CS348 Project 1 Oracle Project Due Date: 2/12/2009

You are going to use Oracle to design a simple University database. You will create tables and implement some queries.

You are going to do the following work:

• Create the tables described below. Name these tables TEACHER, COURSE, STUDENT, ENROLMENT, COURSE_SCHEDULE TEACHER (<u>t_id:number</u>, t_name: text, t_status:text, t_dept: text) COURSE(<u>c_id:text</u>, c_name: text, c_level:text) STUDENT (<u>s_id:number</u>, s_name: text, s_status: text) ENROLMENT (<u>c_id:text</u>, s_id:number) COURSE_SCHEDULE (<u>c_id:text</u>, t_id:number) Primary Keys are underlined.

Queries

1. Find the name(s) of all teachers(s) who are from ECE department.

2. Find the name(s) of all student(s) enrolled in CS250

3. Find the student id(s) and names(s) of all students enrolled in CS348 and either in ECE264 or in CS503

4. Find the name of the teacher teaching MA525

5. Find the name(s) of all students enrolled in one or three courses

6. Find the name(s) of all students who are being taught by Prof. Christopher Clifton.

7. Name any undergraduate course(s) being taken by graduate student(s).

8. Name any undergraduate student(s) who is taking a course with Prof. Sheron Noel

Getting Started

In this lab you will use Oracle to create and query a simple SQL database.

• Follow the steps listed on

http://www.cs.purdue.edu/resources/facilities/oracle/cs.sxhtml to set all environment variables in your shell configuration files and connect to Oracle client.

• You can now start typing in sqlplus commands or SQL statements. (Be sure to terminate every SQL statement with semicolon ";").

• Using your favorite editor, create files named createall.sql(create all the tables), dropall.sql(drops all the tables), populateall.sql (to populate all the tables) and lab1.sql (containing all the queries). Lab1.sql will be the only file you have to submit.

• To run all the code in your **lab1.sql** file, use the following command at the sqlplus prompt:

SQL> @lab1

• Include your name in a header comment at the top of your source file.

• Make sure output of each query is distinguishable. Comment your code; if nothing else, mark each query with its number.

Turnin

You may turn in the project for grading using the procedure described below. Run the following shell command (see 'man turnin' for details):

turnin -c cs348 -p cs348 lab1.sql

• To verify your submission was received, run this command:

turnin -c cs348 -p cs348 -v

- Each submission will overwrite the previous one, if any.
- Three days after the due date, the submission will be closed.

GOOD LUCK !