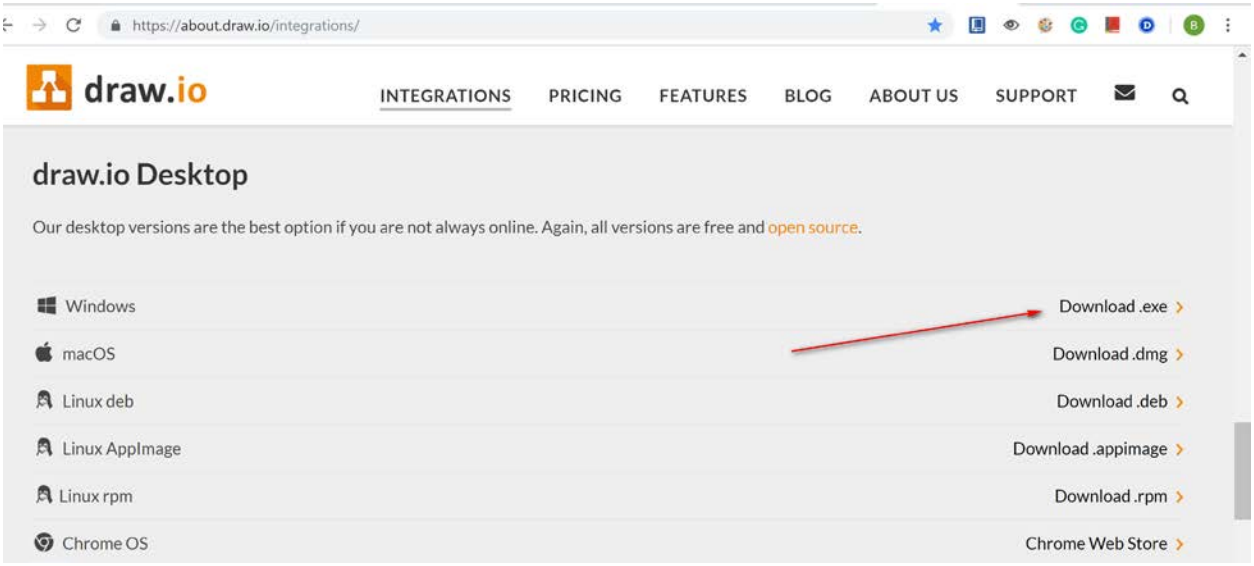
Drawing ER Diagrams Using Draw.io

Draw.io is a drawing tool, not a Computer-Aided Software Engineering (CASE) tool.

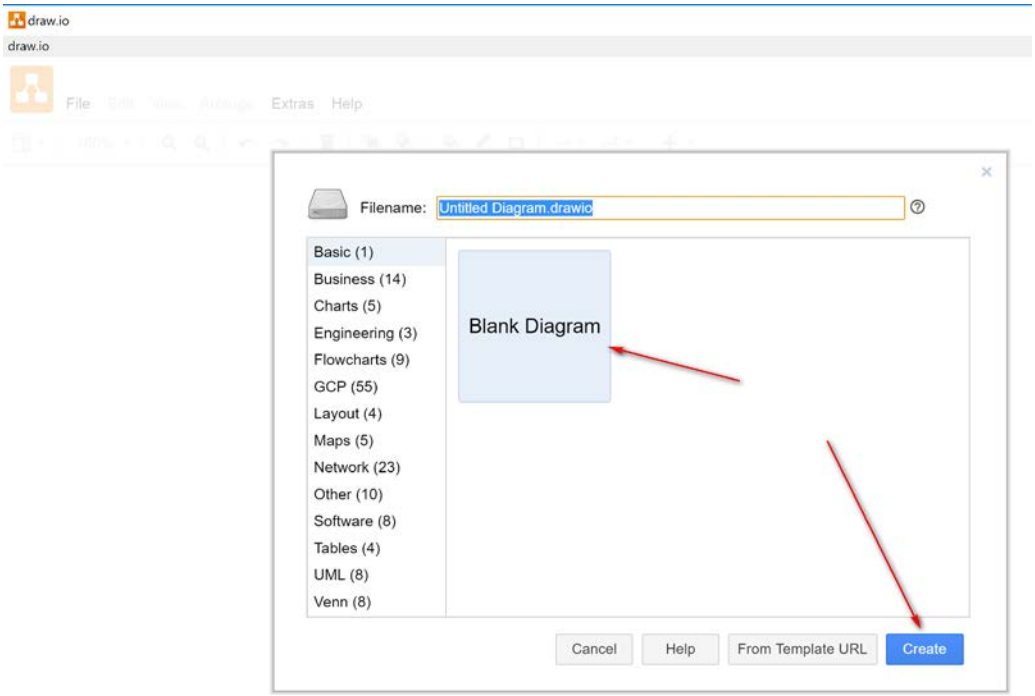
Installation

Go to https://about.draw.io/integrations/ and download and install the desktop version. For Windows:

