



If you do not pay any relevant course fee to maintain Earth University BIT platform,
Be ethical enough to contribute while you are using our Academic Contents

www.earth.lk/community
2004-2024 (20th Anniversary)

Sprint-2 Plan

Employee Detail Management

1. Establishing Project Folder Architecture
2. Server App Initialization
3. **Sprint-2 Execution** [**2(a)**, 2(b), 2(c), 2(d), 2(e), 2(f)]
4. Completing Sprint-1 Objectives

2(a) Employee Module - Analysis, Design & DB-Preparation

1. Data Design
2. UI Design
3. Sample Data
4. Database Preparation

2(b) Employee View

1. Controller Design
2. Coding-Server App
 - Version-1 (Client Pagination)
 - Entity Coding, DAO Coding, Controller Coding, Testing
 - Version-2 (Server Pagination)
 - Controller Modification, Testing
3. Coding-Client App
 - Version-1 (Client Pagination)
 - UI Preparation, Entity Coding, Service Coding, Controller Coding, Testing
 - Version-2 (Server Pagination)
 - Service Modification, Controller Modification, Testing

2(c) Employee Search

2(d) Employee Insert

2(e) Employee Update

2(f) Employee Delete

2(a) Employee Module – Analysis, Design & DB-Preparation

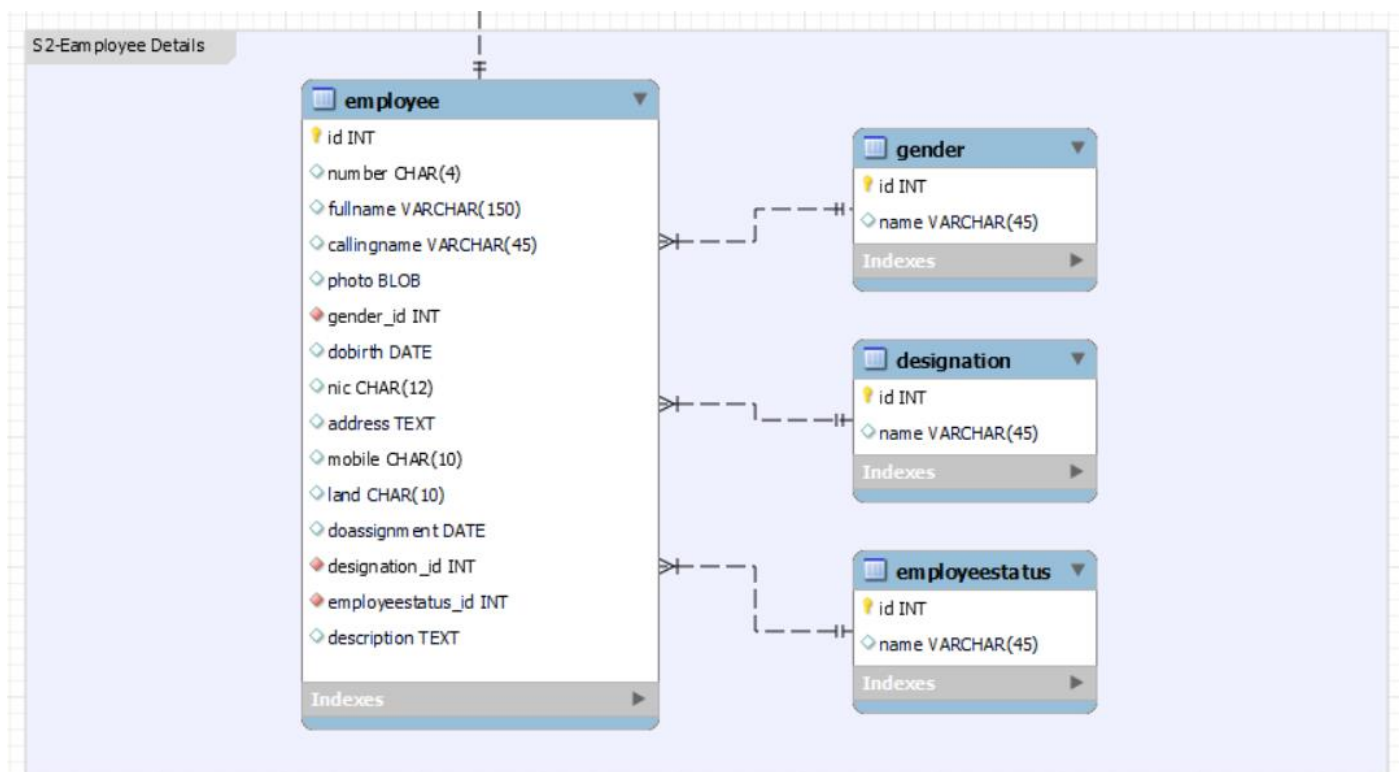
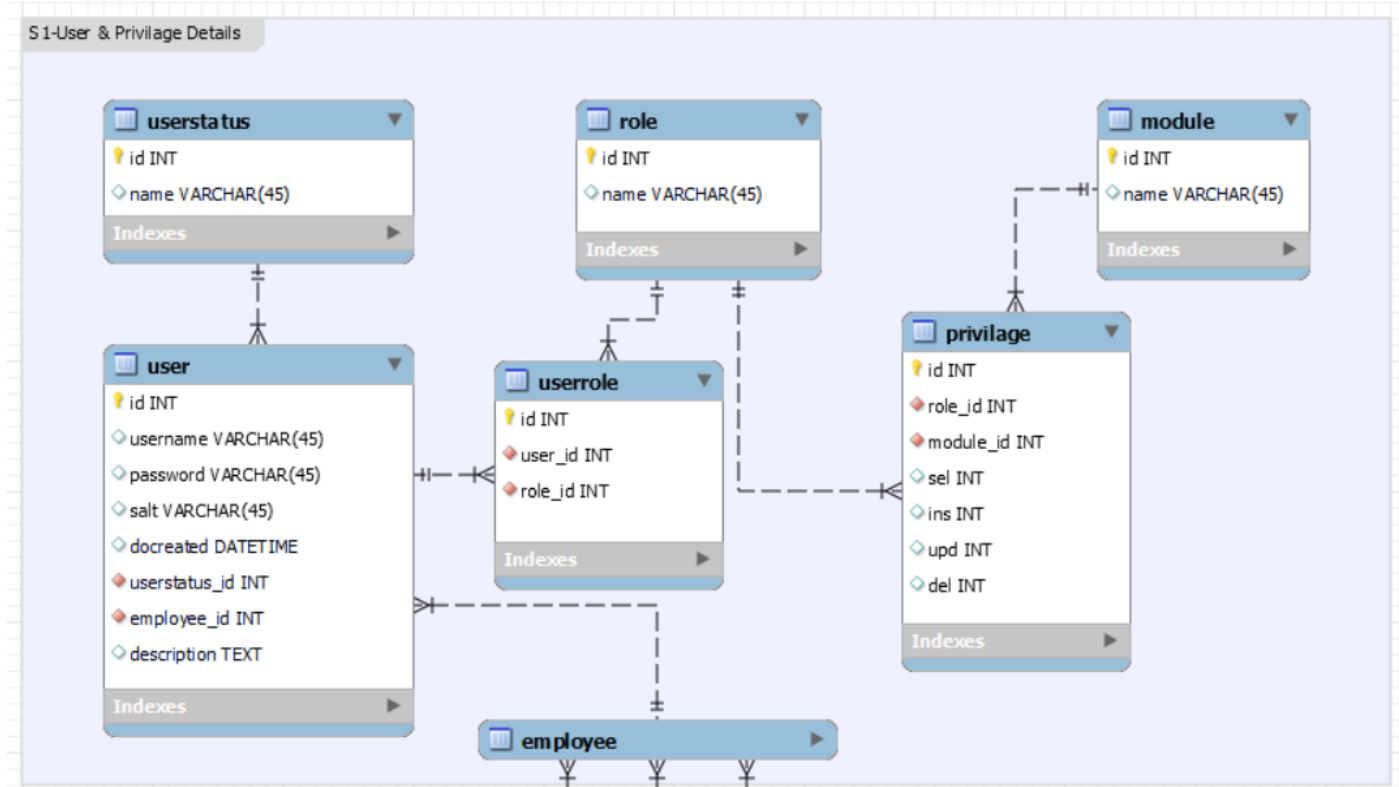
1. Data Design
2. UI Design
3. Sample Data
4. Database Preparation

