

# DATABASE MANAGEMENT SYSTEMS

## ISM 4212

### PROJECT

#### II. Module 2 (10 pt)

**All module 1 revisions must be made before you can do Module 2. If no revisions are necessary put a sheet in the section stating no revisions are necessary.**

- A. Translate your E-R diagram into instance charts. The format is shown below and is available on Canvas. You ***MUST*** use the posted template.
- a. The table name should be in uppercase with underscores instead of blanks. Attach initials to end of name.
  - b. Each attribute should have the name used in 3NF (lower case with underscores instead of blanks), sample data and appropriate data type and size.
  - c. Identify primary and foreign keys, unique keys, required (not null) fields, foreign key table names and foreign key column names, etc.
  - d. Make any business rules you find necessary, but be sure to state them in the business rules section.
  - e. Fill in the specified headers & footers
  - f. When you print the instance charts
    - i. print only the relevant part of the worksheet, ie. the table itself, not lots of extra cells.
    - ii. print a table on one page only. Do not have it span pages. If you have a problem doing this talk to the instructor. Use 11 font or larger.
    - iii. print landscape using gridlines. Make sure headers and footers are printed.
    - iv. punch holes at the top.
    - v. print one table on a page.
    - vi. put the tables in the notebook in the order you would have to create them in.

<i>Table Name:</i>							
<i>Column Name</i>	<i>Key Type</i>	<i>Required?</i>	<i>Foreign Key Table Name</i>	<i>Foreign Key Column Name</i>	<i>Data Type</i>	<i>Data Size</i>	<i>Sample Data</i>
		(NN)					

B. Write the SQL code to create the tables, constraints, sequences, describe the tables and select on the constraints and sequences.

- a. Put these commands in a text file with the .SQL extension.
- b. Use proper indentation. Use the space bar, not the tab key, when you indent.
- c. Comment each command to explain what it is doing.
- d. Put your initials or the company initials at the end of the table name. EX. employees\_SC
- e. Name all constraints according the method used in class.
- f. Create the constraints in the table creation, not using an ALTER TABLE.
- g. Align table constraints with the column names; indent column constraints.
- h. Put all Oracle keywords are in uppercase and all user-assigned names are in lower case.

C. Write the SQL code to perform the DROPs on the tables, constraints and sequences. Put these commands into another text file named with the .SQL extension. This will not be turned in until Module 3.

D. **All the commands from Part B must be run, the output saved and the output printed.** You will need to spool the files to save the output. Spooling refers to the process of moving information from one place (SQL\*PLUS) to another (TXT FILE). See separate instruction sheet (available on Canvas) for how to run, spool and print your DDL. There should be no errors in the spool file.

Use these commands ***exactly as they appear*** to get information about the constraints and sequences. Copy the commands to your text file then copy them from your text file to SQL Plus when you want to run them. Do NOT change them at all!!!

```
REM To get information about constraints:
COLUMN constraint_name FORMAT A32;
COLUMN column_name FORMAT A20;
COLUMN table_name FORMAT A15;
SELECT constraint_name, column_name, table_name
FROM user_cons_columns
WHERE constraint_name NOT LIKE 'BIN%'
ORDER BY constraint_name;
```

```
REM To get information about sequences:
SELECT sequence_name, increment_by
FROM user_sequences;
```

**See Module 2 grade sheet for submission order and sections.**

*Include most recently reviewed documents in the appropriate sections with the final documents. The reviewed documents are the ones I mark up and date.* This will speed up grading. Make sure you make any changes specified on them before submission.

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