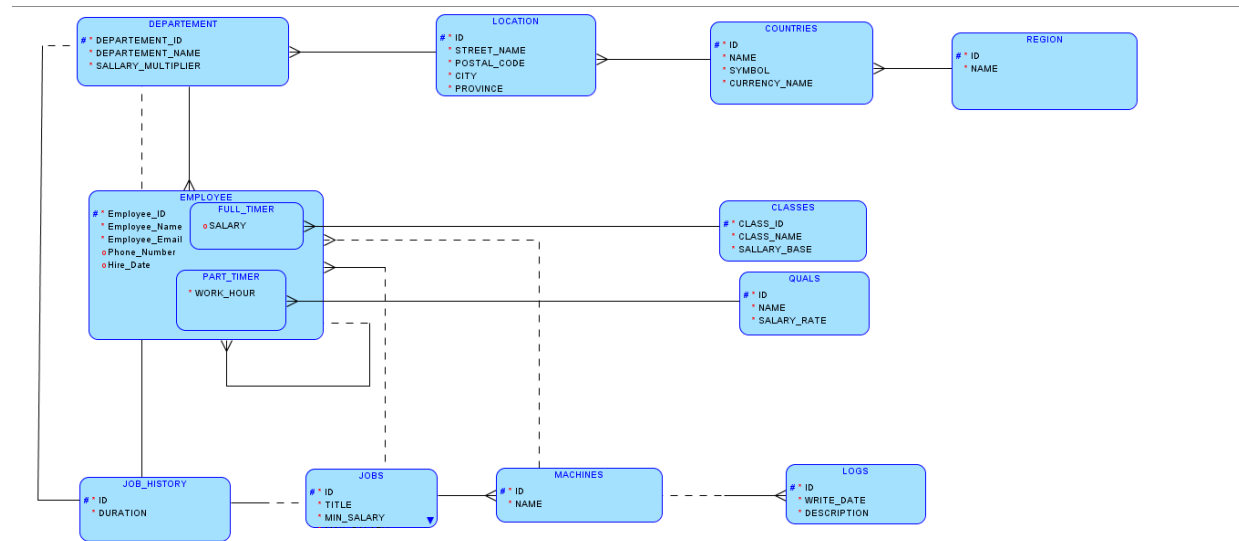


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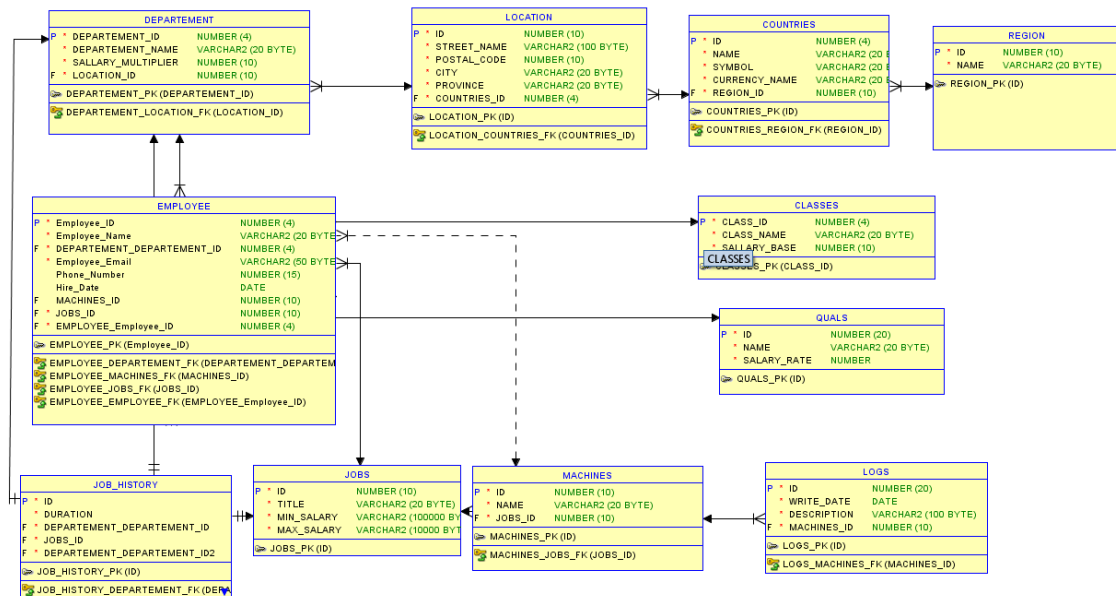
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## 1. Logical