Important

Sprint ER Contains set of Tables from the Sprint-1

Sprint-2 will cover tasks from both Sprint-1 and Sprint-2

1. Data Design



2. UI Design

Employee Detail

Number

Full Name

Calling Name

Photo

Select

Clear

Gender

Birth Day

NIC

Address

Mobile

Land

Designation

Status

Description

Delete

Update

Clear

Add

Employee Search

Number

Number

Designation

Status

NIC

Search

Clear Search

Employee Table

Number	Name	Gender	NIC	Mobile	Land	Designation	Status

<<

<

1

2

3

>

>>

3. Sample Data

gender	
id	name
1	Male
2	Female
3	Other

designation	
id	name
1	Demonstrator L1
2	Assistant G1
3	Assistant G1
4	Demonstrator L2
5	Demonstrator L3

employee status	
id	name
1	Active
2	Suspended Permanently
3	Suspended Temporally
4	Retired
5	Resigned
6	On Leave

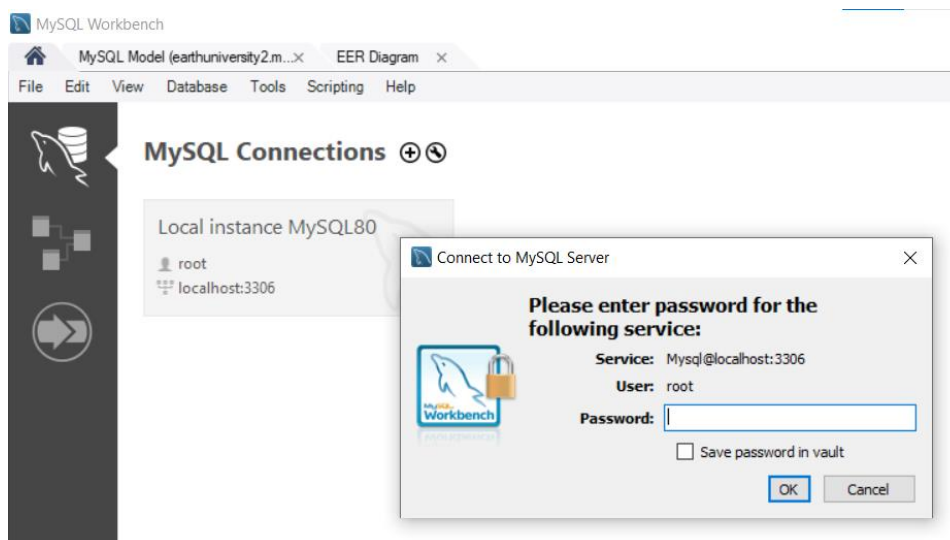
employee					
1	id	1	2	3	4
2	number	2201	2202	2203	2301
3	fullname	Ashan Pathum	Dileesha Rukmal	Thahir Imran	Lakshan Ruvinda
4	callingname	Ashan	Rukmal	Rukmal	Rukmal
5	photo	null	null	null	null
6	gender_id	1(Male)	1(Male)	1(Male)	1(Male)
7	dobirth	2001.01.01	2001.01.02	2001.01.02	2001.01.03
8	nic	200110300040	200120800050	200130700020	200140800090
9	address	Dabulla	Kagalle	Wathathala	Kirindiwela
10	mobile	0779666666	0769666666	0719666666	0729666666
11	land	0339666666	0369666666	0119666666	0369666666
12	doassignment	2001.01.01	2001.01.02	2001.01.02	2001.01.03
13	designation_id	1(Demo L1)	1(Demo L1)	1(Demo L1)	1(Demo L1)
14	employeestatus_id	1(Active)	1(Active)	1(Active)	1(Active)
15	description	BIT-UG	BIT-UG	BIT-UG	BIT-UG

4. Database Preparation

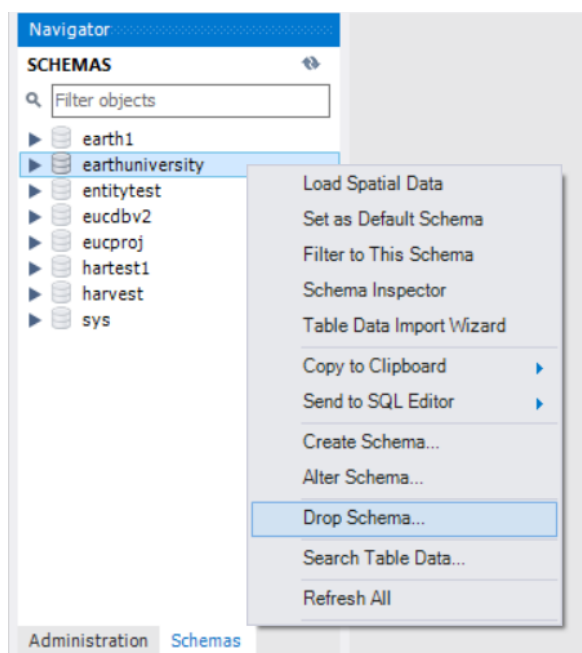
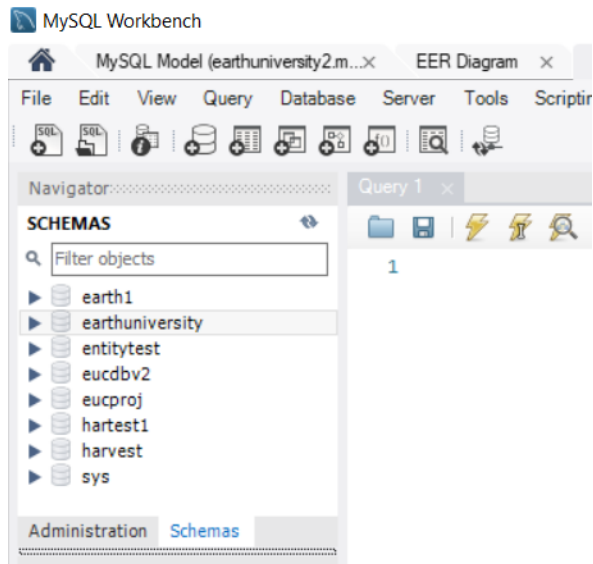
Forward Engineer the Sprint-2 ER and Insert Sample Data into the Database before start these steps

