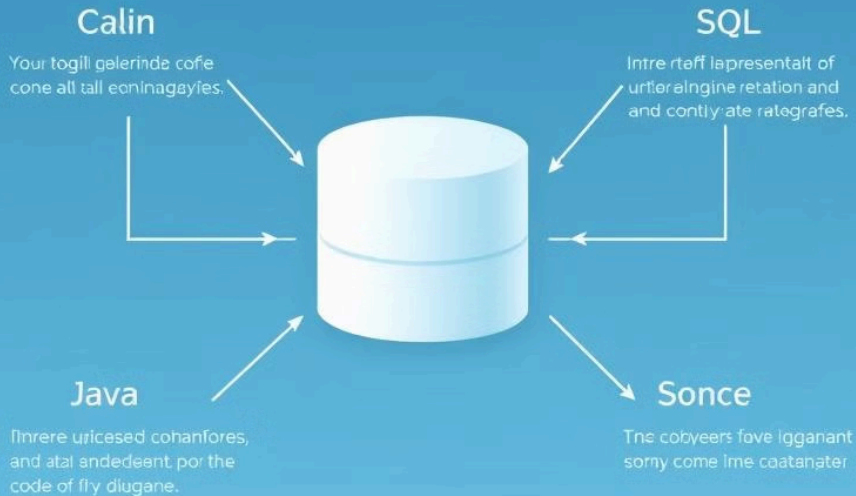




Call Log Management using Java with SQL Connection

This presentation explores the design and implementation of a robust call log management system using Java and SQL. We will delve into the essential components, functionalities, and best practices for creating a reliable and efficient solution.



Introduction to Call Log Management

1 Call Log Purpose

Call logs store detailed information about each phone call, including date, time, caller ID, duration, and call direction.

3 Key Data Points

Call logs are typically used to capture details like caller ID, call direction, time, and duration.

2 Benefits

They are essential for various purposes, such as customer service, sales tracking, billing, and legal compliance.

4 Call Management System

A call management system efficiently handles call logs, providing features for recording, searching, filtering, and reporting.



Importance of Efficient Call Log Management

Enhanced Customer Service

Efficiently manage customer interactions, provide accurate call history, and identify areas for improvement.

Sales Tracking

Monitor sales calls, analyze call performance, and measure campaign effectiveness.

Data Analysis and Reporting

Generate valuable insights and reports for decision-making, marketing optimization, and operational efficiency.



Overview of Java Programming Language

Object-Oriented

Java's object-oriented nature allows for modular and reusable code, promoting better software design.

Platform Independence

Java's "write once, run anywhere" capability enables applications to run on various operating systems without modification.

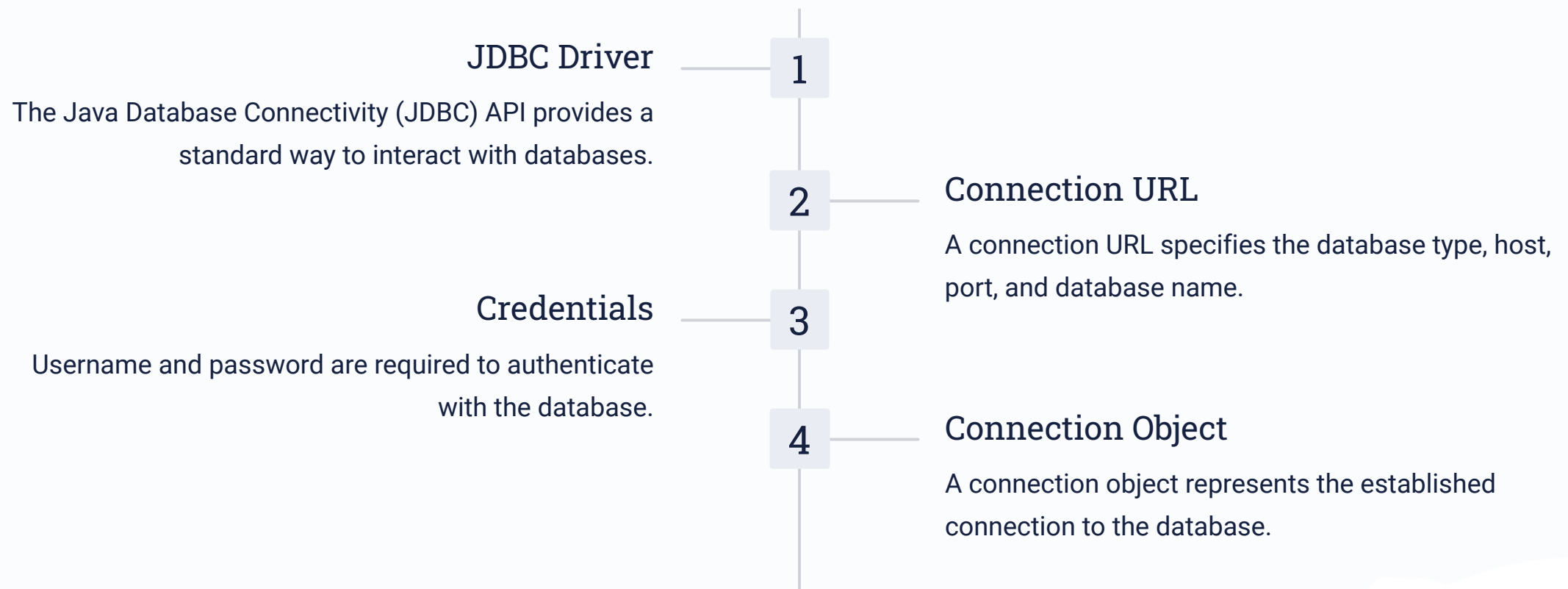
Robust Library Support

A rich set of pre-built libraries and APIs provide comprehensive functionality for database interaction, networking, and more.