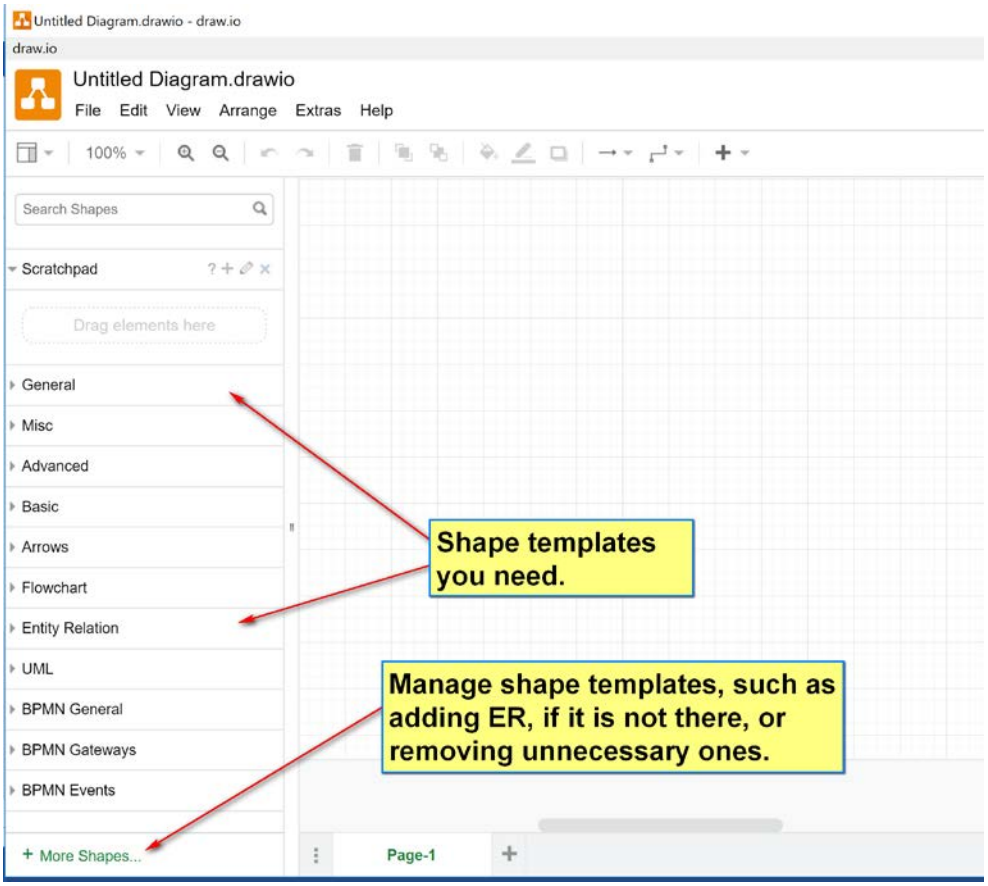


Running and Preparation

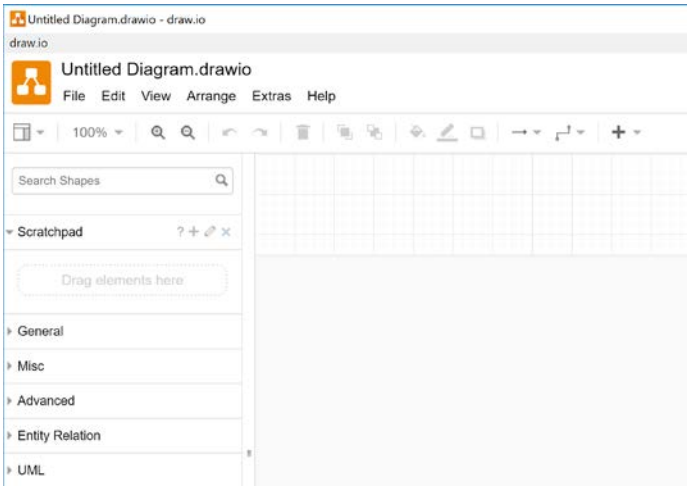
Start draw.io desktop, select to create a blank diagram.



There are many shape templates.



After tidying up:

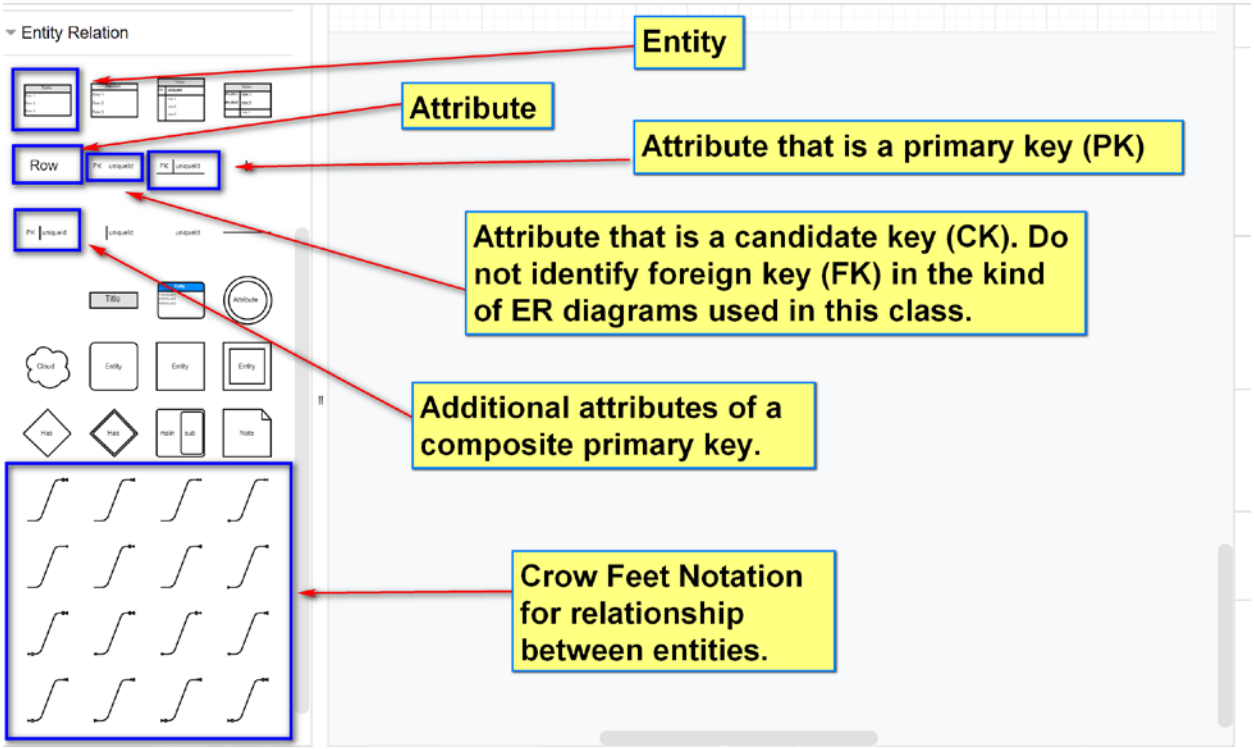


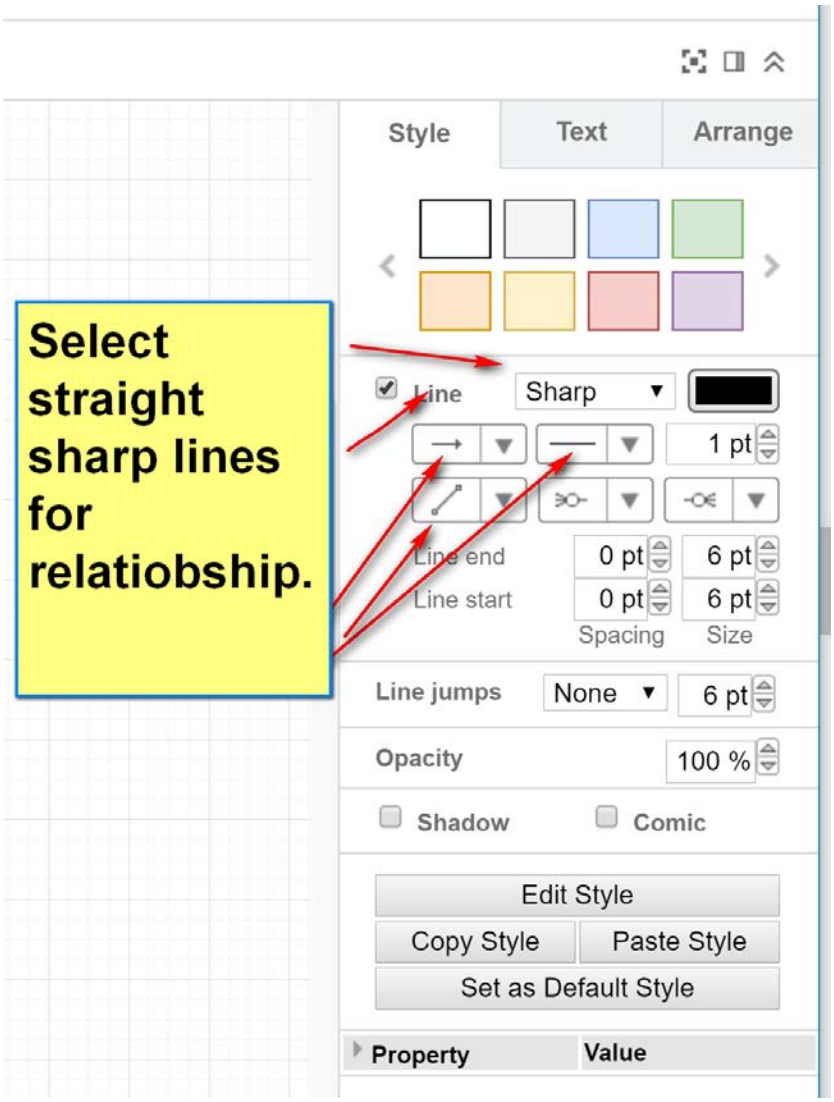
Resources:

- How to draw ER in draw.io: https://about.draw.io/entity-relationship-diagrams-with-draw-io/.

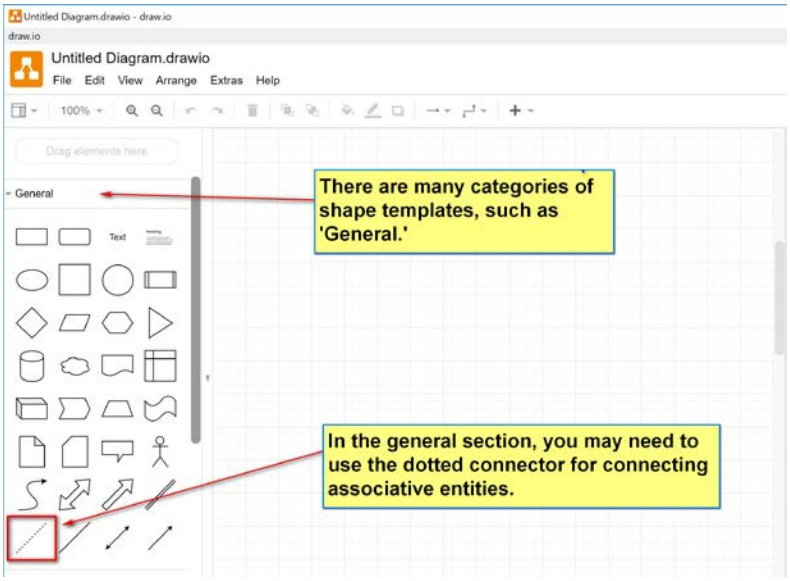
Shapes needed in this courses

Use these in the ER template:





In the general shape template:

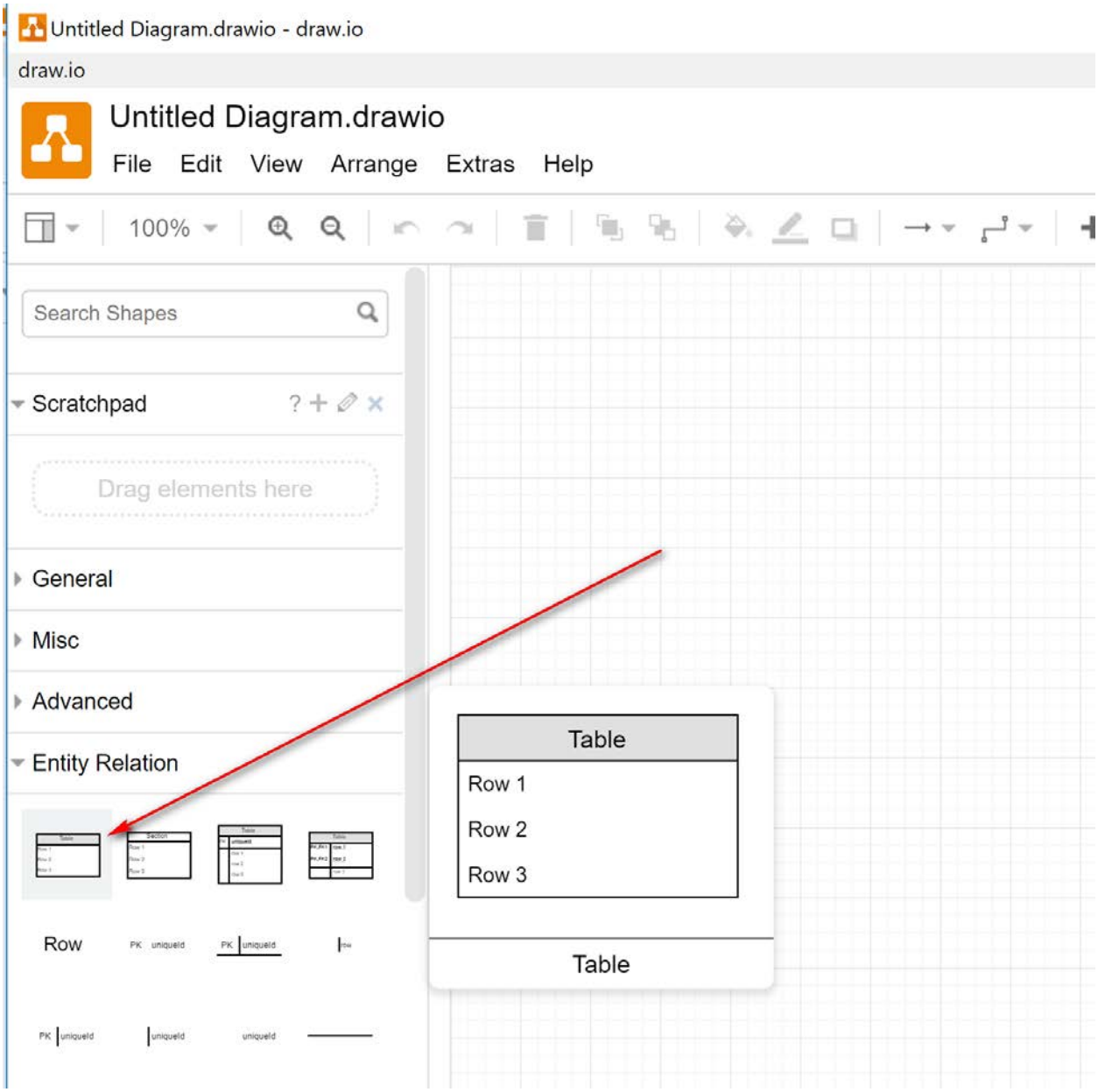


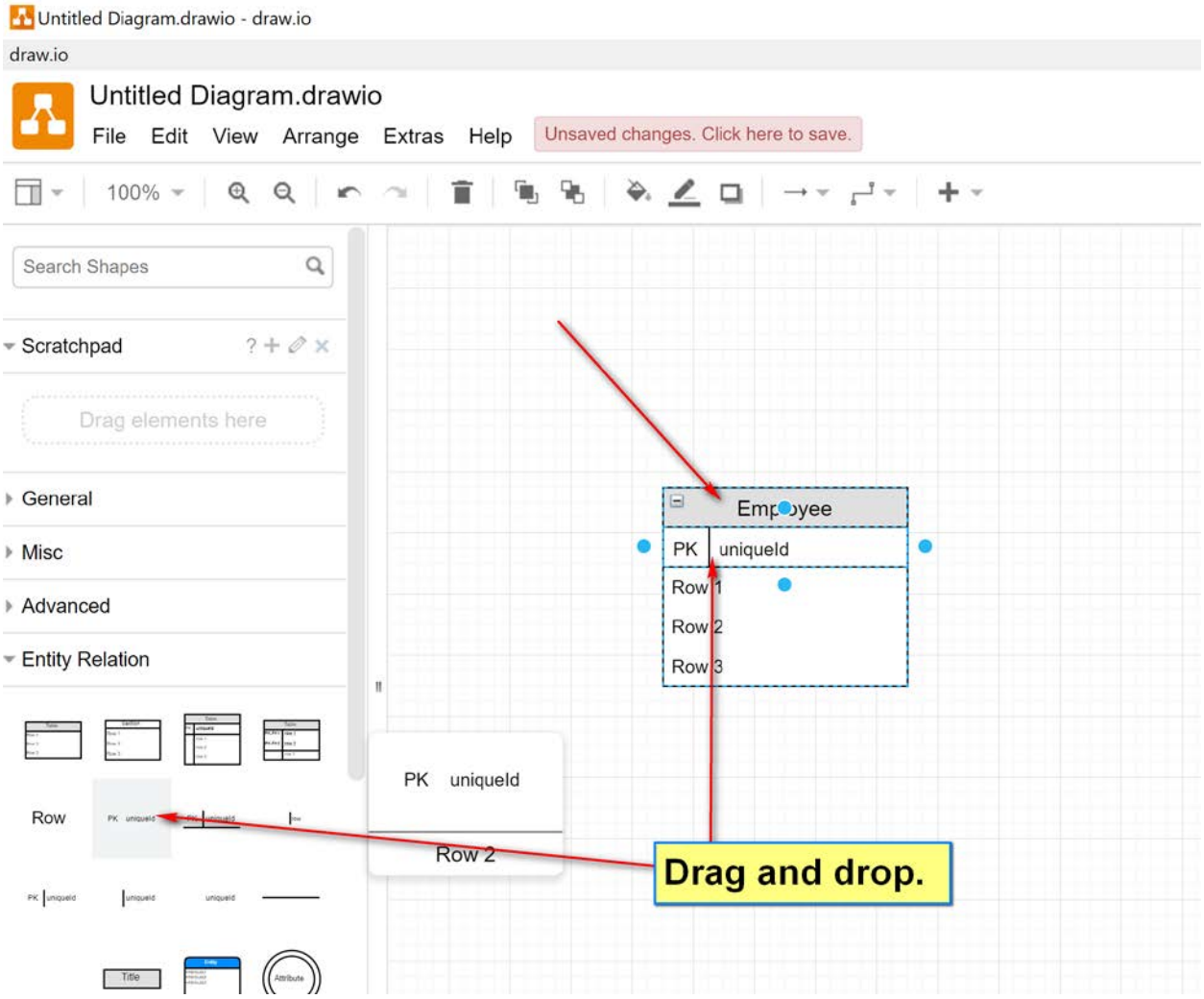
Example

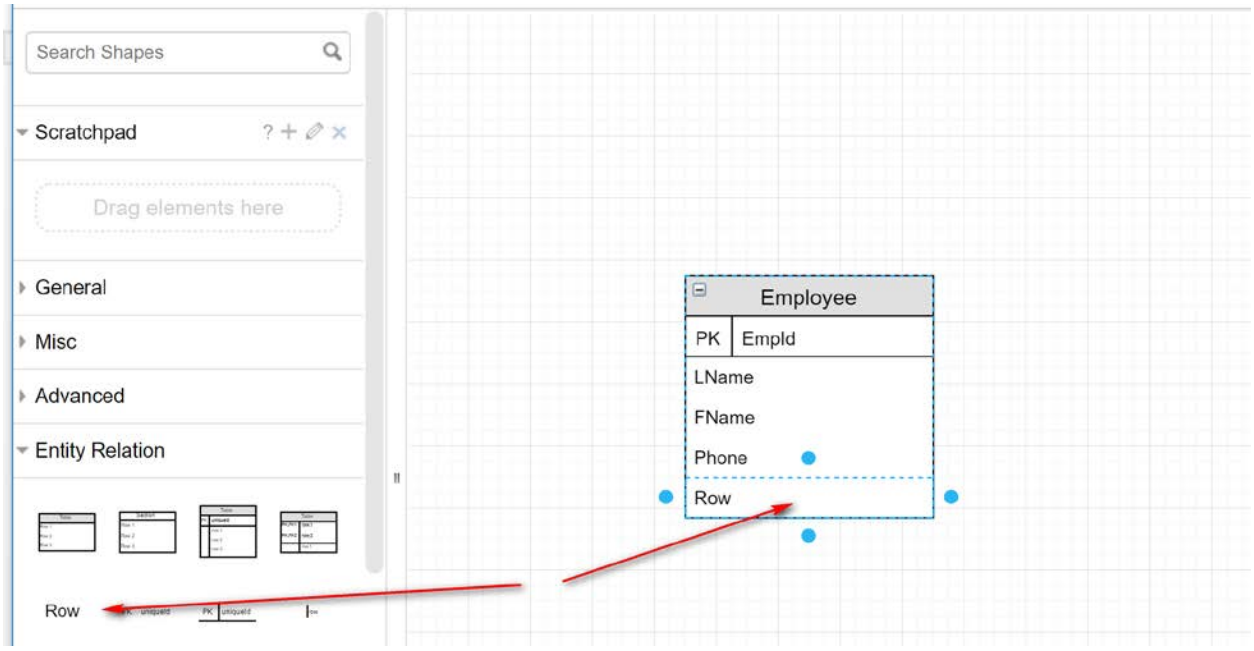
A simple Employees working for projects model.

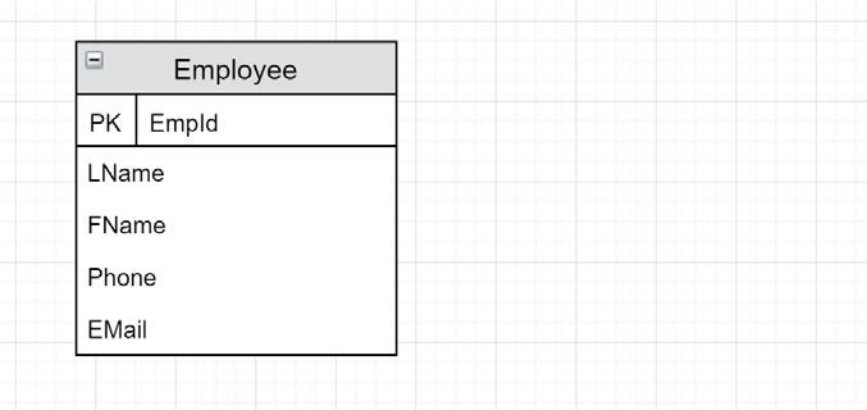
[1] The employee entity:

1. EmpId: PK
2. LName
3. FName
4. Phone
5. EMail



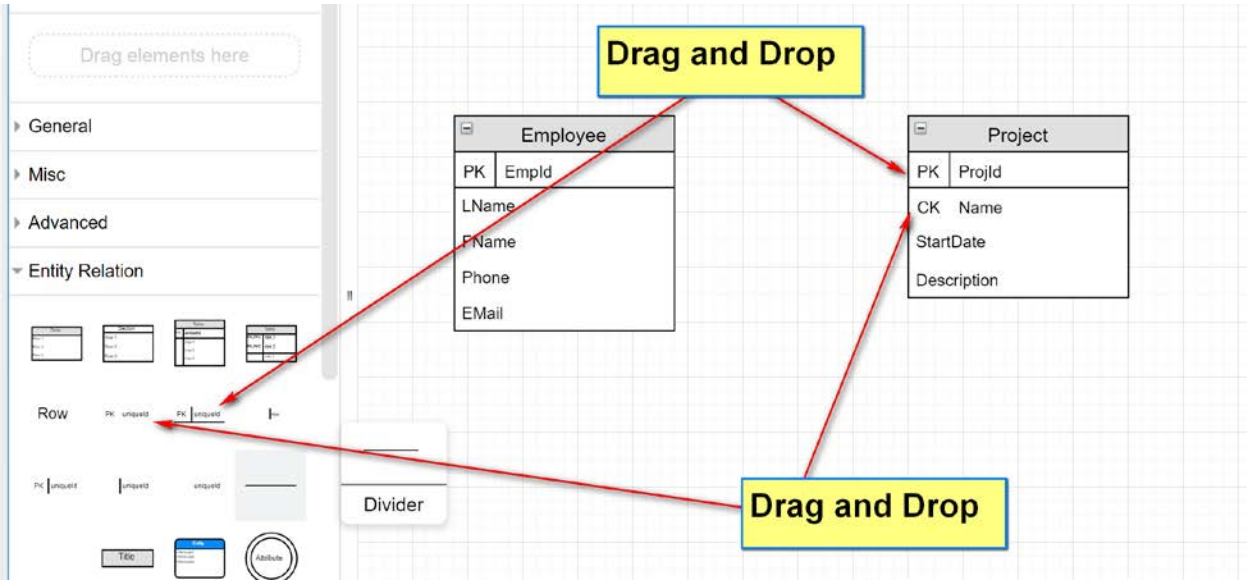

Untitled Diagram.drawio - draw.io
draw.io
Untitled Diagram.drawio
File Edit View Arrange Extras Help
Unsaved changes. Click here to save.
100%
Search Shapes
Scratchpad
Drag elements here
General
Misc
Advanced
Entity Relation
Row
PK uniqueId
Row 2
Employee
PK uniqueId
Row 1
Row 2
Row 3
Drag and drop.


