1. Mapping the regular entity types. (in THIS color)

2. Mapping the weak entity types. (in THIS color)

3. Mapping of binary 1:1 relationship types. (None)

4. Mapping of binary 1:N relationship types. (in THIS color.)

5. Mapping of binary M:N relationship types. (in THIS color.)

6. Mapping of multivalued attributes. (None)

PLANE\_TYPE

|  |  |  |
| --- | --- | --- |
| Model | Capacity | Weight |

PERSON

|  |  |  |  |
| --- | --- | --- | --- |
| SSN | Name | Address | Phone |

EMPLOYEE

|  |  |  |
| --- | --- | --- |
| Salary | Shift | SSN |

SSN is a FK from PERSON.SSN

PILOT

|  |  |  |
| --- | --- | --- |
| Restr | Lic\_num | SSN |

SSN is a FK from PERSON.SSN

AIRPLANE

|  |  |  |
| --- | --- | --- |
| Reg# | Model | Number |

Model is a FK from PLANE\_TYPE.Model

Number is a FK from HANGAR.Number

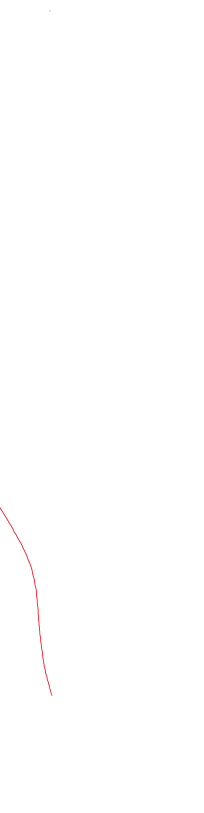
HANGAR

|  |  |  |
| --- | --- | --- |
| Number | Capacity | Location |

CORPORATION

|  |  |  |
| --- | --- | --- |
| Name | Address | Phone |

OWNER



|  |  |
| --- | --- |
| Name | SSN |

Name is a FK from CORPORATION.Name

SSN is a FK from PERSON.SSN

SERVICE



|  |  |  |  |
| --- | --- | --- | --- |
| Hours | Date | Workcode | Reg# |

Reg# is a FK from AIRPLANE.Reg#



WORKS\_ON

|  |  |
| --- | --- |
| Model | SSN |

Model is a FK from PLANE\_TYPE.Model

SSN is a FK from EMPLOYEE.SSN

MAINTAIN

|  |  |
| --- | --- |
| SSN | Reg# |

SSN is a FK from EMPLOYEE.SSN

Reg# is a FK from SERVICE.Reg#

FILES

|  |  |
| --- | --- |
| SSN | Model |

SSN is a FK from PILOT.SSN

Model is a FK from PLANE\_TYPE.Model

OWNS

|  |  |  |  |
| --- | --- | --- | --- |
| Pdate | Reg# | SSN | Name |

Reg# is a FK from AIRPLANE.Reg#

SSN is a FK from OWNER.SSN

Name is a FK from OWNER.SSN

1. Mapping the regular entity types including super class and subclass. (in THIS color)

2. Mapping the weak entity types. (None)

3. Mapping of binary 1:1 relationship types. (None)

4. Mapping of binary 1:N relationship types. (None)

5. Mapping of binary M:N relationship types. (None)

6. Mapping of multivalued attributes. (None)

PERSON

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| SSN | Name | Sex | Address | Birth\_date |

EMPLOYEE

|  |  |
| --- | --- |
| SSN | Salary |

SSN is a FK from PERSON.SSN

ALUMNUS

|  |  |
| --- | --- |
| SSN | Degree |

SSN is a FK from PERSON.SSN

STUDENT

|  |  |
| --- | --- |
| SSN | Major\_dept |

SSN is a FK from PERSON.SSN

STAFF

|  |  |
| --- | --- |
| SSN | Position |

SSN is a FK from EMPLOYEE.SSN

FACULTY

|  |  |
| --- | --- |
| Rank | SSN |

SSN is a FK from EMPLOYEE.SSN

STUDENT\_ASSISTANT

|  |  |  |
| --- | --- | --- |
| Percent\_time | EmSSN | StSSN |

EmSSN is a FK from EMPLOYEE.SSN

StSSN is a FK from STUDENT.SSN

GRADUATE\_STUDENT

|  |  |
| --- | --- |
| Degree\_program | SSN |

SSN is a FK from STUDENT.SSN

UNDERGRADUATE\_STUDENT

|  |  |
| --- | --- |
| Class | SSN |

SSN is a FK from STUDENT.SSN

RESEARCH\_ASSISTANT

|  |  |
| --- | --- |
| Project | SSN |

SSN is a FK from STUDENT\_ASSISTANT.SSN

TEACHING\_ASSISTANT

|  |  |
| --- | --- |
| Course | SSN |

SSN is a FK from STUDENT\_ASSISTANT.SSN