1. Log Into the DBMS using Administrative Tools of the Workbench
2. Look for database “earthuniversity” and drop the database if exists
3. Open Sprint-2 ER (Employee with User) using Designing Tools of the Workbench
4. Forward Engineered the ER to create the database
5. Insert Sample Data, Supportive tables(FKs) first and then the Base table
6. Get a Backup and Restore the Database in another DB-Server

Open Database Administrator Tools of the Workbench

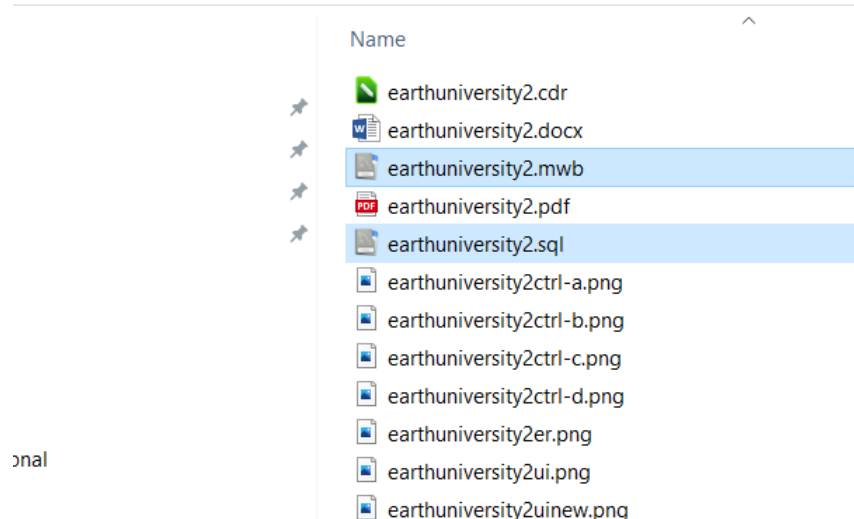


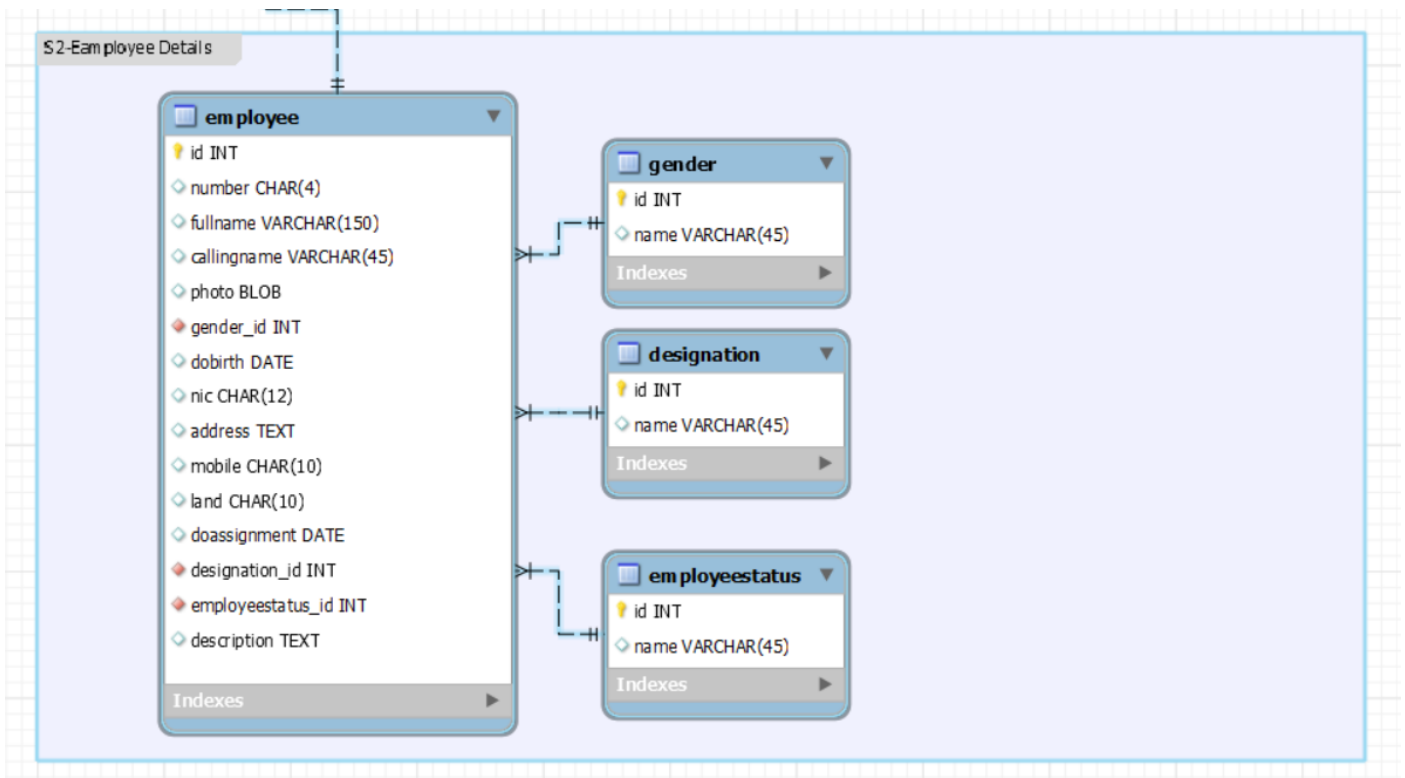
If the “earthuniversity” schema exists, drop the database as we are going to create it from the beginning



