

Assignment 4 – INLS 623

Build Remote Database. Build a remote database connection using PHP to list out the contents of tables and schemas from your MySQL database from Assignment 1. You can base your work on the example we cover in class, i.e. see files

list-dbs.php

list-records.php

list-tables.php

in our “php1” directory (link to this directory is in our class schedule for this module), or you can write your own. You are responsible for making your own copy of PHP code that is runnable from the web. The easiest way to do this is using the class example is to copy all the files from this directory to your own web directory. If you use our class PHP example you must customize it at least a little bit (say to change fonts, colors—see the file *list-records.php*). Additionally for it to work you will need to change the connection to be to db1_X where X is your own database (right now it’s set to use my personal test database ID, db1_29). Just search and change all db1_29 to db1_X in each of the *list-*.php* files. To turn in this portion of the assignment you should produce a printout of a successful run, listing your tables and schema from your db1_X database, and listing your PHP source code. Doing more than one or two simple changes to the class example, or doing your own example, will result in top credit for this part of the assignment. See the other files (hello, example*) for further examples of PHP code.

Ramkrishnan Chapter 6, Exercises 6.1 (Page 217)

Answer the following questions:

1. Explain the following terms: Cursor, embedded SQL, JDBC, SQLJ.
2. What are the differences between JDBC and SQLJ? Why do they both exist?
3. Explain the term *stored procedure*, and give examples why stored procedures are useful.

Ramkrishnan review questions (not numbered) that refer to the following mentioned sections (Page 264)

Answer the following questions:

- What are URIs and URLs? (**section 7.2.1**)
- What are some shortcomings of HTML and how does XML address them? (**section 7.4**)
- Why do we have XML DTDs? What is a well formed XML document? What is a valid XML document? Give an example of an XML document that is valid but not well formed, and vice versa. (**section 7.4.2**)

- What is a three-tier architecture? What advantages does it offer over single-tier and two-tier architectures? Give a short overview of the functionality at each of the three tiers. **(section 7.5)**
- What problem do style sheets address? What are the advantages of using style sheets? **(section 7.6.3)**
- Why do we need to maintain state at the middle tier? What are cookies? How does a browser handle cookies? How can we access the data in cookies from servlets? **(section 7.7.5)**