

Nama : ALFIAN PANDU

NIM : L200180027

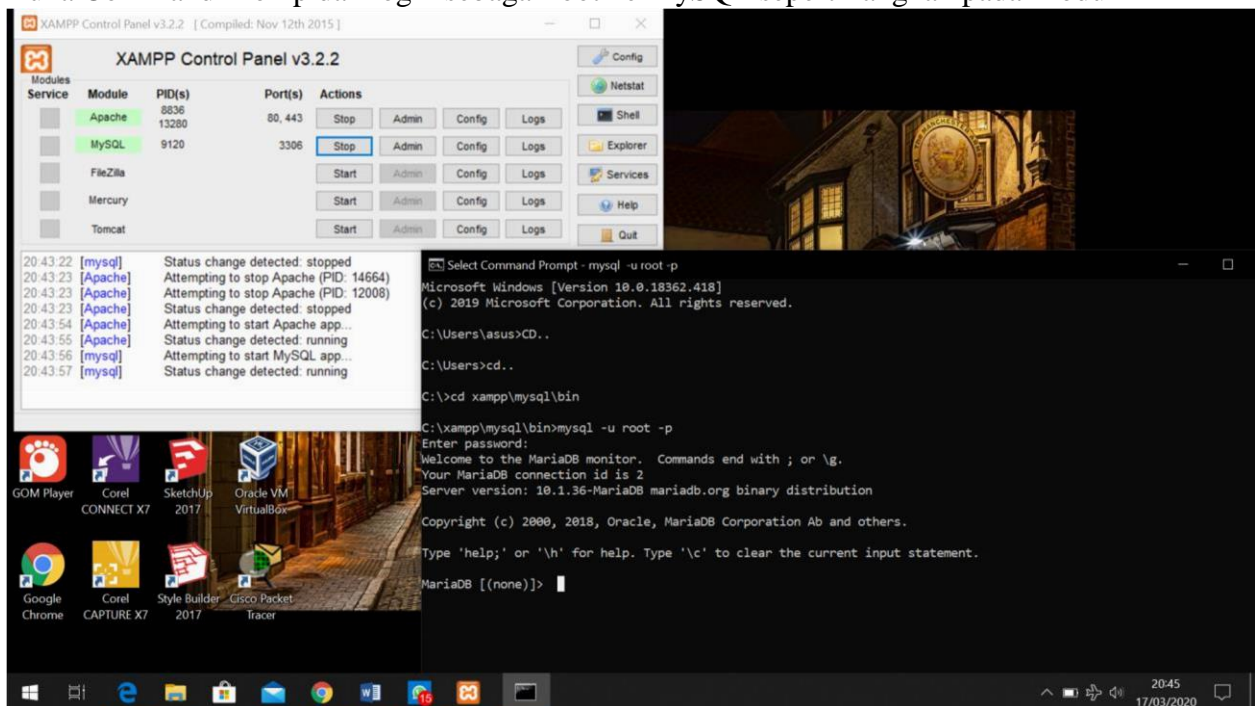
Kelas : B

Modul 4

Data Definition Language (DDL) Langkah-langkah

Praktikum

1. Jalankan XAMPP Control Panel
2. Jalankan server Apache dan MySQL
3. Buka Command Promp dan login sebagai root ke MySQL seperti langkah pada Modul 1



