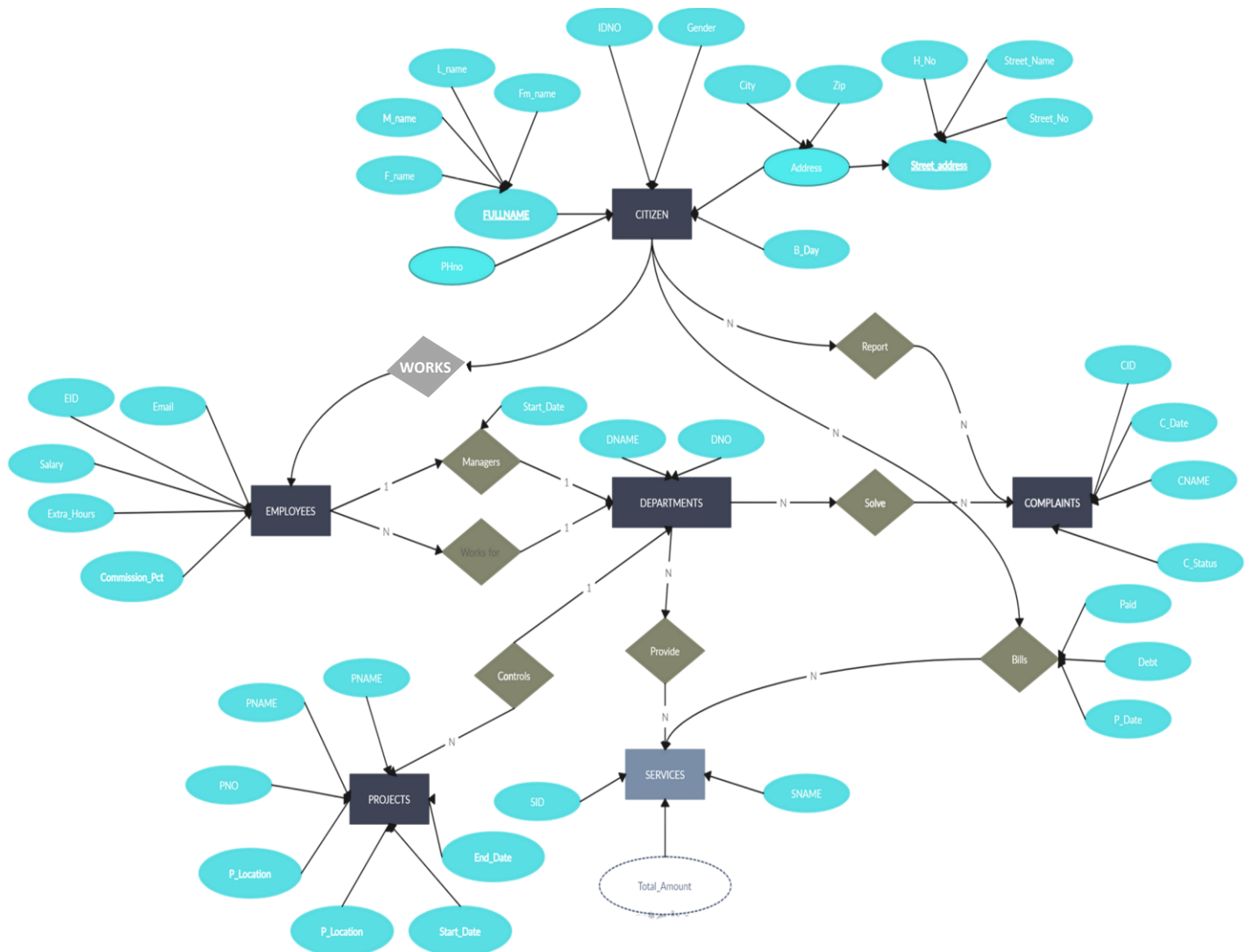# City Corporation Management System

Overview:

- Citizens and their information

- Employees and the departments they work in Projects, Services, and Complaints

- Relationships between all these entities

ER Diagram:-

1. <u>CITIZEN</u>

- <u>IDNO</u> (Primary Key)
- Gender
- B_Day
- PNo (Phone Number)
- Address
- City
- Zip

2. FULLNAME

- <u>IDNO</u> (Primary Key, Foreign Key → CITIZEN)
- F_name
- M_name
- L_name
- Fin_name

3. STREET_ADDRESS

- <u>Address</u> (Primary Key, Foreign Key → CITIZEN)
- H_No
- Street_Name
- Street_No

4. <u>EMPLOYEES</u>

- <u>EID</u> (Primary Key)
- Email
- Salary
- Extra_Hours
- Commission_Pct
- Start_Date
- IDNO (Foreign Key → CITIZEN)
- DNO (Foreign Key → DEPARTMENTS)

5. DEPARTMENTS

- <u>DNO</u> (Primary Key)
- DNAME
- DNAManager (References an EMPLOYEE as manager)

6. PROJECTS

- <u>PNO</u> (Primary Key)
- PNAME
- P_Location
- Start_Date
- End_Date

7. SERVICES

- <u>SID</u> (Primary Key)
- SNAME
- Total_Amount

8. COMPLAINTS

- <u>CID</u> (Primary Key)
- C_Date
- CNAME
- C_Status
- Paid
- Debt
- P_Date
- IDNO (Foreign Key → CITIZEN)

Key Relationships

EMPLOYEES:-

- Works for → One department (DEPARTMENTS)
- Managed by → A single EMPLOYEE manages one department

DEPARTMENTS:-

- Controls → Multiple PROJECTS
- Provides → Multiple SERVICES
- Solves → Multiple COMPLAINTS

PROJECTS

- Controlled by → One DEPARTMENT

CITIZEN

- Reports → Multiple COMPLAINTS

COMPLAINTS

- Linked to → SERVICES through BILLS (with Paid, Debt, P_Date)