

MYSQL

Duration- 4 Days

Prerequisite -

- Basic programming language of Java.
- Basics of database management system.
- Experience in using various tools such as Eclipse in developing applications.
- Knowledge of computer.

Course Objective - Understand basic concepts of how a database stores information via tables. Understanding of SQL syntax used with MySQL. Learn how to retrieve and manipulate data from one or more tables. Know how to filter data based upon multiple conditions.

Lab Setup Details -

Hardware requirement:

CPU : I4/I5 , Hard Disk : 50GB , RAM :8 GB

Software Requirement:

- XAMPP <https://www.apachefriends.org/download.html> (DOWNLOAD VERSION 5.6.31)
- MSOFFICE 2010
- NOTEPAD++ <https://notepad-plus-plus.org/download/v7.5.1.html> (DOWNLOAD VER 7.5.1)
- SUBLIME TEXT3 <https://www.sublimetext.com/3>
- Visual Studio Code <https://code.visualstudio.com/download>
- PDF READER <https://adobe-reader.en.softonic.com/download>
- Browser Google Chrome OS Window 10

Course Outline-

Day 1

MYSQL DATA DEFINITION using SQL

- Manage Databases
- MySQL Table Types
- MySQL Data Types
- MySQL CREATE TABLE
- MySQL Primary Key
- MySQL Foreign Key
- MySQL Sequence
- MySQL INT Data Type
- MySQL DECIMAL Data Type
- MySQL DATE Data Type
- MySQL TIME Data Type
- MySQL DATETIME Data Type
- MySQL ALTER TABLE
- MySQL RENAME TABLE
- MySQL ADD COLUMN

- MySQL DROP TABLE

Basic Data Manipulation using SQL

- SQL Syntax
- What is DDL, DML and DCL?
- SQL Select
- SQL Distinct
- SQL Where
- SQL And & Or
- SQL Order By
- SQL Insert Into
- SQL Update
- SQL Delete
- SQL Select Top
- SQL Like
- SQL In
- SQL Between
- SQL Sub Query
- SQL Aliases

Day 2

- SQL Joins
 - SQL Inner Join
 - SQL Left Join
 - SQL Right Join
 - SQL Full Join
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- SQL Union
 - SQL Create DB
 - SQL Create Table
 - SQL Constraints
 - SQL Not Null
 - SQL Unique
 - SQL Primary Key
 - SQL Foreign Key
 - SQL Check
 - SQL Default
 - SQL Create Index
 - SQL Drop
 - SQL Alter
 - SQL Auto Increment
 - SQL Views

- SQL Dates
- SQL Null Values
- SQL Data Types

Day 3

SQL Functions

- SQL Avg()
- SQL Count()
- SQL First()
- SQL Last()
- SQL Max()
- SQL Min()
- SQL Sum()
- SQL Group By
- SQL Having
- SQL Ucase()
- SQL Lcase()
- SQL Mid()
- SQL Len()
- SQL Round()
- SQL Now()
- SQL Format()

MYSQL STORED PROCEDURES

- MySQL Stored Procedures Introduction
 - MySQL Stored Procedures Getting Started
 - MySQL Stored Procedure Variables
 - Creating Stored Procedure in MYSQL
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- MySQL Stored Procedure Parameters
 - MySQL IF Statement
 - MySQL CASE Statement
 - IF vs. CASE
 - MySQL Loop Statements

Day 4

Introduction to SQL Trigger

- MySQL Triggers Implementation
- Create Trigger in MySQL
- Managing Triggers in MySQL
- Create Multiple Triggers For The Same Trigger Event

MYSQL VIEWS

- Introduction to Database View
- Views in MySQL
- MySQL CREATE VIEW
- MySQL Views & WITH CHECK OPTION
- Creating MySQL Updatable Views
- LOCAL & CASCADED in WITH CHECK OPTION
- Managing Views in MySQL

MYSQL CASE STUDY AND POST ASSESSMENT