

Lab Assignment 10 - ER Diagram

Instructions

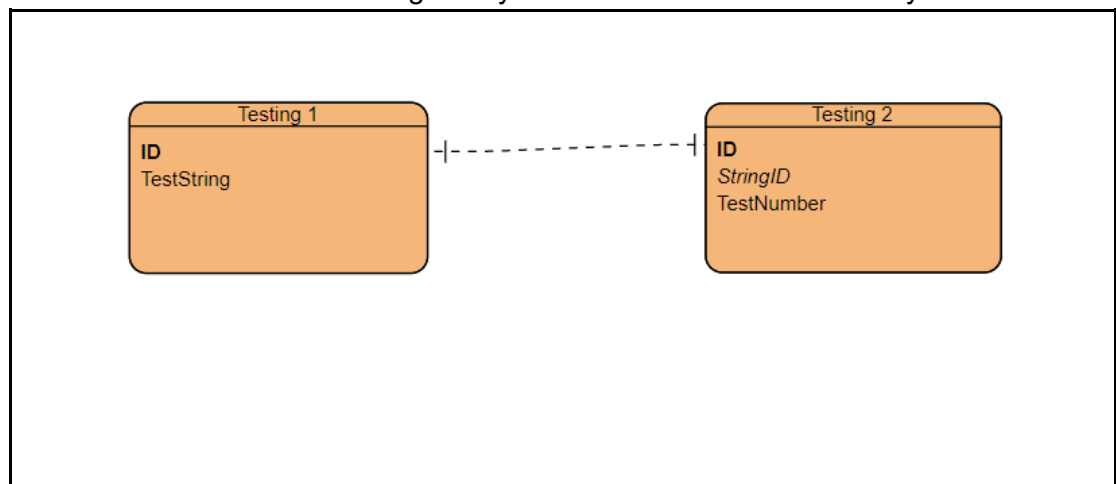
1. Answer the below question in the boxes.
2. Please submit the assignment through TalentLabs Learning System.

Part 1 - Access to Online ERD Tool

1. Visit Online ERD Tool website
 - <https://online.visual-paradigm.com/diagrams/features/erd-tool/>
 - Google Chrome is recommended to access the ERD Editor
2. Scroll down and click on an ERD template
 - A page will show up. Click "EDIT THIS TEMPLATE" will launch the ERD Editor with the ERD template
3. Explore some of the ERD template and try out the editor
 - Create entities by dragging the entity logo from the toolbox at the left
 - Resize the new entity by dragging the corner of the shape
 - Add columns to entity by right clicking on an entity
 - Set primary keys and foreign keys by right clicking on a column
 - Set relation by dragging from an edge on an entity to another

Part 2 - Build an ER Diagram

1. Open the link: <https://online.visual-paradigm.com/diagrams/features/erd-tool/>
2. Click "Make an ERD" and you will have an empty canvas for drawing ERD
3. Create an entity named "Testing 1" with below columns criteria (optional to specify data type)
 - A primary key column named as "ID"
 - A column named as "TestString"
4. Create another entity named "Testing 2" with below columns criteria (optional to specify data type)
 - A primary key column named as "ID"
 - A column named as "TestNumber"
5. Set a relationship by connecting "Testing 1" entity to "Testing 2" entity
 - Hover the mouse to the edge of the "Testing 1" entity
 - An arrow will show up
 - Drag the arrow to an edge of "Testing 2" entity
 - Select one-to-one relationship
 - Bonus: Add a corresponding foreign key to the connected entity
6. Post a screenshot of the "Testing" entity with a relation to another entity



Part 3 - Study College ERD template

1. Open the link: <https://online.visual-paradigm.com/diagrams/templates/entity-relationship-diagram/college/>
2. Read the ER Diagram and list out the below items
 - The tables specified in the ER Diagram
 - The columns specified in each table
 - The primary key / foreign key of each table
 - Specify the primary key as "PK" besides the column name
 - Specify the foreign key as "FK" besides the column name
 - Hint: Right click on the column names and observe the font style
3. Task: Fill in the below table. Each row should contain one column name of one table on ERD. You can append the table rows as needed.