Create database perbankan dan tampilan perbankan

```
Command Prompt - mysql -u root -p

MariaDB [(none)]> use perbankan1;
ERROR 1049 (42000): Unknown database 'perbankan1'
MariaDB [(none)]> create database perbankan1;
Query OK, 1 row affected (0.00 sec)

MariaDB [(none)]> use perbankan1;
Database changed
MariaDB [perbankan1]> CREATE TABLE nasabah(
  -> id_nasabah INTEGER PRIMARY KEY,
  -> nama_nasabah VARCHAR(45) NOT NULL,
  -> alamat_nasabah VARCHAR(255) NOT NULL
  -> );
Query OK, 0 rows affected (0.02 sec)

MariaDB [perbankan1]> CREATE TABLE cabang_bank(
  -> kode_cabang VARCHAR(20) PRIMARY KEY,
  -> nama_cabang VARCHAR(45) UNIQUE NOT NULL,
  -> alamat_cabang VARCHAR(255) NOT NULL
  -> );
Query OK, 0 rows affected (0.03 sec)

MariaDB [perbankan1]> CREATE TABLE rekening(
  -> no_rekening INTEGER PRIMARY KEY,
  -> kode_cabangFK VARCHAR(20) REFERENCES cabang_bank(kode_cabang) ON DELETE CASCADE ON UPDATE CASCADE,
  -> pin VARCHAR(20) DEFAULT '1234' NOT NULL,
  -> saldo INTEGER DEFAULT 0 NOT NULL
  -> );
Query OK, 0 rows affected (0.03 sec)

MariaDB [perbankan1]> CREATE TABLE transaksi(
  -> no_transaksi SERIAL PRIMARY KEY,
  -> id_nasabahFK INTEGER REFERENCES nasabah(id_nasabah) ON DELETE SET NULL ON UPDATE CASCADE,
  -> no_rekeningFK INTEGER REFERENCES rekening(no_rekening) ON DELETE SET NULL ON UPDATE CASCADE,
  -> jenis_transaksi VARCHAR(20) DEFAULT 'debit' NOT NULL,
  -> tanggal DATETIME NOT NULL DEFAULT CURRENT_TIMESTAMP,
  -> jumlah INTEGER NOT NULL CHECK (jumlah>=2000)
  -> );
Query OK, 0 rows affected (0.03 sec)

MariaDB [perbankan1]> CREATE TABLE nasabah_has_rekening(
  -> id_nasabahFK INTEGER REFERENCES nasabah(id_nasabah) ON DELETE CASCADE ON UPDATE CASCADE,
  -> no_rekeningFK INTEGER REFERENCES rekening(no_rekening) ON DELETE CASCADE ON UPDATE CASCADE,
  -> PRIMARY KEY(id_nasabahFK, no_rekeningFK)
  -> );
Query OK, 0 rows affected (0.03 sec)
```

```
Command Prompt - mysql -u root -p

MariaDB [perbankan1]> CREATE TABLE nasabah_has_rekening(
  -> id_nasabahFK INTEGER REFERENCES nasabah(id_nasabah) ON DELETE CASCADE ON UPDATE CASCADE,
  -> no_rekeningFK INTEGER REFERENCES rekening(no_rekening) ON DELETE CASCADE ON UPDATE CASCADE,
  -> PRIMARY KEY(id_nasabahFK, no_rekeningFK)
  -> );
Query OK, 0 rows affected (0.03 sec)

MariaDB [perbankan1]> show tables;
+-----+
| Tables_in_perbankan1 |
+-----+
| cabang_bank          |
| nasabah              |
| nasabah_has_rekening |
| rekening              |
| transaksi             |
+-----+
5 rows in set (0.00 sec)

MariaDB [perbankan1]> describe nasabah;
+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+
| id_nasabah | int(11)   | NO   | PRI | NULL    |       |
| nama_nasabah | varchar(45) | NO   |     | NULL    |       |
| alamat_nasabah | varchar(255) | NO   |     | NULL    |       |
+-----+
3 rows in set (0.01 sec)

MariaDB [perbankan1]> describe cabang_bank;
+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+
| kode_cabang | varchar(20) | NO   | PRI | NULL    |       |
| nama_cabang | varchar(45) | NO   | UNI | NULL    |       |
| alamat_cabang | varchar(255) | NO   |     | NULL    |       |
+-----+
3 rows in set (0.01 sec)

MariaDB [perbankan1]>
```

Localhost / 127.0.0.1 / perbankan1

localhost/phpmyadmin/db_structure.php?db=perbankan1

Server: 127.0.0.1 » Database: perbankan1

Structure SQL Search Query Export Import Operations Privileges Routines Events More

Filters

Containing the word:

