University of Ontario Institute of Technology (UOIT) ENGR 3700 Data Management Systems

CSCI 3030 Database Systems and Concepts

Project (group project) - Phase II

Due Date: October 30, 2012

Submit hard copy in class and softcopy via Blackboard by the due date

In Phase II, you will begin designing and constructing the data store for your application. Use the

proposed application area from Phase I to construct the database for your project. You can use any

database format you like (i.e. MySQL, Microsoft SQL, Oracle Database, etc...). The following items are

the required deliverables for Phase II.

**Deliverables:** 

Part A: Relational Schema (10 points)

Create relational database schema for the proposed application area from Phase I:

· Actual SQL create table commands are required.

· A graphical diagram of the relations is required.

Part B: Sample Data (5 points)

Populate your database with sample data. Each relation should contain at least 6 tuples. Make sure that the populated data is suitable for the type of queries in Part C.

Part C: Views (15 points)

Create (write English description and SQL syntax) of 10 views that a user of the database system would find useful. From these 10 views, the first 5 are common for all groups, and you can create your own

views for the remaining ones.

• <u>View 1</u>: Computes a join of at least three tables

· View 2: Uses nested queries with the ANY or ALL operator and uses a GROUP BY clause

· <u>View 2</u>: A correlated nested query

· View 4: Uses a FULL JOIN

· View 5: Uses nested queries with any of the set operations UNION, EXCEPT, or INTERSECT

Part D: E-R diagram: (10 points)

Create an ER schema diagram for your project database.