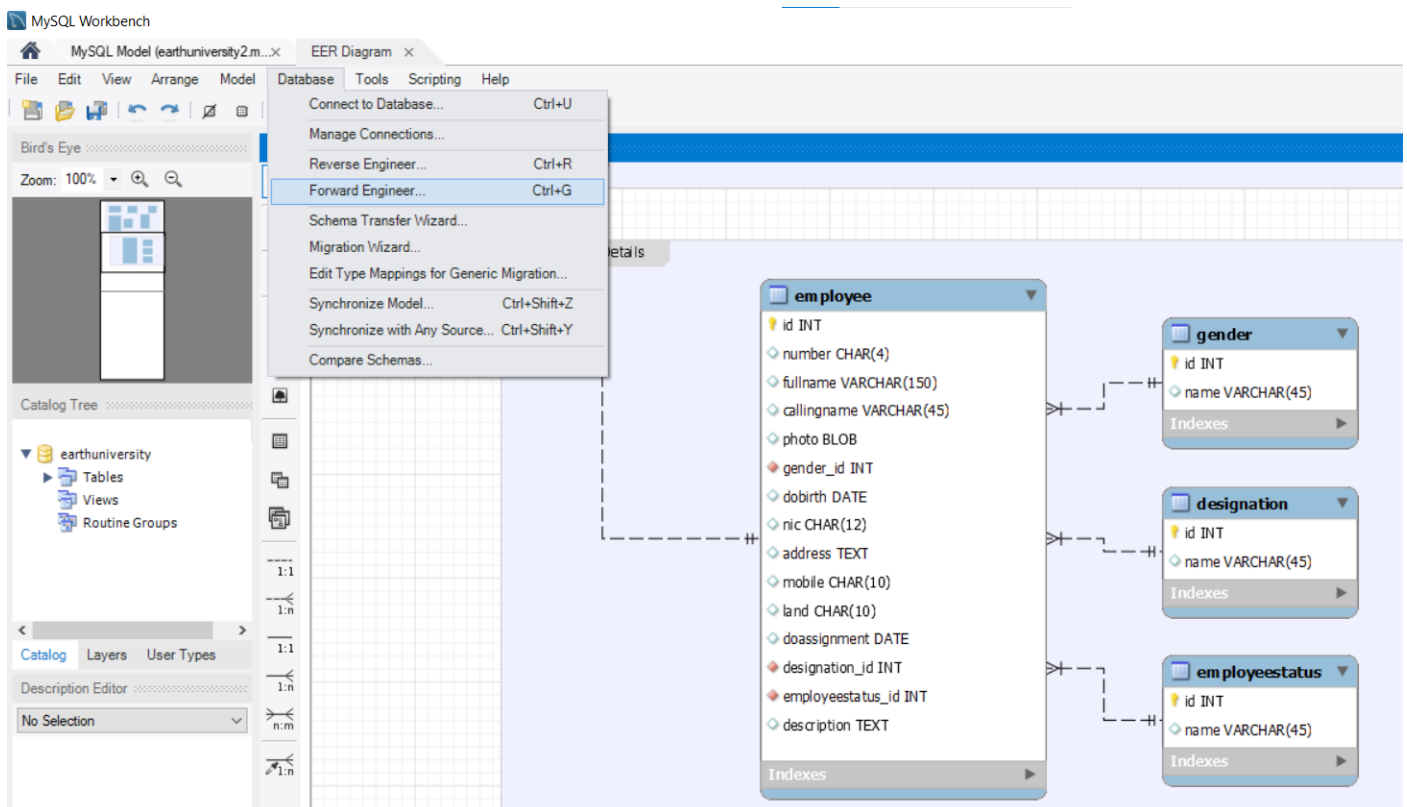
Open the Sprint-2 ER

« Personal (F:) » Projects » Earth-University-College » Sprint-Plans » Sprint-2





Forward Engineer



Forward Engineer to Database

Connection Options

Options

Select Objects

Review SQL Script

Commit Progress

Set Parameters for Connecting to a DBMS

Stored Connections: Select from saved connection settings

Connection Method: Standard (TCP/IP) Method to use to connect to the DBMS

Parameters: SQL Advanced

Hostname: 127.0.0.1 Port: 3306 Name or IP address of the server host - and TCP/IP port.

