ITM - 528  DATABASE SECURITY

Times:
Date:  August 19 through November 30
Location:  Life Sciences Building Room 121

Instructor:
Bob Hendry  rhendry@iit.edu
(630) 965-6526

Text:
Oracle11g: The Complete Reference. Various on-line reading

Abstract:
In addition to teaching the fundamentals of database security the student will learn concepts and technologies such as encapsulation (information hiding) and using relational database security management techniques. By the end of the term, the student will be able to design, build, maintain, and secure a database application written in Oracle DDL. This class assumes little other previous programming knowledge or experience. This is a hands on course. Approximately 50% of class time will be spent on labs.

Evaluation:
Throughout the duration of the class four projects will be handed out, each building upon the other. The grading is as follows. Note that completion of the lab work is essential to pass this class. The lab work is graded Pass/Fail.

<table>
<thead>
<tr>
<th>Points</th>
<th>Project</th>
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<tbody>
<tr>
<td>Lab Work</td>
<td>70%</td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>10%</td>
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<tr>
<td>Final Exam</td>
<td>20%</td>
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Grading is as follows
90% - 100%   A
80% - 89%    B
70% - 79%    C

The project will be graded on functional completeness (i.e. does it work and fulfill functional requirements). Project due dates will be posted. There will be dedicated class time for the projects. Please work on it during ‘lag time’, after individual in-class labs are completed. You are allowed to use any resource available while working on the project. Depending on your student status, the project can be evaluated as ‘P’ass ‘F’ail. You are allowed one re-submission for a project.

Website:
http://woodridge.rice.iit.edu/fall2013/528  This site will contain all announcement, slides, labs, lab solutions, notes, and on-line reading for the course. It is divided by module and topic.

Attendance:
Attendance is expected but not included in your evaluation. If unable to attend class, please look at the class web site for the reading assignments/labs. You are responsible for missing any class announcements in your absence.
Module One: Database Security

Topic 1: Object Encapsulation

Topic 2: Permissions

Topic 3: Database Auditing

Topic 4: Cursors/Record Level Security

Topic 5: Unified Security Model

Topic 6: Threats from the Internet

Topic 7: Database Risk Mitigation

Topic 8: Your Secure Database