School of Computer Science, UPES, Dehradun.

A

LABORATORY FILE

On

DATABASE MANAGEMENT SYSTEM (DBMS) LAB

B.TECH. -III Semester

AUG. – NOV.- 2024.

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Experiment 02

ER Diagram: Company Database for Employee Tracking

AIM:

Consider the following set of requirements for a Company database that is used to keep track of employee.

Problem Statement:

The company is organized into departments. Each department has a unique name, a unique number, and a particular employee who manages the department. We keep track of the start date when that employee began managing the department. A department may have several locations.
A department controls a number of projects, each of which has a unique name, a unique number, and a single location.

We store each employee's name, Social Security number,2 address, salary, sex (gender), and birth date. An employee is assigned to one department, but may work on several projects, which are not necessarily controlled by the same department. We keep track of the current number of hours per week that an employee works on each project. We also keep track of the direct supervisor of each employee (who is another employee).

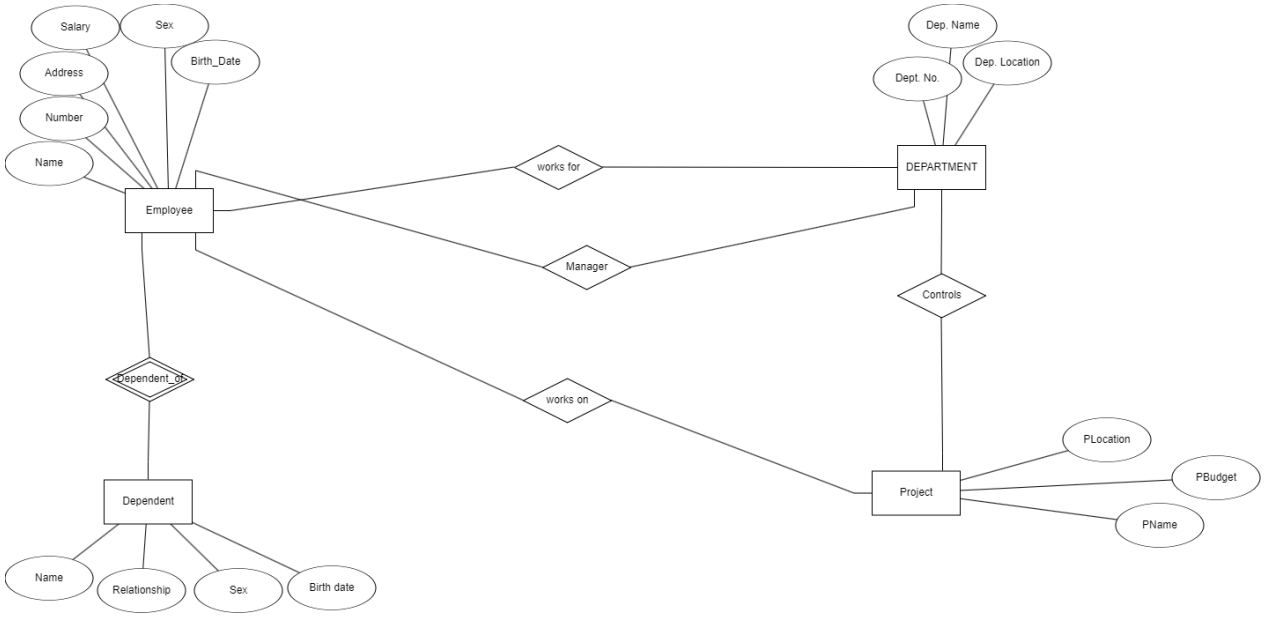
We want to keep track of the dependents of each employee for insurance purposes. We keep each dependent's first name, sex, birth date, and relationship to the employee.

Design an Entity-Relationship diagram for the company database and enter the design
using a data-modeling tool such as ERWin/free tool.

THEORY:

The Entity Relationship Diagram explains the relationship among the entities present in the database. ER models are used to model real-world objects like a person, a car, or a company and the relation between these real-world objects. In short, the ER Diagram is the structural format of the database.

Results:



Conclusion:

The Entity-Relationship (ER) diagram is an essential tool in database design that visually represents the structure and relationships among the entities within a system. For the given problem statement, an ER diagram helps in systematically capturing and organizing the various elements of a company's database, ensuring data integrity and effective manage