Search Shapes
Scratchpad
Drag elements here
General
Misc
Advanced
Entity Relation
Row
Employee
PK EmpId
LName
FName
Phone
Row



[2] The Project Entity

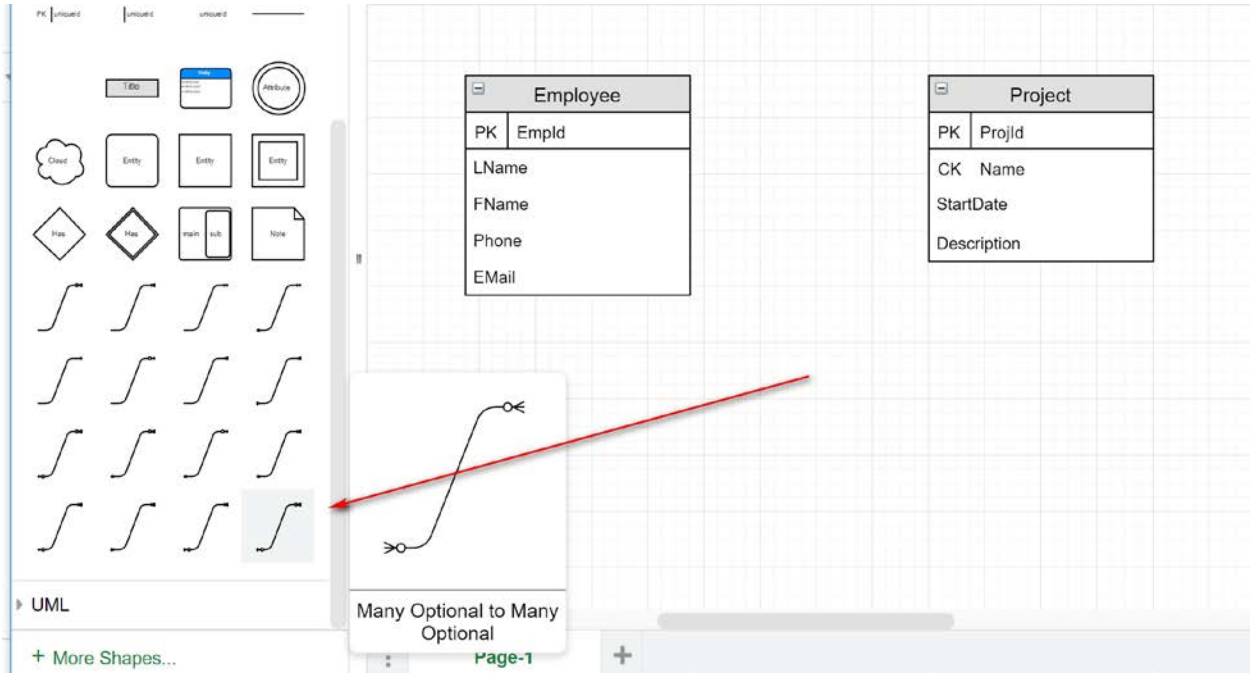
1. ProjId: PK
2. Name: CK, must be unique
3. StartDate
4. Description