## 2. Reltaion



## 3. DDL

-- Generated by Oracle SQL Developer Data Modeler 20.2.0.167.1538

-- at: 2020-11-01 09:47:41 ICT

-- site: Oracle Database 11g

-- type: Oracle Database 11g

-- predefined type, no DDL - MDSYS.SDO\_GEOMETRY

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-- predefined type, no DDL - XMLTYPE

```
CREATE TABLE classes (  
    class_id    NUMBER(4) NOT NULL,  
    class_name  VARCHAR2(20 BYTE) NOT NULL,  
    sallary_base NUMBER(10) NOT NULL  
);
```

```
ALTER TABLE classes ADD CONSTRAINT classes_pk PRIMARY KEY ( class_id );
```

```
CREATE TABLE countries (  
    id          NUMBER(4) NOT NULL,  
    name        VARCHAR2(20 BYTE) NOT NULL,  
    symbol      VARCHAR2(20 BYTE) NOT NULL,  
    currency_name VARCHAR2(20 BYTE) NOT NULL,  
    region_id   NUMBER(10) NOT NULL  
);
```

```
ALTER TABLE countries ADD CONSTRAINT countries_pk PRIMARY KEY ( id );
```

```
CREATE TABLE departement (  
    departement_id    NUMBER(4) NOT NULL,  
    departement_name  VARCHAR2(20 BYTE) NOT NULL,  
    sallary_multiplier NUMBER(10) NOT NULL,  
    location_id       NUMBER(10) NOT NULL  
);
```

```
ALTER TABLE departement ADD CONSTRAINT departement_pk PRIMARY KEY ( departement_id  
);
```

```
CREATE TABLE employee (  
    employee_id    NUMBER(4) NOT NULL,  
    employee_name  VARCHAR2(20 BYTE) NOT NULL,  
    departement_departement_id NUMBER(4) NOT NULL,  
    employee_email VARCHAR2(50 BYTE) NOT NULL,  
    phone_number   NUMBER(15),  
    hire_date      DATE,  
    machines_id    NUMBER(10),  
    jobs_id        NUMBER(10) NOT NULL,  
    employee_employee_id NUMBER(4) NOT NULL  
);
```

```
ALTER TABLE employee ADD CONSTRAINT employee_pk PRIMARY KEY ( employee_id );
```

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```
CREATE TABLE full_timer (  
    employee_id    NUMBER(4) NOT NULL,  
    salary         NUMBER(20),  
    classes_class_id NUMBER(4) NOT NULL  
);
```

```
ALTER TABLE full_timer ADD CONSTRAINT part_timer_pk PRIMARY KEY ( employee_id );
```

```
CREATE TABLE job_history (  
    id                NUMBER(10) NOT NULL,  
    duration          NUMBER(10) NOT NULL,  
    departement_departement_id NUMBER(4) NOT NULL,  
    jobs_id           NUMBER(10) NOT NULL,  
    departement_departement_id2 NUMBER(4) NOT NULL  
);
```

```
CREATE UNIQUE INDEX job_history__idx ON  
    job_history (  
        departement_departement_id  
    ASC );
```

```
CREATE UNIQUE INDEX job_history__idxv1 ON  
    job_history (  
        jobs_id  
    ASC );
```