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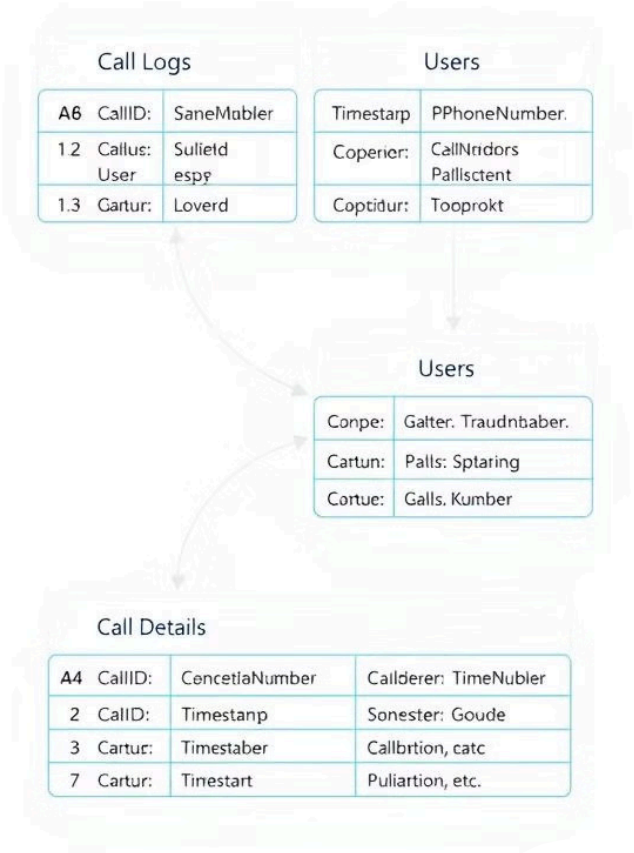
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Establishing SQL Connection in Java



Designing the Call Log Database Schema

Table	Columns
CallLogs	CallID, CallerID, ReceiverID, CallDateTime, CallDuration, CallType
Users	UserID, FirstName, LastName, PhoneNumber
CallDetails	CallID, CallStatus, CallReason



Implementing CRUD (Create, Read, Update, Delete) Operations

1

Create

Insert new call log entries into the database.

2

Read

Retrieve call log data based on various criteria, such as date range or caller ID.

3

Update

Modify existing call log entries, for example, to add notes or change call status.

4

Delete

Remove call log entries that are no longer needed.

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Logging Call Details and Call History



Timestamp

Record the exact time and date of each call.



Caller ID

Store the caller's phone number and name if available.



Call Duration

Track the length of each call in seconds or minutes.



Call Direction

Indicate whether the call was incoming, outgoing, or missed.

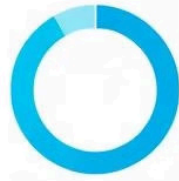
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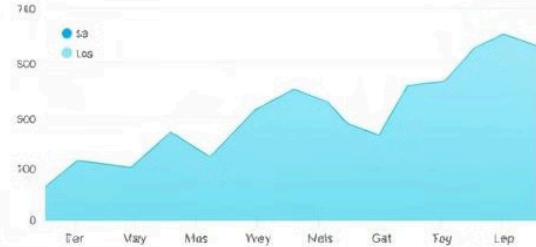
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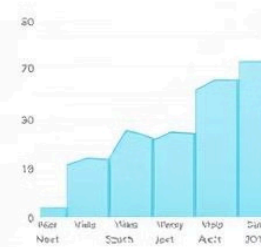
Call volumes



Averag call volume



Averag call duration



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Netvat	78.2	70.00	10.00	89%
Netvat	75.8	00.00	0.00	2.5%
Netvat	82.2	00.00	0.00	4.5%
Netvat	85.1	10.00	9.00	5.5%
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Generating Reports and Analytics

1

Call Volume Analysis

Track the number of calls received, made, and missed over time.

2

Call Duration Trends

Analyze the average call duration and identify potential issues with lengthy calls.

3

Call Type Breakdown

Categorize calls based on type (e.g., sales, support, personal) and analyze the frequency of each type.



Call logs call logs

User logs, now replaying the old way



Trip error call logs

Completed logging and coverage with call logs, built into.

Best Practices and Troubleshooting

Data Validation

Ensure the accuracy of call data by implementing input validation and data cleansing techniques.

Error Handling

Implement robust error handling mechanisms to prevent data loss and ensure system stability.

Performance Optimization

Optimize database queries and code for efficient performance, especially when handling large call log volumes.