**Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**CITC 2348 PC7 Lab Exercise 1**

**Part A:** (25 pts)

Download this document to refer to and modify during class discussion.

**Scenario: Java Jitters Coffee Company**

The Java Jitters Coffee Company (JJCC) is a wholesaler supplying coffee, tea and snacks to retailers in the greater Miami area. It also provides and maintains the equipment for brewing the beverages. The firm has a reputation for providing outstanding customer service. To improve customer service even further, the owner recently purchased a relational database product to keep track of customers, orders, products, etc. She currently is storing this data in an Excel workbook. The workbook has 2 “tables” in the form of spreadsheets, a Product worksheet and a Customer Orders worksheet. The database will replace the spreadsheets currently being maintained by the office manager. The spreadsheets are out of date and seem to be error prone.

Examine the current spreadsheet and respond to the following questions. You will be asked to share your responses with the rest of the class.

1. What kind of errors might result from a record keeping system organized in this manner?

There will be user errors such as typos, data integrity, and performance issues when the excel file gets to big.

1. Is it easy to validate the data being entered in this spreadsheet? Explain why or why not?

No, because the user would have to know advanced formulas and make sure to not put any typos in it.

1. What improvements in the accuracy of the data or ease of use for the office manager might be possible by using a relational database management system?

The improvements would include, data integrity, performance, data validation, better reporting.

1. Is a relational database management system an appropriate type of database to support the owner’s goals? (as opposed to hierarchical, network, NoSQL, spreadsheet, etc.). Justify your response.

Yes, because you can better track inventory, see who the sales per sales rep, and able to pull any kind of reports you may want.

Suppose your team has been hired to design and create a database for a transactional system. Suppose further that after implementation, you will eventually have to import all of the existing data from the Excel spreadsheet into the new database.

Working in a group, create an ERD of this system

List the name(s) of your partner(s)?

Before leaving class, please print this document and attach a copy of your normalized entity relationship model and submit to me in hardcopy format.