Table Name	Column Name (PK / FK)
Course	ID (PK) DepartmentName (FK) InstructorID (FK) Duration Name
Department	Name (PK) Location
Instructor	ID (PK) DepartmentName (FK) headedBy (FK) FirstName LastName Phone
Course_Student	CourseID (FK) StudentID (FK)
Student	ID (PK) FirstName LastName Phone

Part 4 - Open DB Browser for SQLite and open the Movie database

1. In the Database Structure tab, with the given information, fill in the below items
 - The tables specified in the Database Structure tab
 - The columns specified in each table
 - The primary key / foreign key of each table
 - Specify the primary key as "PK" besides the column name
 - Specify the foreign key as "FK" besides the column name

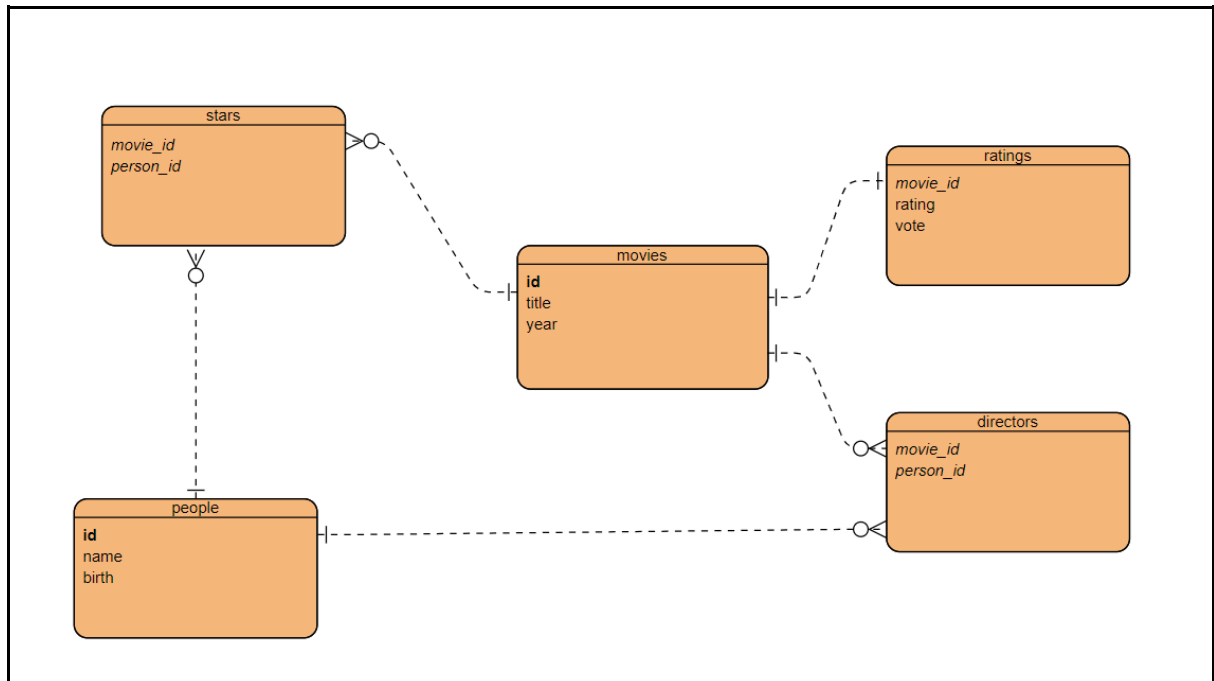
Table Name	Column Name (PK / FK)
directors	movie_id (FK) person_id (FK)
movies	id (PK) title year
people	id (PK) name birth
ratings	movie_id (FK) rating votes
stars	movie_id (FK) person_id (FK)

2. Draw an ER Diagram for the Movie Database
 - Go to <https://online.visual-paradigm.com/diagrams/features/erd-tool/>
 - Scroll down and click "Make an ERD"
 - Click "Start from blank"
 - Start by dragging new entities from the left toolbox
 - The ERD should include entities and columns
 - Primary keys and foreign keys should be specified

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- Link the entities with relations (one to one, one to many, many to one)
- Data type is optional

3. Paste a screenshot of the finished ERD below



- End of Assignment -