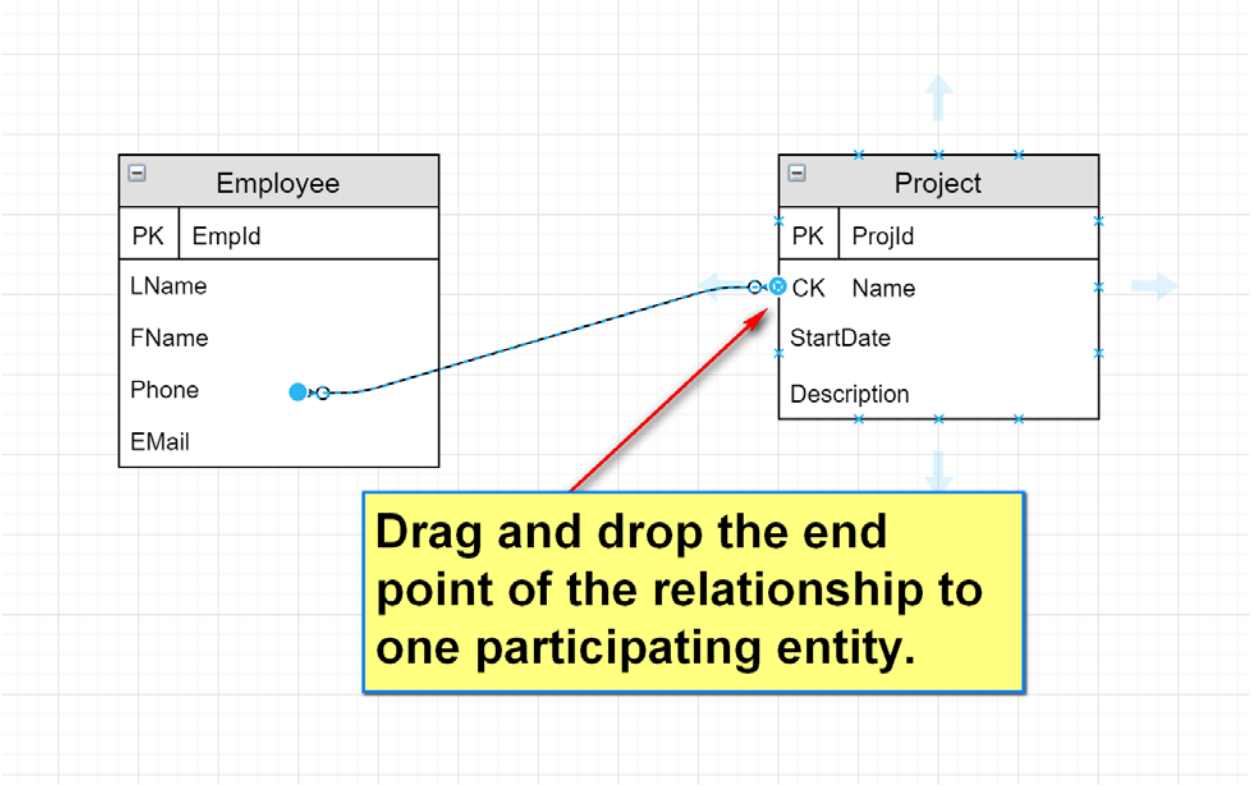


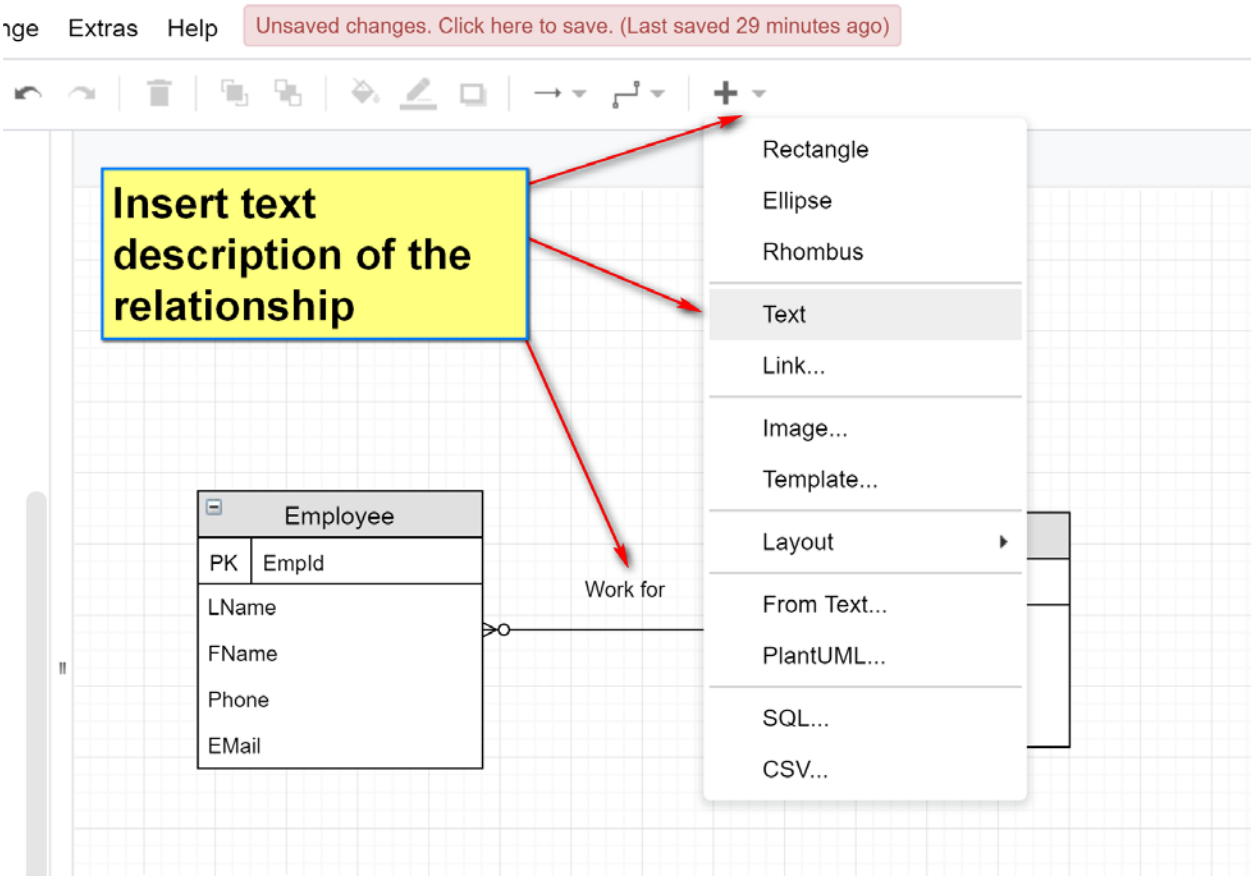
[3] Relationship between Employee and Project:

1. (0..many) to (0..many) relationship:
    a. An employee may work for zero or more projects.
    b. A Project may have zero or more worker member employee.
2. Relationship attributes: associative entities:
    a. Role
    b. StartDate

