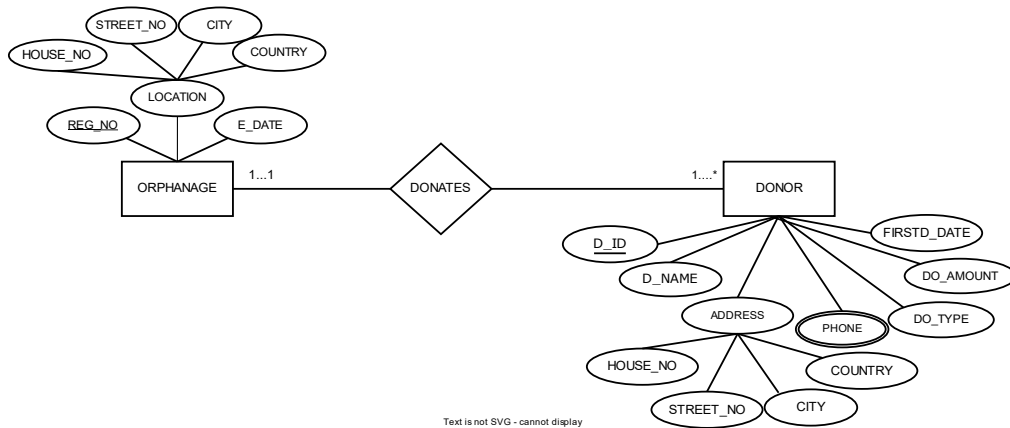


## **NORMALIZATION:**



### **DONATES:**

UNF:

REG\_NO, E\_DATE, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, D\_ID, D\_NAME,

HOUSE\_NO, STREET\_NO, CITY, COUNTRY, PHONE, DO\_TYPE, DO\_AMOUNT, FIRSTD\_DATE

1NF:

PHONE is a multivalued attribute

REG\_NO, E\_DATE, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, D\_ID, D\_NAME,

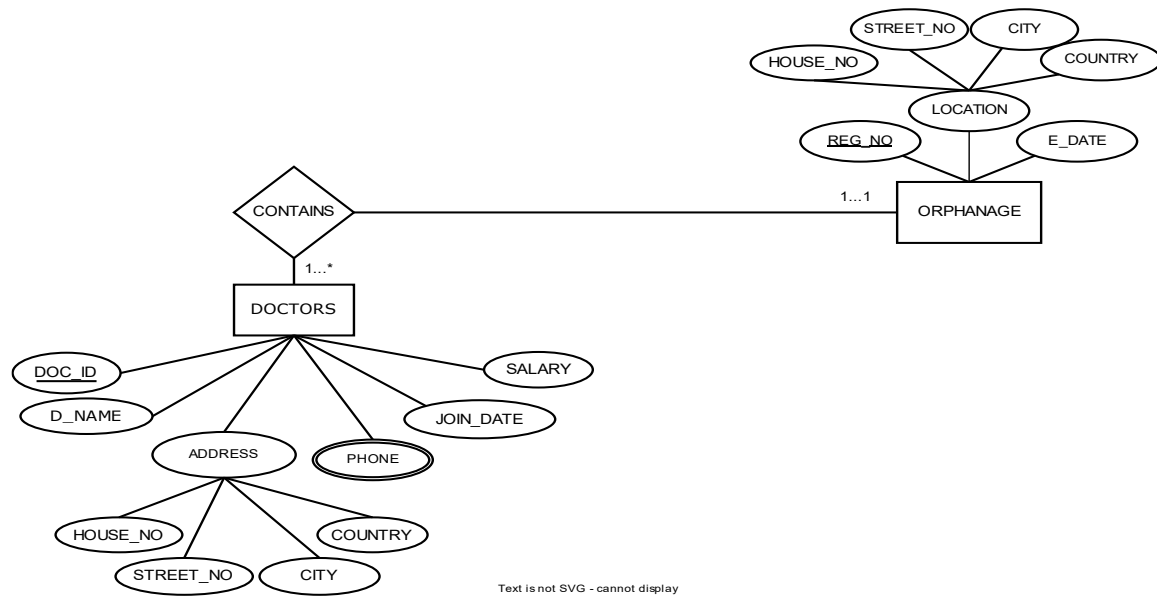
HOUSE\_NO, STREET\_NO, CITY, COUNTRY, DO\_TYPE, DO\_AMOUNT, FIRSTD\_DATE

2NF:

1. REG\_NO, E\_DATE, HOUSE\_NO, STREET\_NO, CITY, COUNTRY
2. D\_ID, D\_NAME, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, DO\_TYPE, DO\_AMOUNT, FIRSTD\_DATE, REG\_NO, PHONE\_ID
3. PHONE\_ID, PHONE

3NF:

1. REG\_NO, E\_DATE, ADD\_ID
2. ADD\_ID, HOUSE\_NO, STREET\_NO, CITY, COUNTRY
3. D\_ID, D\_NAME, REG\_NO, ADD\_ID, PHONE\_ID
4. ADD\_ID, HOUSE\_NO, STREET\_NO, CITY, COUNTRY
5. D\_ID, DO\_TYPE, DO\_AMOUNT, FIRSTD\_DATE,
6. PHONE\_ID, PHONE



