Introduction to MySQL Workbench – LAB 2

Scenario:

The human resources department of a company uses excel for the employee's data management, the company wants to implement a new system and hires a consultancy IT company to design the relational model of the HR database. The requirements of the department in the company are the following:

The company has locations in different countries. The company may have more than one location per country. Each location may have one or more departments of the company. Each department may have more than one employee, and each employee is assigned to one job; however, each job may be done by more than one employee. The human resources department needs to track a history of the jobs that the employees had in each of the departments. The employees may change from one job to another job. The existing jobs may have different grades/categories indicating the lowest and highest salary allowed for that job.

LAB 1:

1. Draw on paper an Entity-Relationship Model for the described scenario (try to use between 7 to 9 tables).
2. Make sure the database server is running. Then, open the MySQL workbench.
3. Create the database "hr" using the workbench.
4. Using the "hr" database, upload and run the script provided in Moodle ("CreateTables.sql"). The script will create the tables, the relationships are not yet created. Look to the code of the script. Are the primary keys defined? Are the foreign keys defined?
5. The database is now created, use the reverse engineering option to visualize the entity-relationship diagram (ERD) in workbench (see the annex 1 "LabSupplement-ReverseEngineeringHR_DB.pdf").
6. Compare the tables from the initial diagram that you drew in step 1 with the tables displayed in the ERD from class solution. How similar is your diagram?