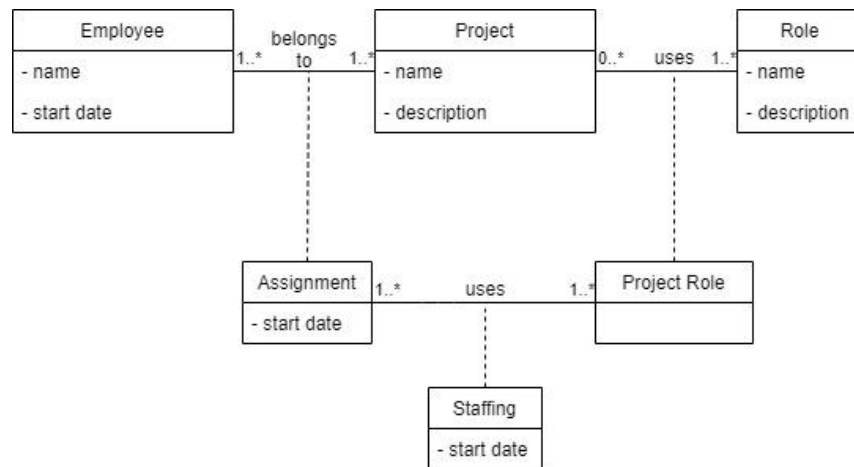# CECS 323 LAB COLLIDING FOREIGN KEY INTRO

OBJECTIVE: Provide practice in the use & mechanics of using colliding foreign keys to enforce a business rule.

INTRODUCTION: In general, the use of colliding foreign keys is just one of many tools at our disposal for enforcing business rules in the database. This example has the following business rules:

1. Each employee belongs to at least one, and perhaps several projects.
2. Each project must have at least one employee.
3. The employee has a start date with the company, but they also have a start date associated with each Project that they join, since they could join a given project at any time.
4. Each project needs to staff various roles. A project role might be "configuration management", or "principal investigator". Not every project needs every role.
5. A given role might be used by several projects.
6. A given employee, working for a given project, could be assigned any number of roles within that project.
7. A given employee can only staff a role on a given project if the employee is assigned to that project, and the role in question is in use by that same project. Hence the colliding foreign key.

The UML for the above business rules is:

PROCEDURE:

1. Develop the relation scheme diagram for the above UML model. Be careful to capture how you will implement the last business rule listed above.

WHAT TO TURN IN:

- Your relation scheme diagram.
- Your team's Collaboration document. You can find the template for that document on BeachBoard | Content | Lab Collaboration Document.