Table	Action	Rows	Type	Collation	Size	Overhead
<input type="checkbox"/> cabang_bank		0	InnoDB	latin1_swedish_ci	32 Kib	-
<input type="checkbox"/> nasabah		0	InnoDB	latin1_swedish_ci	16 Kib	-
<input type="checkbox"/> nasabah_has_rekening		0	InnoDB	latin1_swedish_ci	16 Kib	-
<input type="checkbox"/> rekening		0	InnoDB	latin1_swedish_ci	16 Kib	-
<input type="checkbox"/> transaksi		0	InnoDB	latin1_swedish_ci	16 Kib	-
5 tables	Sum	0	InnoDB	latin1_swedish_ci	96 Kib	0 B

☐ Check all With selected:

Print Data dictionary

Create table

Name: Number of columns: 4

Go

Console

22:10 17/03/2020

```
Command Prompt - mysql -u root -p

MariaDB [kuliah]> desc ruang_kelas;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| nama_ruang | varchar(45) | NO | | NULL | |
| kode_ruang | varchar(20) | NO | PRI | NULL | |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.01 sec)

MariaDB [kuliah]> desc mata_kuliah;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| kode_matkul | varchar(20) | NO | PRI | NULL | |
| nama_matkul | varchar(45) | NO | | NULL | |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.01 sec)

MariaDB [kuliah]> desc mahasiswa_take_mata_kuliah;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| nimFK | varchar(20) | NO | PRI | NULL | |
| kode_matkulFK | varchar(20) | NO | PRI | NULL | |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.01 sec)

MariaDB [kuliah]> desc dosen_teach_mahasiswa;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| nipFK | varchar(20) | NO | PRI | NULL | |
| nimFK | varchar(20) | NO | PRI | NULL | |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.01 sec)

MariaDB [kuliah]> desc mata_kuliah_fill_ruang_kelas;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.01 sec)

Command Prompt - mysql -u root -p

+-----+-----+-----+-----+-----+-----+
| kode_matkul | varchar(20) | NO | PRI | NULL | |
| nama_matkul | varchar(45) | NO | | NULL | |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.01 sec)

MariaDB [kuliah]> desc mahasiswa_take_mata_kuliah;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| nimFK | varchar(20) | NO | PRI | NULL | |
| kode_matkulFK | varchar(20) | NO | PRI | NULL | |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.01 sec)

MariaDB [kuliah]> desc dosen_teach_mahasiswa;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| nipFK | varchar(20) | NO | PRI | NULL | |
| nimFK | varchar(20) | NO | PRI | NULL | |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.01 sec)

MariaDB [kuliah]> desc mata_kuliah_fill_ruang_kelas;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| kode_matkulFK | varchar(20) | NO | PRI | NULL | |
| kode_ruangFK | varchar(20) | NO | PRI | NULL | |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.01 sec)

MariaDB [kuliah]>
```

Localhost / 127.0.0.1 / kuliah | phpMyAdmin

phpMyAdmin

Recent | Favorites

- New
- information_schema
- mysql
- performance_schema
- phpmyadmin
- test

Server: 127.0.0.1 » Database: kuliah

Structure SQL Search Query Export Import Operations Privileges Routines More

Filters

Containing the word:

Table	Action	Rows	Type	Collation	Size	Overhead
<input type="checkbox"/> dosen	Browse Structure Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	16 Kib	-
<input type="checkbox"/> dosen_teach_mahasiswa	Browse Structure Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	16 Kib	-
<input type="checkbox"/> dosen_teach_mata_kuliah	Browse Structure Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	16 Kib	-
<input type="checkbox"/> dosen_use_ruang_kelas	Browse Structure Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	16 Kib	-
<input type="checkbox"/> mahasiswa	Browse Structure Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	16 Kib	-
<input type="checkbox"/> mahasiswa_take_mata_kuliah	Browse Structure Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	16 Kib	-
<input type="checkbox"/> mata_kuliah	Browse Structure Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	16 Kib	-
<input type="checkbox"/> mata_kuliah_fill_ruang_kelas	Browse Structure Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	16 Kib	-
<input type="checkbox"/> ruang_kelas	Browse Structure Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	16 Kib	-
9 tables	Sum	0	InnoDB	latin1_swedish_ci	144 Kib	0 B

☐ Check all With selected:

Print Data dictionary

Create table

Name: Number of columns:

Console

22:49 17/03/2020