## CONTAINS:

UNF:

REG\_NO, E\_DATE, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, DOC\_ID, DO\_NAME, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, PHONE, JOIN\_DATE, SALARY

1NF:

PHONE is a multivalued attribute

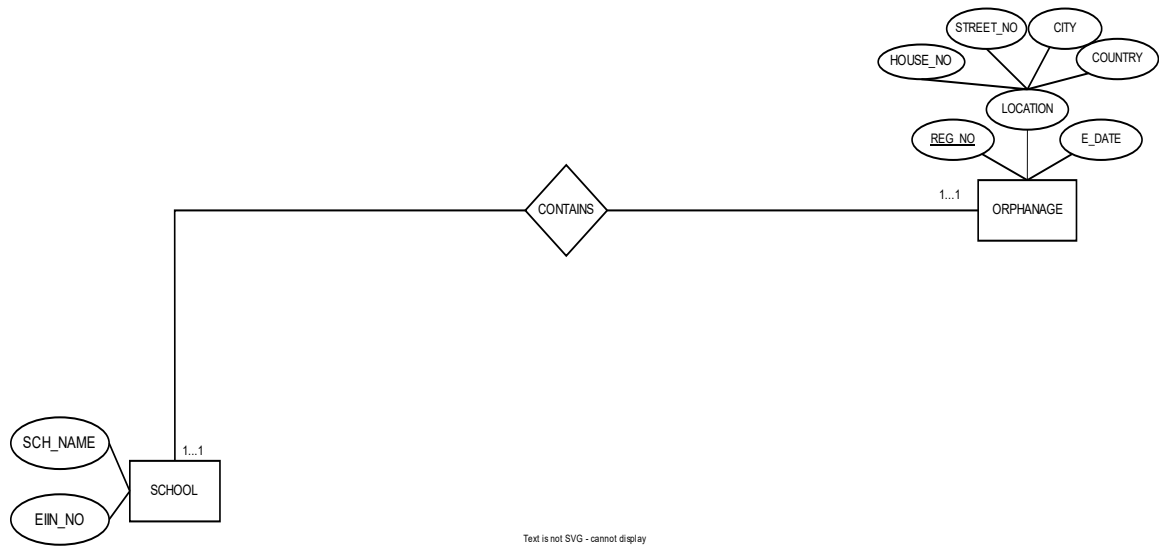
REG\_NO, E\_DATE, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, DOC\_ID, DO\_NAME, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, JOIN\_DATE, SALARY

2NF:

1. REG\_NO, E\_DATE, HOUSE\_NO, STREET\_NO, CITY, COUNTRY
2. DOC\_ID, DO\_NAME, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, JOIN\_DATE, SALARY, REG\_NO, PHONE\_ID
3. PHONE\_ID, PHONE

3NF:

1. REG\_NO, E\_DATE, ADD\_ID
2. ADD\_ID, HOUSE\_NO, STREET\_NO, CITY, COUNTRY
3. DOC\_ID, DO\_NAME, JOIN\_DATE, SALARY, REG\_NO, PHONE\_ID, ADD\_ID
4. ADD\_ID, HOUSE\_NO, STREET\_NO, CITY, COUNTRY
5. PHONE\_ID, PHONE



## CONTAIN:

UNF:

REG\_NO, REG\_NO, E\_DATE, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, SCH\_NAME, EIIN\_NO

1NF:

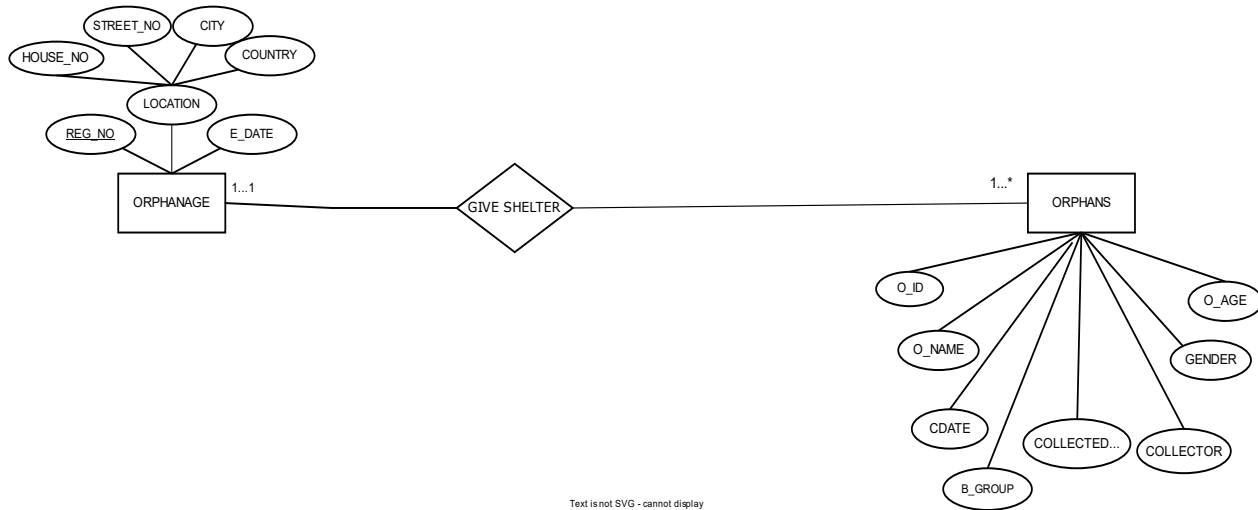
REG\_NO, REG\_NO, E\_DATE, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, SCH\_NAME, EIIN\_NO