Username: root Name of the user to connect with.

Password: Store in Vault ... Clear The user's password. Will be requested later if it's not set.

Default Schema: The schema to use as default schema. Leave blank to select it later.

Back Next Cancel

Forward Engineer to Database

Connection Options

Options

Select Objects

Review SQL Script

Commit Progress

Select Objects to Forward Engineer

To exclude objects of a specific type from the SQL Export, disable the corresponding checkbox. Press Show Filter and add objects or patterns to the ignore list to exclude them from the export.

☒ Export MySQL Table Objects 10 Total Objects, 10 Selected Show Filter

☐ Export MySQL View Objects 0 Total Objects, 0 Selected Show Filter

☐ Export MySQL Procedure Objects 0 Total Objects, 0 Selected Show Filter

☐ Export MySQL Trigger Objects 0 Total Objects, 0 Selected Show Filter

☐ Export MySQL Function Objects 0 Total Objects, 0 Selected Show Filter

☐ Export MySQL User Objects 0 Total Objects, 0 Selected Show Filter

Back Next Cancel

Forward Engineer to Database

Connection Options

Options

Select Objects

Review SQL Script

Commit Progress

Review the SQL Script to be Executed

This script will now be executed on the DB server to create your databases. You may make changes before executing.

```

1 -- MySQL Workbench Forward Engineering
2
3 SET @OLD_UNIQUE_CHECKS=@@UNIQUE_CHECKS, UNIQUE_CHECKS=0;
4 SET @OLD_FOREIGN_KEY_CHECKS=@@FOREIGN_KEY_CHECKS, FOREIGN_KEY_CHECKS=0;
5 SET @OLD_SQL_MODE=@@SQL_MODE, SQL_MODE='ONLY_FULL_GROUP_BY,STRICT_TRANS_TABLES';
6
7
8 -- Schema earthuniversity
9
10
11
12 -- Schema earthuniversity
13
14 CREATE SCHEMA IF NOT EXISTS 'earthuniversity' DEFAULT CHARACTER SET utf8 ;
15 USE 'earthuniversity' ;
16
17
18 -- Table 'earthuniversity'.'gender'
19
20 CREATE TABLE IF NOT EXISTS 'earthuniversity'.'gender' (
21   'id' INT NOT NULL AUTO_INCREMENT,
22   'name' VARCHAR(45) NULL,
23   PRIMARY KEY ('id'))
24 ENGINE = InnoDB;

```

Save to File... Copy to Clipboard

Back Next Cancel

Forward Engineer to Database

Connection Options

Options

Select Objects

Review SQL Script

Commit Progress

Forward Engineering Progress

The following tasks will now be executed. Please monitor the execution. Press Show Logs to see the execution logs.

☒ Connect to DBMS

☐ Execute Forward Engineered Script

☐ Read Back Changes Made by Server

☐ Save Synchronization State

Connecting to DBMS...

Connect to MySQL Server

Please enter password for the following service:

Service: MySQL@127.0.0.1:3306

User: root

Password:

☐ Save password in vault

OK Cancel

Show Logs

Back Close Cancel

Forward Engineer to Database

Connection Options

Options

Select Objects

Review SQL Script

Commit Progress

Forward Engineering Progress

The following tasks will now be executed. Please monitor the execution. Press Show Logs to see the execution logs.

