**CSC 134-02 Database Management Systems (Spring 2022)**

**In-class Worksheet 1 (100 points)**

**Data Modeling using ER Model**

**Due at 12:00 pm, Monday February 7, 2022**

1. Consider the following set of requirements for a COMPANY database. **Draw an ER diagram**.

* The company is organized into branches. Each branch has a unique number, a name, and a particular employee who manages it.
* The company makes its money by selling to clients. Each client has a name and a unique number to identify it.
* The foundation of the company is its employees. Each employee has a name, birthday, sex, salary and a unique number.
* An employee can work for one branch at a time, and each branch will be managed by one of the employees that work there. We’ll also want to keep track of when the current manager started as manager.
* An employee can act as a supervisor for other employees. An employee can have at most one supervisor.
* A branch may handle a number of clients, with each client having a name and a unique number to identify it. A single client may only be handled by one branch at a time.
* Employees can work with clients controlled by their branch to sell them stuff. If necessary, multiple employees can work with the same client. We’ll want to keep track of how many dollars worth of stuff each employee sells to each client they work with.
* Many branches will need to work with suppliers to buy inventory. For each supplier we’ll keep track of their name and the type of product they’re selling the branch.
* A single supplier may supply products to multiple branches. Each supplier has a name that is unique only inside each branch.

**Deliverables**

1. A pdf or image containing all your answers. The instructor will share the Jamboard link with you in class.

* Create a sticky note with your name.
* Save **your OWN frame** as image. Make sure the sticky note with your name is there.
* Submit your image to Canvas

How to use Google Jamboard: <https://www.youtube.com/watch?v=IJc55XOJhJI>

**Requirements on deliverables**

1. Your deliverable should be ***FLastname\_W1.pdf*** where *F* indicates first letter, in uppercase, of your firstname and *Lastname* indicates your last name where first letter is in uppercase. Please exactly follow the naming rule described above. You will be deducted 5 points for incorrect naming.
2. Clearly state your name, ID, course title, worksheet number, and due date.
3. Submit your pdf file via Canvas.
4. No late submission will be accepted.
5. When grades are returned to you on Canvas, you have 7 days to meet with the instructor for grade changes. Issues and/or disagreements concerning your grade must be resolved in such 7 days window. After 7 days, the grades are written in stone and can't be changed after that point, for whatever reason.