Database from beginner to expert

Contents: -

Section 1- About this course, database and software engineering

1- Basic introduction with software development, database, works and future

Section 2- Getting started: overview and installation

How to install MySQL on windows machine.

1- we use WAMP here
2- describe WAMP apache server, php website, SQL database GUI
3- fix localhost in apache > httpd.conf
4- fix phpmyadmin in wamp > alias > phpmyadmin.conf
5- execute SQL command line
6- introduce different database
7- introduce different database command
8- run MySQL help, show database, select @@hostname command

Section 3: Creating database and tables

Introduce to new database command

1- create a new Database
2- show database
3- delete database
4- how to use the created database
5- see what database we are currently using

introducing about tables

1- data type in a database
2- creating table
3- show tables
4- deleting tables
5- data type activity

Section 4- Inserting data and couple of other things

1- inserting data
2- introduction to select
3- multiple insert
4- insert challenge
5- warning message
6- null statement
7- setting default values
8- primary key
9- section exercise

Section 5- CRUD commands

1- Introduction to crud
2- Preparing our data
3- Introduction to select command
4- Introduction to where command
5- Select challenges
6- Introduction to aliases
7- Introduction to Update command
8- Update challenge
9- Introduction to delete command

Section 6- CRUD challenge section

1- crud exercise create solution
2- crud exercise read solution
3- crud exercise update solution
4- crud exercise delete solution

Section 7- World of string function

1- running SQL file
2- loading our book data
3- working with concat
4- introducing substring
5- introducing replace
6- using reverse
7- working with character length
8- changing case with upper and lower

9- string function challenges

Section 8- Refining our selection

1- Seed data: Adding couple of new books
2- Using distinct
3- Sorting data with order by
4- Using limit
5- Better searches with like
6- Like part 2: more wildcard
7- Refining selection exercise

Section 9- Magic of aggregate function

1- The count functions
2- The joys of group by
3- Min and max basics
4- Subqueries: min and max problem
5- Using min and max with group by
6- The sum functions
7- The average function
8- Aggregate function challenges
9- Aggregate function challenges solution

Section 10- Revisiting data type

1- Character and varcharacter
2- Decimal
3- Float and double
4- Date, time and datetime
5- Create date data
6- Curdate, curtime and now\
7- Formatting dates
8- Date math
9- Working with timestamps
10- Datatype exercises

Section 11- Power of logical operators

1- Not equal

2- Not like
3- Greater than
4- Less than
5- Logical And
6- Logical OR
7- Between
8- In and not in
9- Case statement
10- Logical operators exercise
11- Logical operator exercise solution

Section 12- One to Many Relationship

1- Real word data is messy
2- Types of data relationships
3- One to many: the basics
4- Working with foreign keys
5- Cross join
6- Inner join
7- Left join
8- Right join: part 1
9- Right join: part 2
10- Right and left join: a common question
11- Our first join exercise e
12- Our first join exercise solution
13- Our first join exercise 2
14- Our first join exercise solution 2

Section 13- Many to Many Relationship

1- Many to many basics
2- Crating our tables
3- TV joins challenges 1
4- Tv joins challenges 1 solution
5- Tv join challenges 2
6- Tv join challenges 2 solution
7- Tv joins challenges 3
8- Tv join challenges 3 solution
9- Tv joins challenges 4
10- Tv join challenges 4 solution
11- Tv joins challenges 5

12- Tv join challenges 5 solution
13- Tv joins challenges 6
14- Tv join challenges 6 solution
15- Tv joins challenges 7
16- Tv join challenges 7 solution

Section 14- Instagram database clone

1- Introducing to Instagram database clone schema
2- Cloning Instagram database: users schema
3- Cloning Instagram database: photos schema
4- Cloning Instagram database: comments schema
5- Cloning Instagram database: likes schema
6- Cloning Instagram database: flowers schema
7- Cloning Instagram database: hashtag part 1 schema
8- Cloning Instagram database: hashtag part 2 schema
9- Cloning Instagram database: comments schema
10- Cloning Instagram database: comments schema

Section 15- Working with Instagram data

1- Loading the jumbo dataset
2- Instagram clone challenge 1
3- Instagram clone challenge 1 solution
4- Instagram clone challenge 2
5- Instagram clone challenge 2 solution
6- Instagram clone challenge 3
7- Instagram clone challenge 3 solution
8- Instagram clone challenge 4
9- Instagram clone challenge 4 solution
10- Instagram clone challenge 5
11- Instagram clone challenge 5 solution
12- Instagram clone challenge 6
13- Instagram clone challenge 6 solution
14- Instagram clone challenge 7
15- Instagram clone challenge 7 solution

Section 16- Introduction PHP and NodeJS

1- MySQL and other languages

2- About php
3- Introduction to join us app
4- Setting up cloud WAMP for node
5- About faker install
6- Introduction NPM and Faker
7- Introducing MySQL package
8- Connecting node to my SQL
9- Creating our users table
10- Selecting using node
11- Inserting using node
12- Some my SQL and node magic
13- Bulk inserting 500 users
14- 500 users exercise
15- 500 users exercise solution

Section 17- Database Triggers

1- Create Instagram database
2- Add trigger to database to control user input only adult
3- Add trigger to database to stop following yourself

Section 18- Building our web app

1- Our first simple web app
2- The code
3- Data inserted in database
4- Connect the web app and database
5- Check the result