☒ Connect to DBMS

☒ Execute Forward Engineered Script

☒ Read Back Changes Made by Server

☒ Save Synchronization State

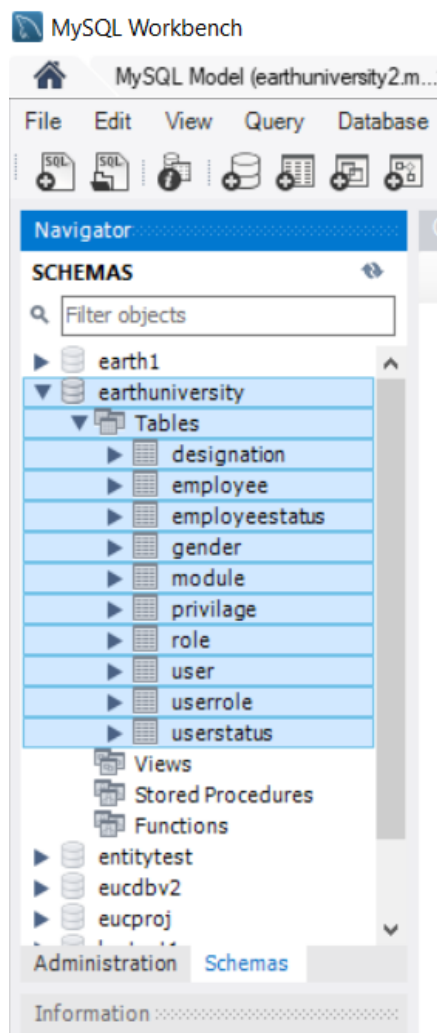
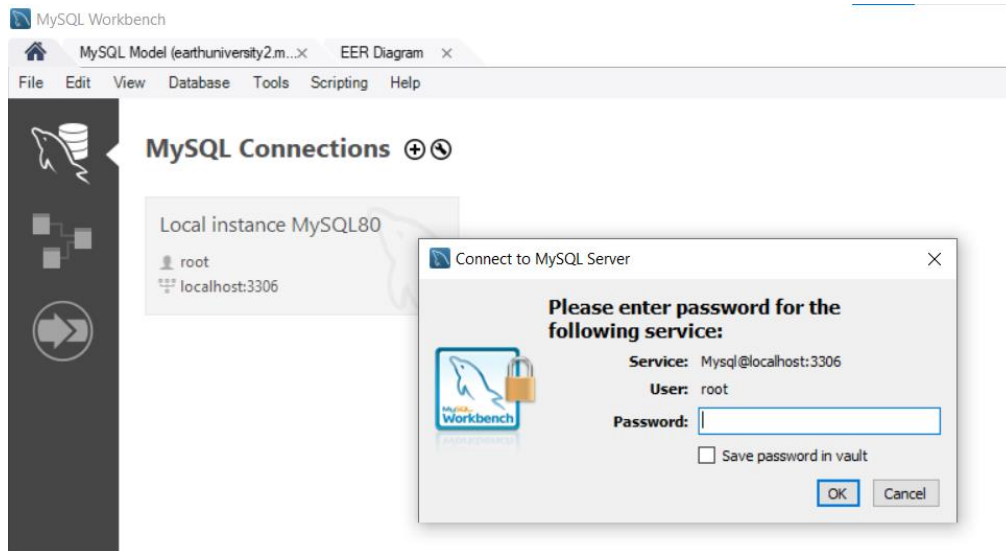
Forward Engineer Finished Successfully

Show Logs

Back Close Cancel

Next, Next, Enter DB Password

Log into the administrative tools and observe the database and tables to check whether the Forward Engineering Process is successful or not



Make sure that they do not have data inserted yet

The screenshot shows the SQL Developer interface. On the left, the 'Navigator' pane displays the 'SCHEMAS' tree with 'earthuniversity' expanded, showing a list of tables including 'designation'. The main pane shows the 'designation' table selected, with the SQL query 'SELECT * FROM earthuniversity.designation;' entered. The 'Result Grid' shows two columns: 'id' and 'name', both with 'NULL' values.