2NF:

1. REG\_NO, E\_DATE, HOUSE\_NO, STREET\_NO, CITY, COUNTRY
2. EIIN\_NO, SCH\_NAME, REG\_NO

3NF:

1. REG\_NO, E\_DATE, ADD\_ID
2. ADD\_ID, HOUSE\_NO, STREET\_NO, CITY, COUNTRY
3. EIIN\_NO, SCH\_NAME, REG\_NO



### GIVE SHELTER:

UNF:

REG\_NO, REG\_NO, E\_DATE, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, O\_ID, O\_NAME, C\_DATE, COLLECTED\_FROM, COLLECTOR, B\_GROUP, GENDER, O\_AGE

1NF:

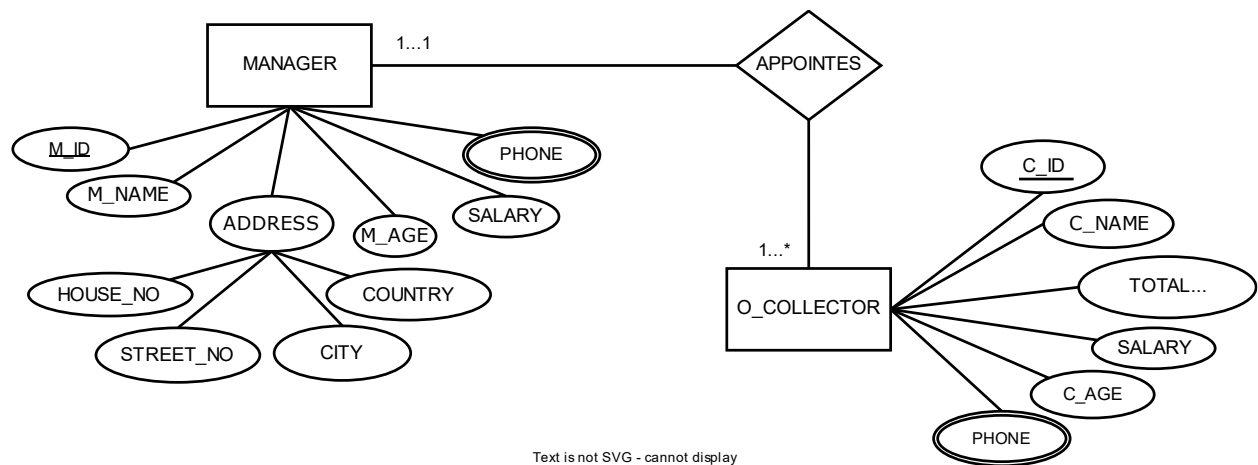
REG\_NO, REG\_NO, E\_DATE, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, O\_ID, O\_NAME, C\_DATE, COLLECTED\_FROM, COLLECTOR, B\_GROUP, GENDER, O\_AGE

2NF:

1. REG\_NO, E\_DATE, HOUSE\_NO, STREET\_NO, CITY, COUNTRY
2. O\_ID, O\_NAME, C\_DATE, COLLECTED\_FROM, COLLECTOR, B\_GROUP, GENDER, O\_AGE, REG\_NO

3NF:

1. REG\_NO, E\_DATE, ADD\_ID
2. ADD\_ID, HOUSE\_NO, STREET\_NO, CITY, COUNTRY
3. O\_ID, O\_NAME, B-GROUP, GENDER, O\_AGE, REG\_NO
4. O\_ID, C\_DATE, COLLECTED\_FROM, COLLECTOR



### APPOINTS:

UNF:

M\_ID, M\_NAME, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, M\_AGE, SALARY, PHONE, C\_ID, C\_NAME, TOTAL\_COLLECTION, SALARY, C\_AGE, PHONE

1NF:

PHONE is a multivalued attribute

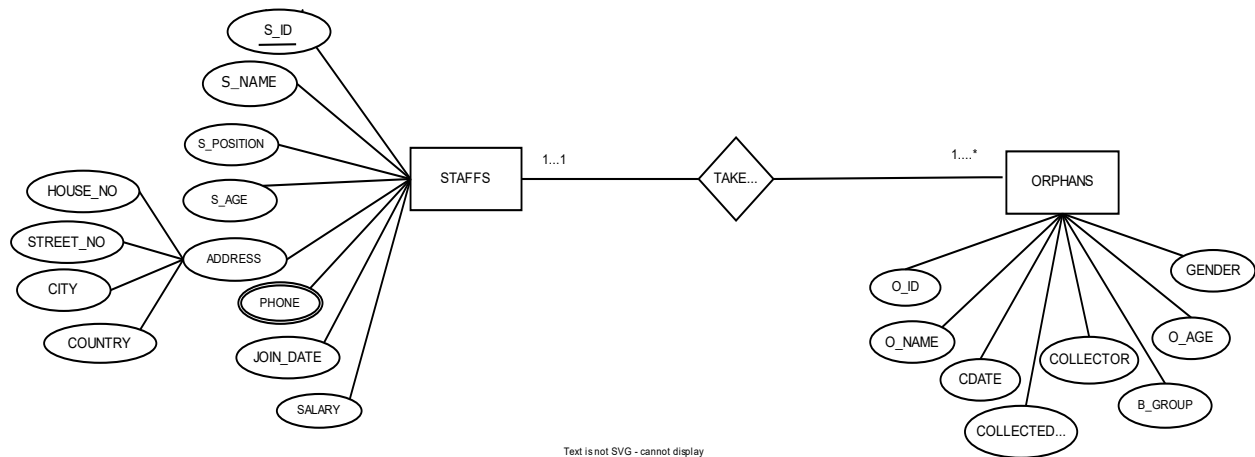
M\_ID, M\_NAME, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, M\_AGE, SALARY, C\_ID, C\_NAME, TOTAL\_COLLECTION, SALARY, C\_AGE,

2NF:

1. M\_ID, M\_NAME, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, M\_AGE, SALARY, PHONE\_ID
2. PHONE\_ID, PHONE
3. C\_ID, C\_NAME, TOTAL\_COLLECTION, SALARY, C\_AGE, M\_ID, PHONE\_ID
4. PHONE\_ID, PHONE

3NF:

1. M\_ID, M\_NAME, M\_AGE, SALARY, PHONE\_ID, ADD\_ID
2. ADD\_ID, HOUSE\_NO, STREET\_NO, CITY, COUNTRY
3. PHONE\_ID, PHONE
4. C\_ID, C\_NAME, TOTAL\_COLLECTION, SALARY, C\_AGE, M\_ID, PHONE\_ID
5. PHONE\_ID, PHONE



### TAKE CARE:

UNF:

S\_ID, S\_NAME, S\_POSITION, S\_AGE, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, PHONE, JOIN\_DATE, SALARY, O\_ID, O\_NAME, C\_DATE, COLLECTED\_FROM, COLLECTOR, B\_GROUP, GENDER, O\_AGE

1NF:

PHONE is a multivalued attribute

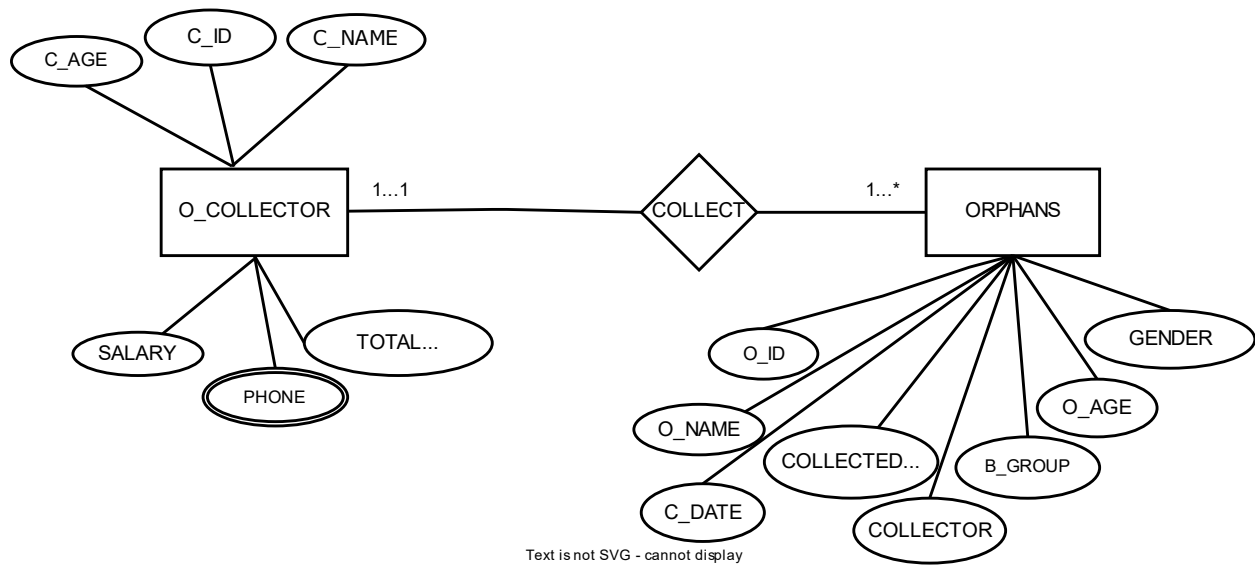
S\_ID, S\_NAME, S\_POSITION, S\_AGE, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, JOIN\_DATE, SALARY, O\_ID, O\_NAME, C\_DATE, COLLECTED\_FROM, COLLECTOR, B\_GROUP, GENDER, O\_AGE

2NF:

1. S\_ID, S\_NAME, S\_POSITION, S\_AGE, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, JOIN\_DATE, SALARY, PHONE\_ID
2. PHONE\_ID, PHONE
3. O\_ID, O\_NAME, C\_DATE, COLLECTED\_FROM, COLLECTOR, B\_GROUP, GENDER, O\_AGE, S\_ID

3NF:

1. S\_ID, S\_NAME, S\_AGE, JOIN\_DATE, ADD\_ID, PHONE\_ID
2. S\_ID, S\_POSITION, SALARY
3. ADD\_ID, HOUSE\_NO, STREET\_NO, CITY, COUNTRY
4. PHONE\_ID, PHONE
5. O\_ID, O\_NAME, B-GROUP, GENDER, O\_AGE, S\_ID
6. O\_ID, C\_DATE, COLLECTED\_FROM, COLLECTOR



### **COLLECT:**

UNF:

C\_ID, C\_NAME, TOTAL\_COLLECTION, SALARY, C\_AGE, PHONE, O\_ID, O\_NAME, C\_DATE, COLLECTED\_FROM, COLLECTOR, B\_GROUP, GENDER, O\_AGE

1NF:

PHONE is a multivalued attribute

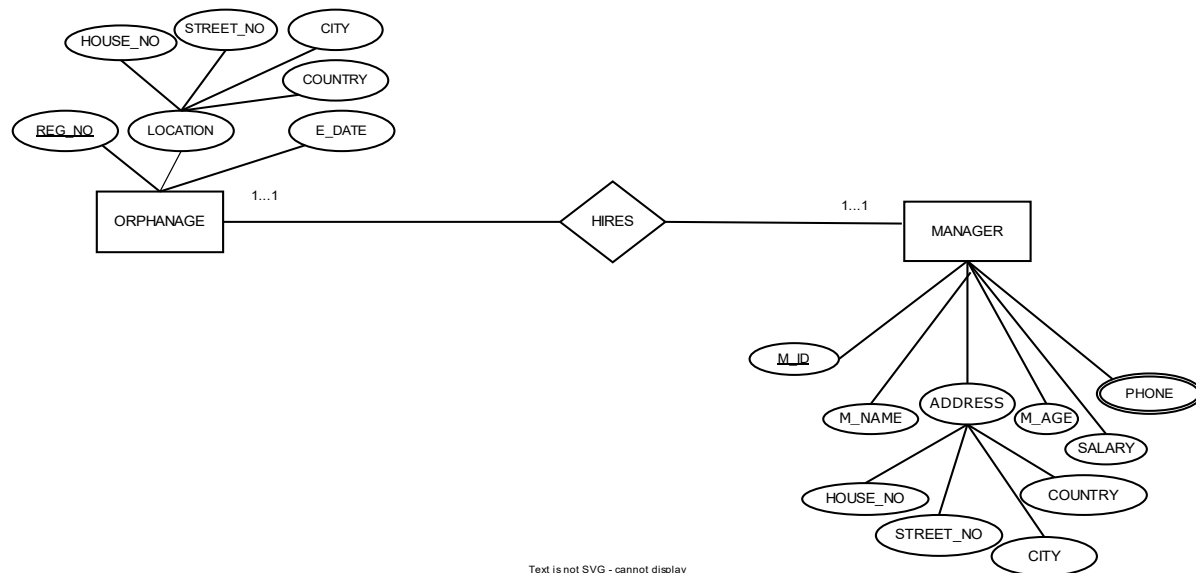
C\_ID, C\_NAME, TOTAL\_COLLECTION, SALARY, C\_AGE, O\_ID, O\_NAME, C\_DATE, COLLECTED\_FROM, COLLECTOR, B\_GROUP, GENDER, O\_AGE

2NF:

1. C\_ID, C\_NAME, TOTAL\_COLLECTION, SALARY, C\_AGE, PHONE\_ID
2. PHONE\_ID, PHONE
3. O\_ID, O\_NAME, C\_DATE, COLLECTED\_FROM, COLLECTOR, B\_GROUP, GENDER, O\_AGE, C\_ID

3NF:

1. C\_ID, C\_NAME, TOTAL\_COLLECTION, SALARY, C\_AGE, PHONE\_ID
2. PHONE\_ID, PHONE
3. O\_ID, O\_NAME, B\_GROUP, GENDER, O\_AGE, C\_ID
4. O\_ID, C\_DATE, COLLECTED\_FROM, COLLECTOR



## HIRES:

UNF:

REG\_NO, E\_DATE, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, M\_ID, M\_NAME, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, M\_AGE, SALARY, PHONE

1NF:

PHONE is a multivalued attribute.

REG\_NO, E\_DATE, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, M\_ID, M\_NAME, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, M\_AGE, SALARY