```
CREATE UNIQUE INDEX job_history__idxv2 ON  
    job_history (  
        departement_departement_id2  
    ASC );
```

```
ALTER TABLE job_history ADD CONSTRAINT job_history_pk PRIMARY KEY ( id );
```

```
CREATE TABLE jobs (  
    id        NUMBER(10) NOT NULL,  
    title     VARCHAR2(20 BYTE) NOT NULL,  
    min_salary VARCHAR2(100000 BYTE) NOT NULL,  
    max_salary VARCHAR2(100000 BYTE) NOT NULL  
);
```

```
ALTER TABLE jobs ADD CONSTRAINT jobs_pk PRIMARY KEY ( id );
```

```
CREATE TABLE location (  
    id        NUMBER(10) NOT NULL,  
    name      VARCHAR2(20 BYTE) NOT NULL,  
    address   VARCHAR2(100000 BYTE) NOT NULL,  
    city      VARCHAR2(20 BYTE) NOT NULL,  
    state     VARCHAR2(20 BYTE) NOT NULL,  
    zip       VARCHAR2(10 BYTE) NOT NULL,  
    country   VARCHAR2(30 BYTE) NOT NULL  
);
```

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```
id          NUMBER(10) NOT NULL,
street_name VARCHAR2(100 BYTE) NOT NULL,
postal_code NUMBER(10) NOT NULL,
city        VARCHAR2(20 BYTE) NOT NULL,
province    VARCHAR2(20 BYTE) NOT NULL,
countries_id NUMBER(4) NOT NULL
);
```

```
ALTER TABLE location ADD CONSTRAINT location_pk PRIMARY KEY ( id );
```

```
CREATE TABLE logs (
  id          NUMBER(20) NOT NULL,
  write_date  DATE NOT NULL,
  description VARCHAR2(100 BYTE) NOT NULL,
  machines_id NUMBER(10) NOT NULL
);
```

```
ALTER TABLE logs ADD CONSTRAINT logs_pk PRIMARY KEY ( id );
```

```
CREATE TABLE machines (
  id          NUMBER(10) NOT NULL,
  name        VARCHAR2(20 BYTE) NOT NULL,
  jobs_id     NUMBER(10) NOT NULL
);
```

```
ALTER TABLE machines ADD CONSTRAINT machines_pk PRIMARY KEY ( id );
```

```
CREATE TABLE part_timer (
  employee_id1 NUMBER(4) NOT NULL,
  work_hour    NUMBER(24) NOT NULL,
  quals_id     NUMBER(20) NOT NULL
);
```

```
ALTER TABLE part_timer ADD CONSTRAINT part_timer_pkv1 PRIMARY KEY ( employee_id1 );
```

```
CREATE TABLE quals (
  id          NUMBER(20) NOT NULL,
  name        VARCHAR2(20 BYTE) NOT NULL,
  salary_rate NUMBER NOT NULL
);
```

```
ALTER TABLE quals ADD CONSTRAINT quals_pk PRIMARY KEY ( id );
```

```
CREATE TABLE region (
```

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```
    id  NUMBER(10) NOT NULL,  
    name VARCHAR2(20 BYTE) NOT NULL  
);
```

```
ALTER TABLE region ADD CONSTRAINT region_pk PRIMARY KEY ( id );
```

```
ALTER TABLE countries  
  ADD CONSTRAINT countries_region_fk FOREIGN KEY ( region_id )  
    REFERENCES region ( id );
```

```
ALTER TABLE departement  
  ADD CONSTRAINT departement_location_fk FOREIGN KEY ( location_id )  
    REFERENCES location ( id );
```

```
ALTER TABLE employee  
  ADD CONSTRAINT employee_departement_fk FOREIGN KEY ( departement_departement_id )  
    REFERENCES departement ( departement_id );
```

```
ALTER TABLE employee  
  ADD CONSTRAINT employee_employee_fk FOREIGN KEY ( employee_employee_id )  
    REFERENCES employee ( employee_id );
```

