Quiz 2 Study Topics

Data dictionary

Data type, data length, default value, value range

Why data types matter

Data types that act as constraints

NUMERIC

* INT
* tinyint
* smallint
* medium int
* Bigint
* Float
* Double
* Decimal

DATE/TIME

* Date
* Time
* DateTime
* Timestamp
* Year

STRINGS

* Char (situations where better than VARCHAR)
* Varchar (situations where better than (CHAR)
* Text
* Blob
* SET and ENUM

Cascade Update Options (Cascade, Restrict/Deny, Nullify, Set Default)

Cascade Delete Options (Cascade, Restrict/Deny, Nullify, Set Default)

Link between mandatory/optional and allowing nulls in an FK value

Indexes – how do indexes improve performance.

How should you choose a good index?

Views

Types of view: Data Views, Aggregate Views, Validation Views,

Database oriented business rules

Field specific rules

Relationship specific rules

Field specific constraints you can implement in MySQL

CHECK

Normalization definition

Denormalization definition and rationale

Definitions: 1NF, 2NF, 3NF, BCN

Partial dependency

Transitive dependency

Subquery definitions: nested, correlated

Trigger definition

6 trigger options

Transaction definition

Concurrency control definition

Lock types: write/read; Table, Page, Row Lock

Elements of ACID transactions

Query types:

Three table queries – write a query based on tables

Outer joins (aka right/left join) – write a query based on tables

Union and Union All –just definitions/descriptions

Subqueries Nested: Scalar & Multirow - write a query based on tables

Correlated – just definitions/descriptions, no queries

Window Functions - write a query based on tables

CHECK