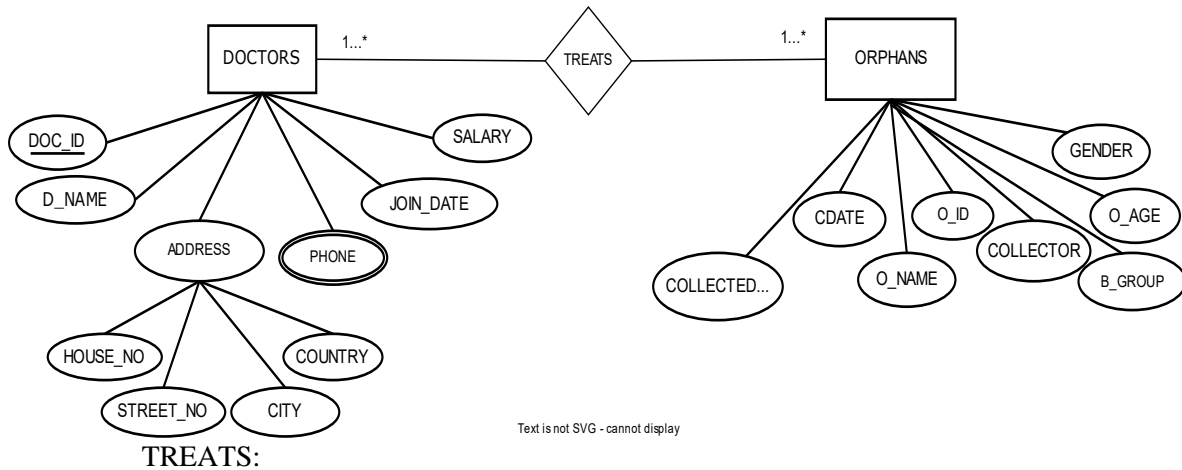
2NF:

1. REG\_NO, E\_DATE, HOUSE\_NO, STREET\_NO, CITY, COUNTRY
2. M\_ID, M\_NAME, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, M\_AGE, SALARY, REG\_NO, PHONE\_ID
3. PHONE\_ID, PHONE

3NF:

1. REG\_NO, E\_DATE, ADD\_ID
2. ADD\_ID, HOUSE\_NO, STREET\_NO, CITY, COUNTRY
3. M\_ID, M\_NAME, M\_AGE, SALARY, REG\_NO, PHONE\_ID, ADD\_ID
4. ADD\_ID, HOUSE\_NO, STREET\_NO, CITY, COUNTRY
5. PHONE\_ID, PHONE





UNF:

DOC\_ID, DO\_NAME, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, PHONE, JOIN\_DATE, SALARY, O\_ID, O\_NAME, C\_DATE, COLLECTED\_FROM, COLLECTOR, B\_GROUP, GENDER, O\_AGE

1NF:

PHONE is a multivalued attribute

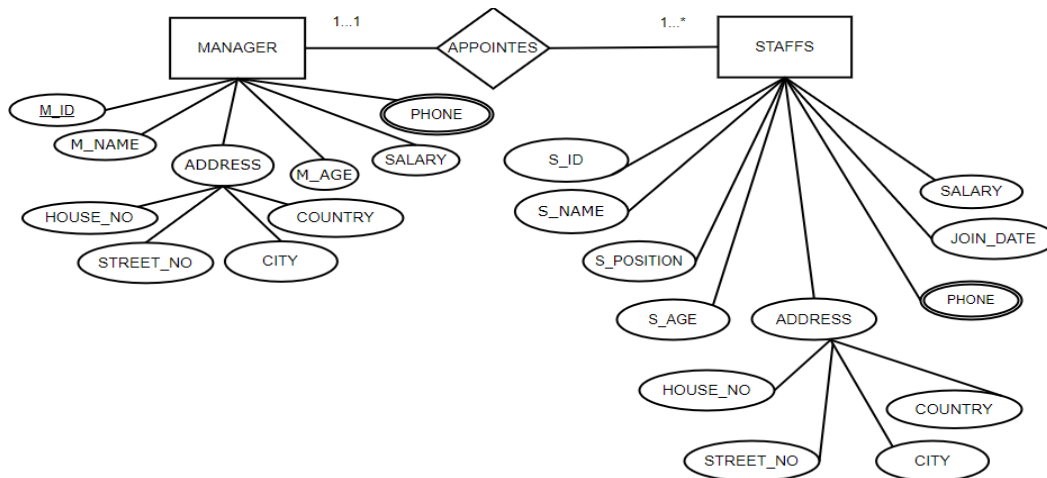
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2NF:

1. DOC\_ID, DO\_NAME, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, JOIN\_DATE, SALARY, PHONE\_ID
2. PHONE\_ID, PHONE
3. O\_ID, O\_NAME, C\_DATE, COLLECTED\_FROM, COLLECTOR, B\_GROUP, GENDER, O\_AGE, DOC\_ID

3NF:

1. DOC\_ID, DO\_NAME, JOIN\_DATE, SALARY, ADD\_ID, PHONE\_ID
2. ADD\_ID, HOUSE\_NO, STREET\_NO, CITY, COUNTRY
3. PHONE\_ID, PHONE
4. O\_ID, O\_NAME, B\_GROUP, GENDER, O\_AGE, DOC\_ID
5. O\_ID, C\_DATE, COLLECTED\_FROM, COLLECTOR



APPOINTS:

UNF:

M\_ID, M\_NAME, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, M\_AGE, SALARY, PHONE, S\_ID, S\_NAME, S\_POSITION, S\_AGE, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, PHONE, JOIN\_DATE, SALARY

1NF:

PHONE is a multivalued attribute.

