Lab 3

The goals of the lab are to get some practice with MySQL database and table creation and to create an initial Limbo database.

**Background**

MySQL is a client-server relational database management system (RDBMS). The “relations” are expressed as a set of rows and columns in table form.

The table has zero or more rows and one or more columns. A field is the intersection of a row and a column. Each row has the same number of columns and the columns type and possibly modifiers that constrain field values.

MySQL has a command line interface, the MySQL Client, for interactively submitting CRUD commands.

MySQL line comments start with “#”; block comments use /\* … \*/.

**Tasks**

Part I

1. In a plain text editor such as NotePad, create an SQL file named create\_limbo.sql
2. At the top of the file place the following comments:

# This file creates the Limbo database. # Author: <team members>

1. Immediately below the comments, add the commands:

drop database if exists limbo\_db; create database limbo\_db ;   
use limbo\_db ;

Then save this file in your Portable Directory. The file path should be:   
C:\Program Files (x86)\EasyPHP-Devserver-16.1\eds-www\create\_limbo.sql   
Note that SQL files have a little yellow storage cylinder icon next to their name.

Part II

1. Open EasyPHP and start both the web server and database server.
2. Go to the Portable Directory and navigate to to C:\program files (x86)\EasyPHP-Devserver-16.1\eds-binaries\dbserver\mysql5711x86x160813154806\bin
3. Open a Windows command line prompt from the file menu.
4. Invoke the MySQL client command line shell by typing at the prompt:

mysql -u root

1. Source the file create\_limbo.sql by typing the source command and the complete file path at the mysql command line prompt.

Part III

1. Edit create\_limbo.sql to create a table, stuff, modeled on the one from p. 86 in McGrath (2012). Namely, stuff has the columns shown below.

|  |  |
| --- | --- |
| Column | Data type |
| id | int |
| descr | text |

1. Save and source create\_limbo.sql.
2. Explain stuff to make sure you created the table correctly.

Part III

1. Write below three more fields with types to add to the stuff.

a.

b.

c.

Part IV

1. Add to create\_limbo.sql alter commands per the specs below. For an example of the alter command, see p. 95 in McCrath(2012).
   1. Make id the primary key.
   2. Rename descr to description.
   3. Add the three additional fields from above to stuff with types as shown on p. 88 in McGrath (2012).
2. Add an explain command at the bottom of your create\_limbo.sql file to explain the table stuff.
3. Save and source create\_limbo.sql .
4. Deliverables: Submit the output explaining the table as a screen shot to iLearn (or cut/paste it into a file, print it out, and turn in hardcopy). Submit create\_limbo.sql (either as a file to iLearn or hardcopy) with your team member names at the top of the file.
5. Save create\_limbo.sql for future reference.