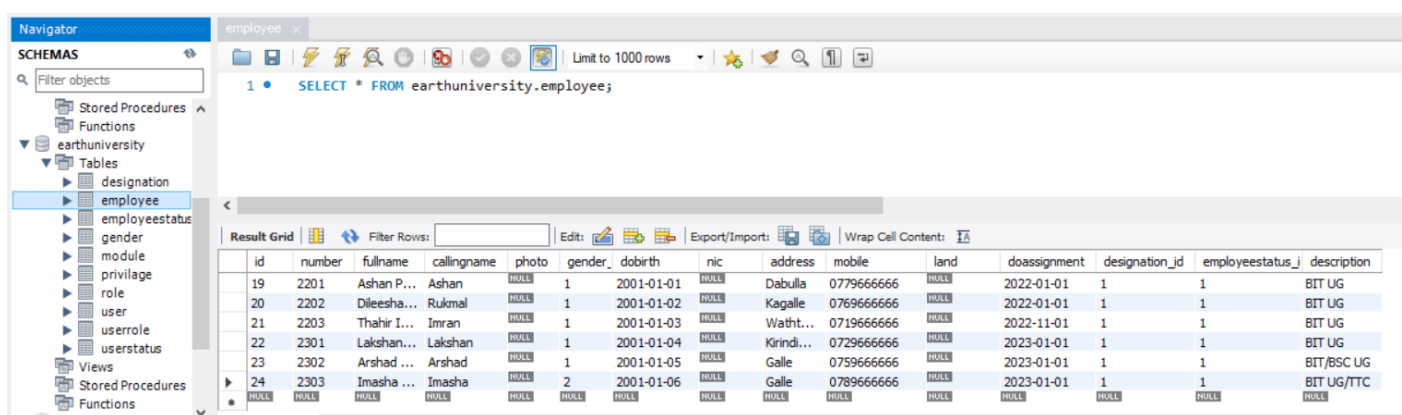
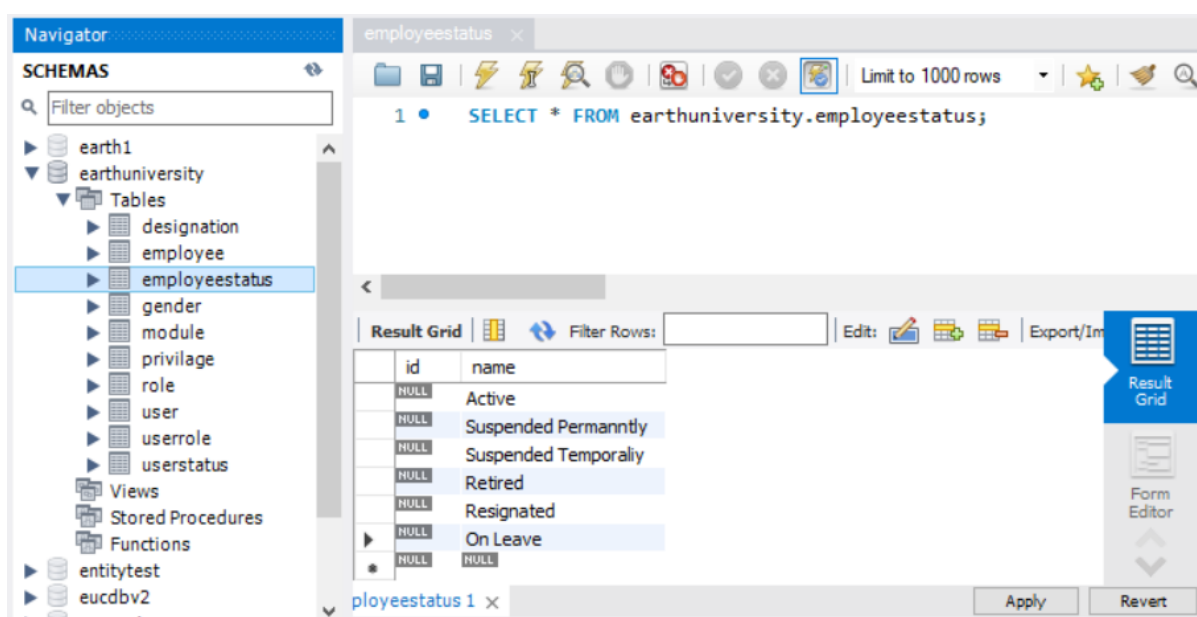
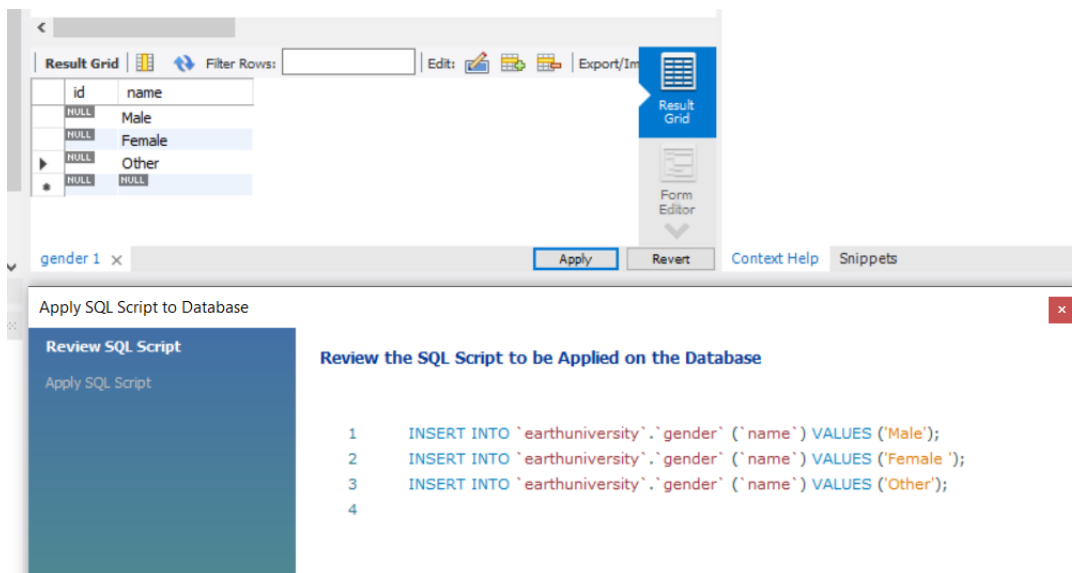
Add Sample Data (designation, gender, employeeestatus, employee)

The screenshot shows the SQL Developer interface with the 'designation' table selected. The SQL query 'SELECT * FROM earthuniversity.designation;' is entered. The 'Result Grid' shows five rows of data:

id	name
NULL	Demonstrator L1
NULL	Assistent G1
NULL	Assistent G2
NULL	Demonstrator L2
NULL	Demonstrator L3

The screenshot shows the SQL Developer interface with the 'gender' table selected. The SQL query 'SELECT * FROM earthuniversity.gender;' is entered. The 'Result Grid' shows four rows of data:

id	name
NULL	Male
NULL	Female
NULL	Other
NULL	NULL



Get a Backup of the Database & Restore it another Computer.

Place the backup in the "Sprint-Plan" → "Sprint-2"

earthuniversity2.sql

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