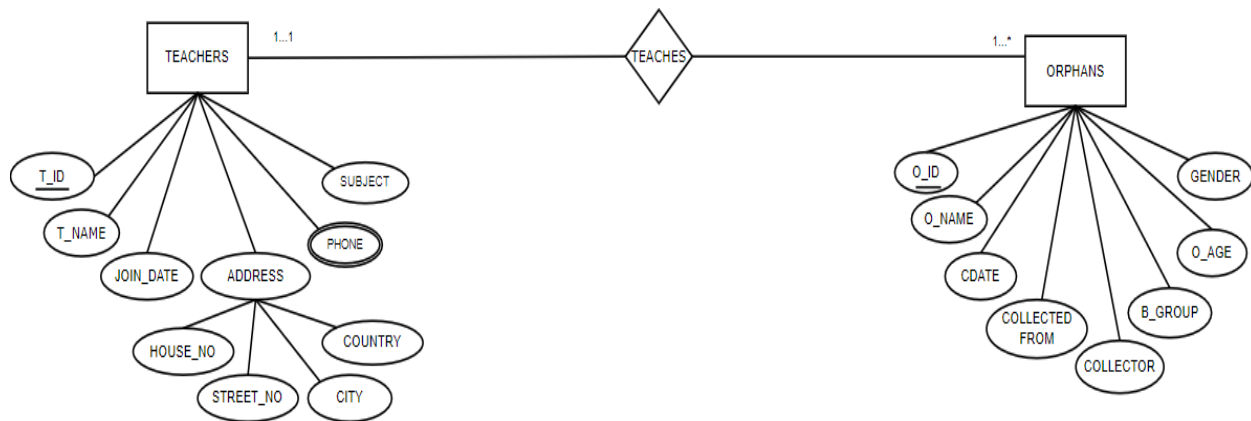
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2NF:

1. M\_ID, M\_NAME, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, M\_AGE, SALARY, PHONE\_ID
2. PHONE\_ID, PHONE
3. S\_ID, S\_NAME, S\_POSITION, S\_AGE, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, JOIN\_DATE, SALARY, M\_ID, PHONE\_ID
4. PHONE\_ID, PHONE

3NF:

1. M\_ID, M\_NAME, M\_AGE, SALARY, ADD\_ID, PHONE\_ID
2. ADD\_ID, HOUSE\_NO, STREET\_NO, CITY, COUNTRY
3. PHONE\_ID, PHONE
4. S\_ID, S\_NAME, S\_AGE, JOIN\_DATE, M\_ID, ADD\_ID, PHONE\_ID
5. S\_ID, S\_POSITION, SALARY
6. ADD\_ID, HOUSE\_NO, STREET\_NO, CITY, COUNTRY
7. PHONE\_ID, PHONE



### **TEACHES:**

UNF:

T\_ID, T\_NAME, SUBJECT, PHONE, JOIN\_DATE, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, O\_ID, O\_NAME, GENDER, O\_AGE, B\_GROUP, C\_DATE, COLLECTED FROM, COLLECTOR

1NF:

PHONE is a multivalued attribute.

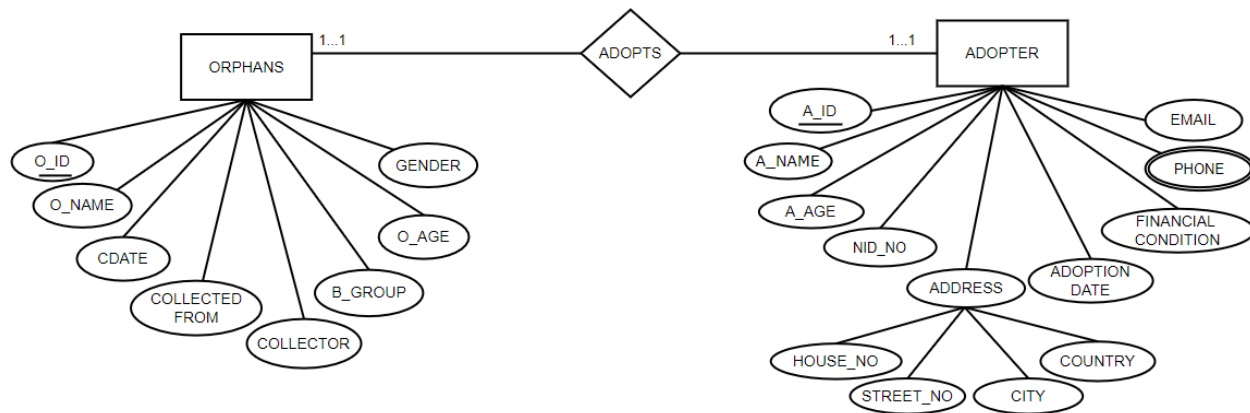
T\_ID, T\_NAME, SUBJECT, JOIN\_DATE, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, O\_ID, O\_NAME, GENDER, O\_AGE, B\_GROUP, C\_DATE, COLLECTED FROM, COLLECTOR

2NF:

1. T\_ID, T\_NAME, SUBJECT, JOIN\_DATE, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, PHONE\_ID
2. PHONE\_ID, PHONE
3. O\_ID, O\_NAME, GENDER, O\_AGE, B\_GROUP, C\_DATE, COLLECTED FROM, COLLECTOR, T\_ID

3NF:

1. T\_ID, T\_NAME, SUBJECT, JOIN\_DATE, PHONE\_ID, ADD\_ID
2. PHONE\_ID, PHONE
3. ADD\_ID HOUSE\_NO, STREET\_NO, CITY, COUNTRY
4. O\_ID, O\_NAME, GENDER, O\_AGE, B\_GROUP, T\_ID
5. O\_ID, C\_DATE, COLLECTED\_FROM, COLLECTOR



### **ADOPTS:**

UNF:

A\_ID, A\_NAME, A\_AGE, NID\_NO, EMAIL, PHONE, FINANCIAL CONDITION, ADOPTION DATE, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, O\_ID, O\_NAME, GENDER, O\_AGE, B\_GROUP, C\_DATE, COLLECTED FROM, COLLECTOR

1NF:

PHONE is a multivalued attribute.

