MySQL 5.6 Developer Certification Exam Topics

MySQL Architecture

* Use MySQL client programs to interface with the MySQL Server interactively and in batch
* Describe SQL Modes and their impact on behavior of MySQL
* Identify characteristics which have session scope

General MySQL Syntax

* Explain MySQL of identifiers including case sensitivity, qualified names, aliases and use of reserved words
* Identify MySQL data type properties and appropriate usage
* Recognize and use common functions and expressions for all MySQL data types
* Identify and use comment syntax
* Describe and utilize prepared statements
* Describe transactions and transaction isolation levels and the impact they have on database behavior

Creation and Design of MySQL Schema Objects

* Design and create normalized databases
* Create and modify tables using appropriate data types and indexing
* Describe and create table constraints enforcing data integrity
* Creating and modifying views
* Identify and use various methods to obtain metadata for MySQL database objects

Creation, Design and Use of MySQL Stored Programs

* Describe and use triggers
* Create and execute stored procedures
* Create and use stored functions
* Implement error handling within stored procedures

Querying for Data

* Execute a basic SELECT statement
* Limit rows returned by a SELECT statement
* Limit columns returned by a SELECT statement
* Apply sorting to SELECT statement results
* Execute SELECT statements which aggregate and group data

Modifying Data

* Describe and execute INSERT statements
* Describe and execute REPLACE statements
* Describe and execute UPDATE statements
* Describe and execute TRUNCATE statements
* Describe and execute LOAD DATA statements
* Describe and execute DELETE statements

Joins, subqueries and UNION

* Identify, describe and use JOINs in MySQL commands
* Describe and utilize subqueries in MySQL commands
* Perform operations using UNION clause

MySQL Application Development

* Identify key characteristics, features & options for PHP, Java & .NET development using MySQL standard drivers
* Write a basic Java application that uses MySQL
* Write a basic PHP application that uses MySQL
* Write a basic .NET application that uses MySQL
* Interpret MySQL error messages
* Collect available diagnostic information
* Describe and use NoSQL and memcached API

Basic Optimizations

* Identify statements requiring optimization
* Recognize and create optimal indexes for query optimization
* Recognize and fix sub-optimal SQL commands
* Identify appropriate optimization strategies for InnoDB usage
* Optimize performance through data normalization