[1] Add relationship

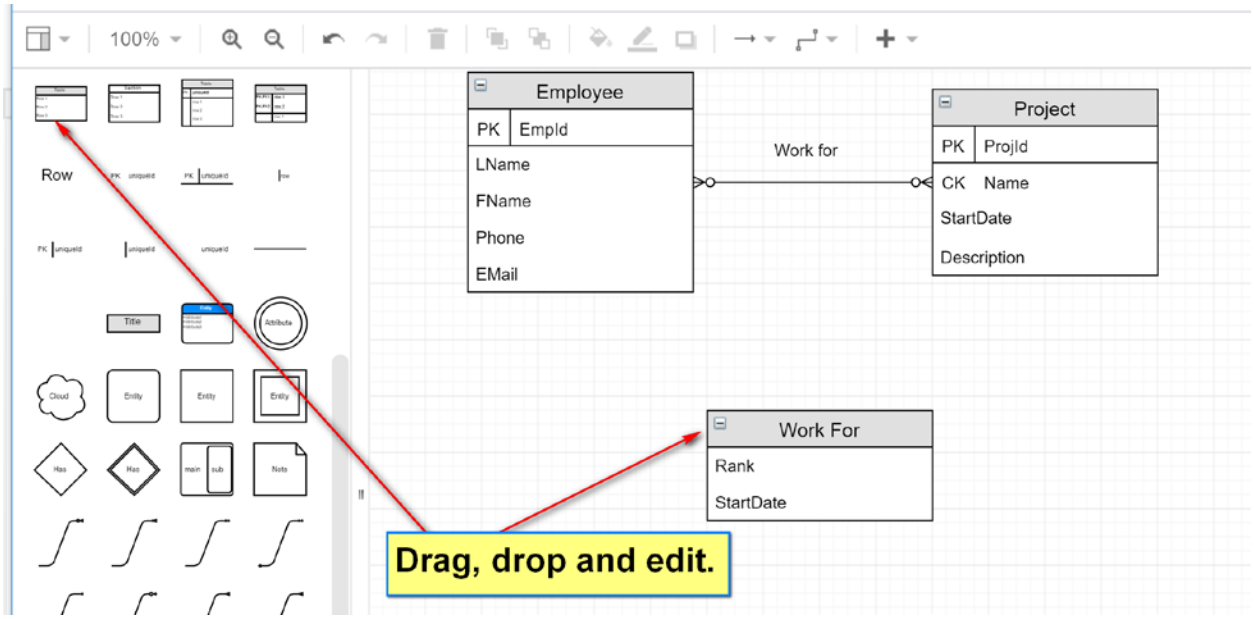




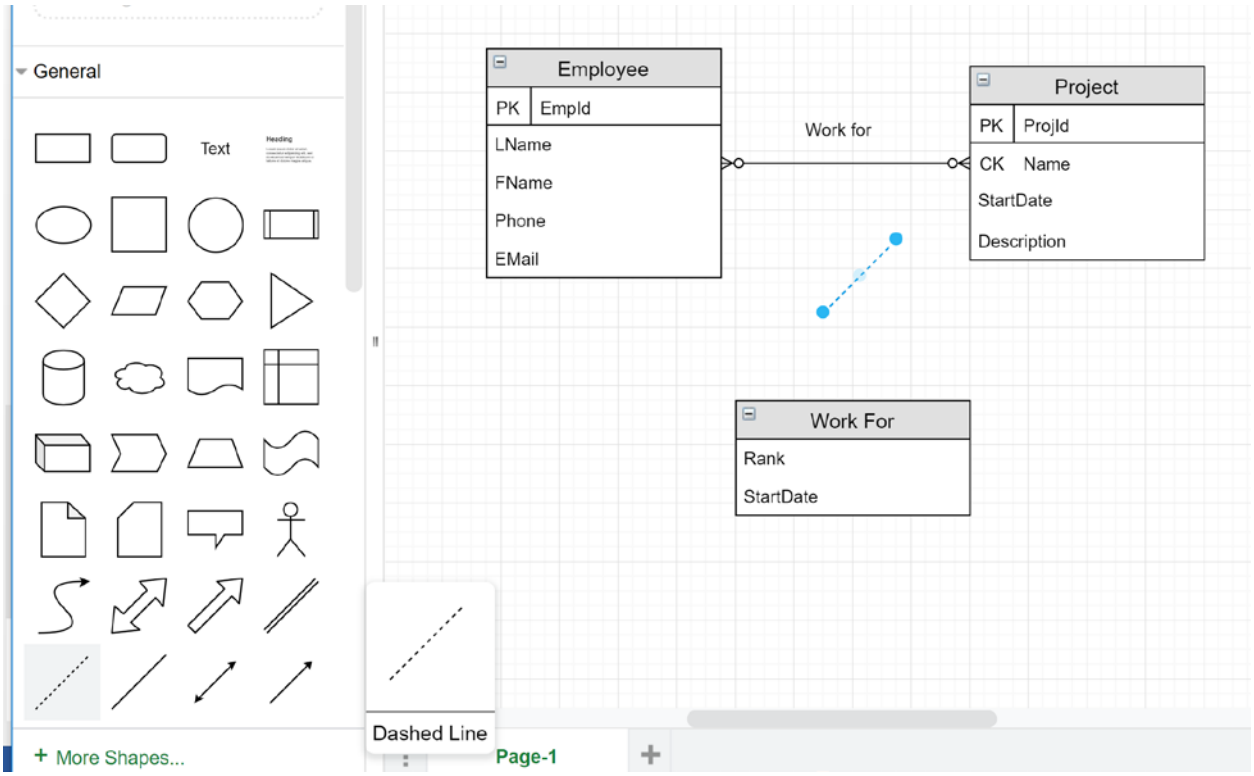


[2] Add relationship attribute (associative entity)

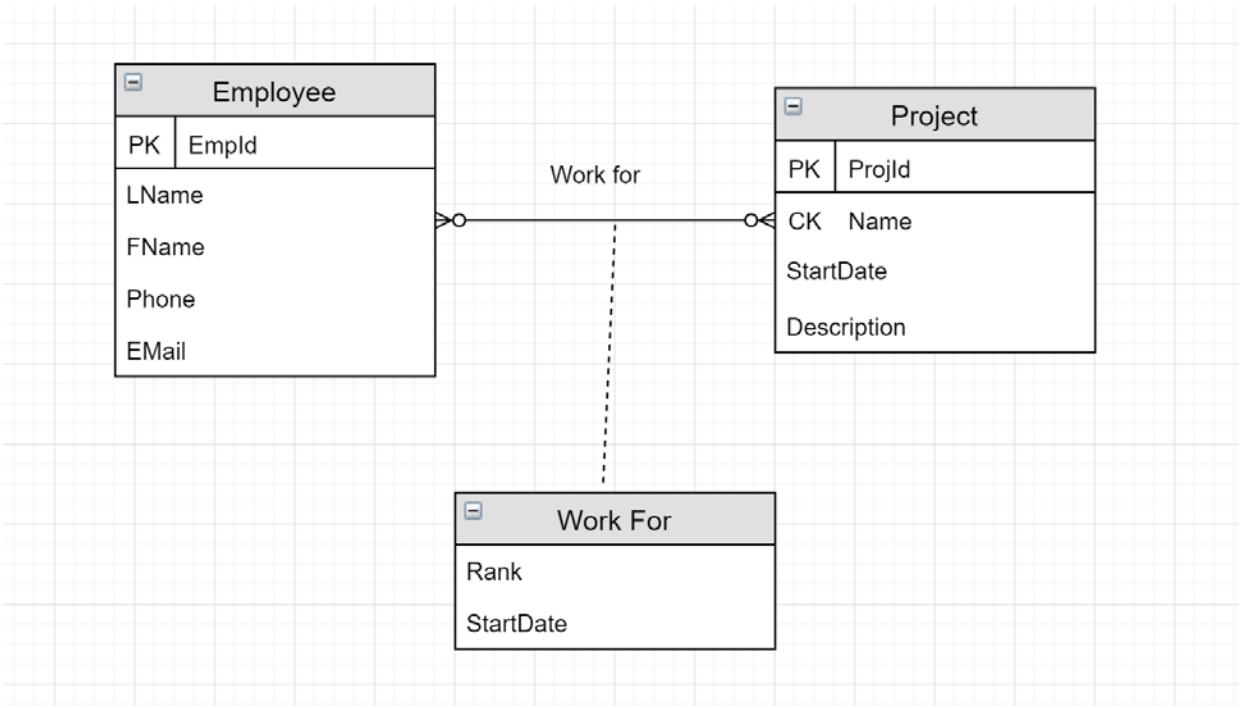
Add an associative entity:



Add a dashed line connector.



Connect the connector to the new entity and the relationship.



Do not forget to save from time to time. *Please do the example yourself to familiarize with the tool.*