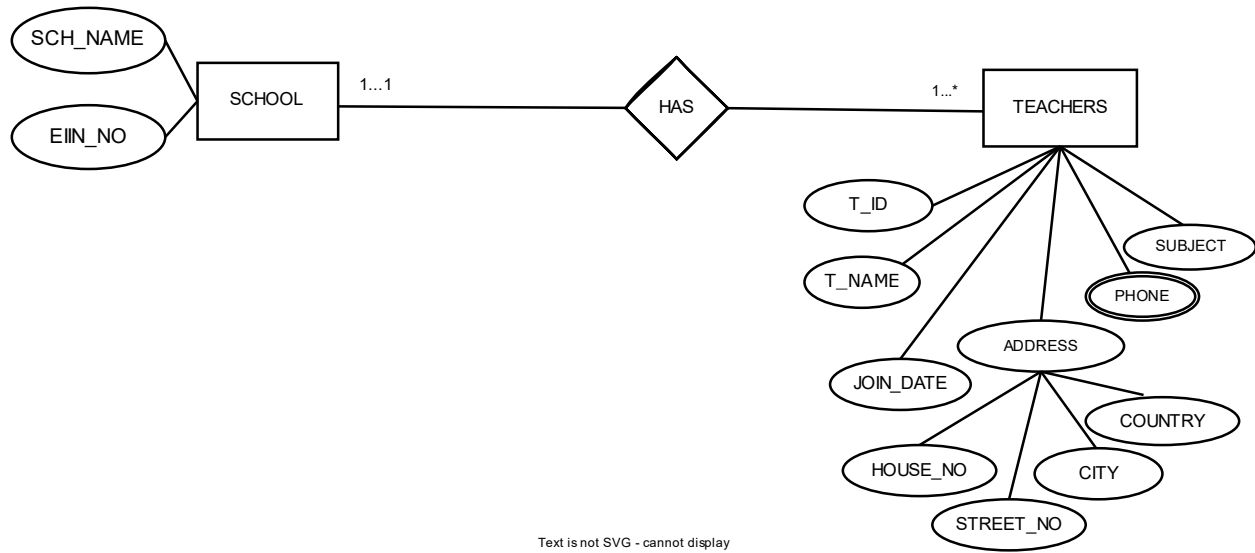
A\_ID, A\_NAME, A\_AGE, NID\_NO, EMAIL, FINANCIAL CONDITION, ADOPTION DATE, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, O\_ID, O\_NAME, GENDER, O\_AGE, B\_GROUP, C\_DATE, COLLECTED FROM, COLLECTOR.

2NF:

1. A\_ID, A\_NAME, A\_AGE, NID\_NO, EMAIL, FINANCIAL\_CONDITION, ADOPTION\_DATE, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, PHONE\_ID
2. PHONE\_ID, PHONE
3. O\_ID, O\_NAME, GENDER, AGE, BG, C\_DATE, COLLECTED FROM, COLLECTOR, A\_ID.

3NF:

1. A\_ID, A\_NAME, A\_AGE, NID\_NO, EMAIL, FINANCIAL CONDITION, ADOPTION DATE, PHONE\_ID, ADD\_ID
2. PHONE\_ID, PHONE
3. ADD\_ID, HOUSE\_NO, STREET\_NO, CITY, COUNTRY
4. O\_ID, O\_NAME, GENDER, AGE, B\_GROUP, A\_ID
5. O\_ID, C\_DATE, COLLECTED\_FROM, COLLECTOR



HAS:

UNF:

EIIN\_NO, SCH\_NAME, T\_ID, T\_NAME, SUBJECT, PHONE, JOIN\_DATE, HOUSE\_NO, STREET\_NO, CITY, COUNTRY

1NF:

PHONE is a multivalued attribute.

EIIN\_NO, SCH\_NAME, T\_ID, T\_NAME, SUBJECT, JOIN\_DATE, HOUSE\_NO, STREET\_NO, CITY, COUNTRY

2NF:

1. EIIN\_NO, SCH\_NAME
2. T\_ID, T\_NAME, SUBJECT, JOIN\_DATE, HOUSE\_NO, STREET\_NO, CITY, COUNTRY, EIIN\_NO, PHONE\_ID
3. PHONE\_ID, PHONE

3NF:

1. EIIN\_NO, SCH\_NAME
2. T\_ID, T\_NAME, SUBJECT, JOIN\_DATE, EIIN\_NO, PHONE\_ID, ADD\_ID
3. PHONE\_ID, PHONE
4. ADD\_ID, HOUSE\_NO, STREET\_NO, CITY, COUNTRY