CSCI 4333 Design of Database Systems
Summer 2020
Homework #7

Web Database Development with MySQL, PyMySQL and Python

You should have already installed XAMPP so you can have Apache in your computer. Follow the steps in the class lecture notes to ensure that Apache supports Python CGI. Also, for pymysql documentation, see http://pymysql.readthedocs.io/en/latest/.

Use Swim in MySQL: createSwim.sql.txt and PopulateSwim.sql.txt

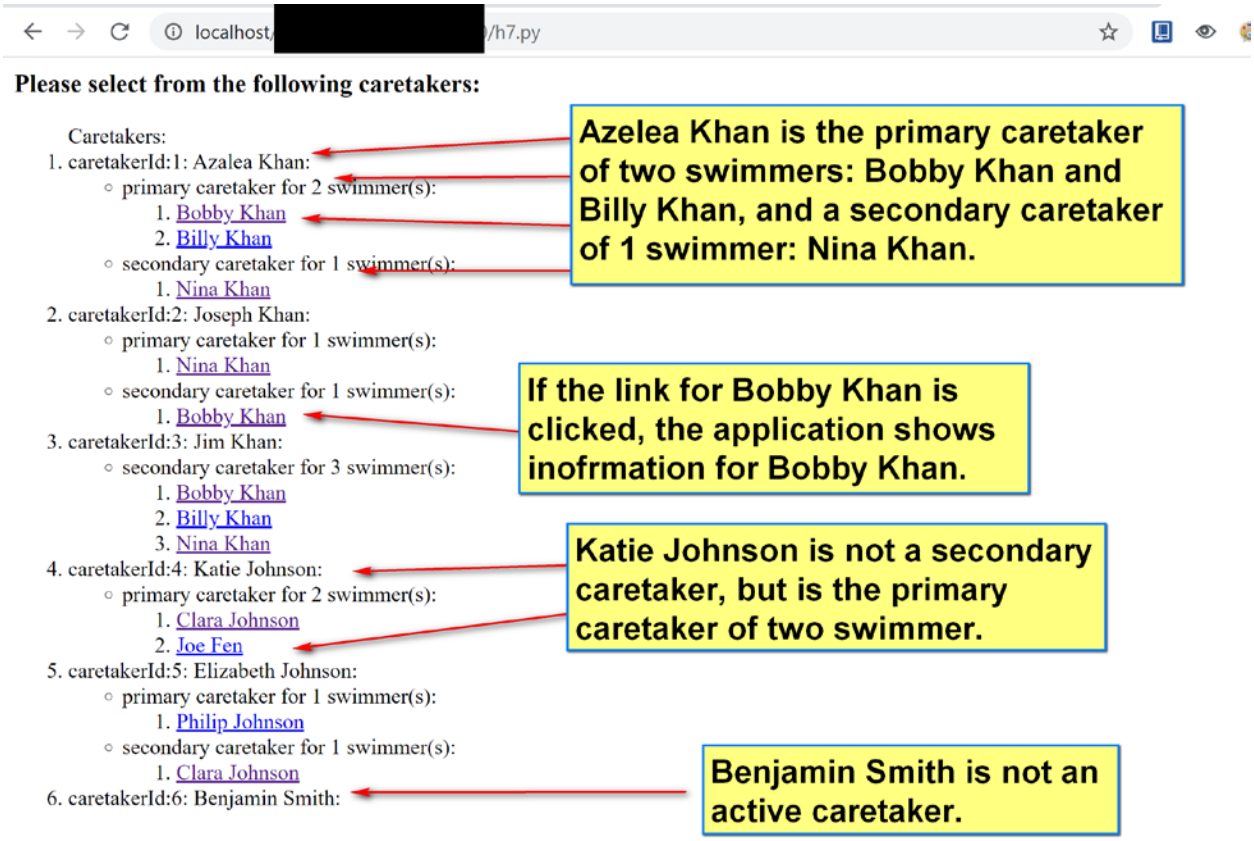
Write a Python CGI application, h7.py. It may accept one HTTP parameter, *sid*, which is swimmerId.

The Web application initially displays all caretakers in nested lists. For each caretaker, it shows

1. caretakerId
2. name
3. the number of swimmers in which the caretaker is the primary caretaker.
4. a nested list of URL link with names of these swimmers in (3).
5. the number of swimmers in which the caretaker is a secondary (other) caretaker.
6. a nested list of URL link with names of these swimmers in (5).

Study the following format to ensure that your application will reproduce it.

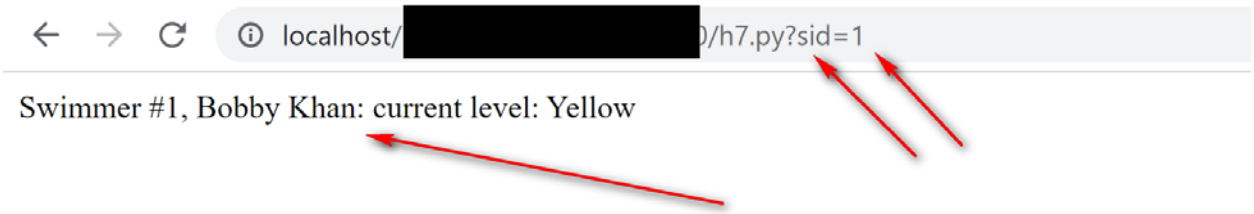
http://.../h7.py



If the link for 'Bobby Khan' is clicked, it will lead to

http://.../h7.py?sid=1

which shows:



Your program does not need to check for HTTP parameter errors.

Host the Python application in your dcm account. Note that dcm server may have problems in using dbconfig.py and dbconfig.ini, so you may simply include your dcm's MySQL credential *directly* in h7.py, which should be:

Host: localhost
user: <<your dcm MySQL username>>

password: <<your dcm MySQL password>>
database: swim

Submit URL at dcm for the Web application and the Python code to the TA so she can grade your work.

Your program file name should be h7.py. Submit your homework through Blackboard. Add the extension .txt in your submission if necessary.