```
ALTER TABLE employee  
  ADD CONSTRAINT employee_jobs_fk FOREIGN KEY ( jobs_id )  
    REFERENCES jobs ( id );
```

```
ALTER TABLE employee  
  ADD CONSTRAINT employee_machines_fk FOREIGN KEY ( machines_id )  
    REFERENCES machines ( id );
```

```
ALTER TABLE full_timer  
  ADD CONSTRAINT full_timer_classes_fk FOREIGN KEY ( classes_class_id )  
    REFERENCES classes ( class_id );
```

```
ALTER TABLE job_history  
  ADD CONSTRAINT job_history_departement_fk FOREIGN KEY ( departement_departement_id  
)  
    REFERENCES departement ( departement_id );
```

```
ALTER TABLE job_history  
  ADD CONSTRAINT job_history_departement_fkv1 FOREIGN KEY ( departement_departement_id2 )  
    REFERENCES departement ( departement_id );
```

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```
ALTER TABLE job_history
  ADD CONSTRAINT job_history_jobs_fk FOREIGN KEY ( jobs_id )
    REFERENCES jobs ( id );
```

```
ALTER TABLE location
  ADD CONSTRAINT location_countries_fk FOREIGN KEY ( countries_id )
    REFERENCES countries ( id );
```

```
ALTER TABLE logs
  ADD CONSTRAINT logs_machines_fk FOREIGN KEY ( machines_id )
    REFERENCES machines ( id );
```

```
ALTER TABLE machines
  ADD CONSTRAINT machines_jobs_fk FOREIGN KEY ( jobs_id )
    REFERENCES jobs ( id );
```

```
ALTER TABLE full_timer
  ADD CONSTRAINT part_timer_employee_fk FOREIGN KEY ( employee_id )
    REFERENCES employee ( employee_id );
```

```
ALTER TABLE part_timer
  ADD CONSTRAINT part_timer_employee_fkv2 FOREIGN KEY ( employee_id1 )
    REFERENCES employee ( employee_id );
```

```
ALTER TABLE part_timer
  ADD CONSTRAINT part_timer_quals_fk FOREIGN KEY ( quals_id )
    REFERENCES quals ( id );
```

-- ERROR: No Discriminator Column found in Arc FKArc\_1 - constraint trigger for Arc cannot be generated

-- ERROR: No Discriminator Column found in Arc FKArc\_1 - constraint trigger for Arc cannot be generated

-- Oracle SQL Developer Data Modeler Summary Report:

--

-- CREATE TABLE	13
-- CREATE INDEX	3
-- ALTER TABLE	29
-- CREATE VIEW	0
-- ALTER VIEW	0
-- CREATE PACKAGE	0

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```
-- CREATE PACKAGE BODY          0
-- CREATE PROCEDURE              0
-- CREATE FUNCTION                0
-- CREATE TRIGGER                 0
-- ALTER TRIGGER                  0
-- CREATE COLLECTION TYPE         0
-- CREATE STRUCTURED TYPE         0
-- CREATE STRUCTURED TYPE BODY    0
-- CREATE CLUSTER                 0
-- CREATE CONTEXT                 0
-- CREATE DATABASE                0
-- CREATE DIMENSION               0
-- CREATE DIRECTORY               0
-- CREATE DISK GROUP              0
-- CREATE ROLE                    0
-- CREATE ROLLBACK SEGMENT        0
-- CREATE SEQUENCE                0
-- CREATE MATERIALIZED VIEW        0
-- CREATE MATERIALIZED VIEW LOG    0
-- CREATE SYNONYM                 0
-- CREATE TABLESPACE             0
-- CREATE USER                    0
--
-- DROP TABLESPACE              0
-- DROP DATABASE                  0
--
-- REDACTION POLICY               0
--
-- ORDS DROP SCHEMA               0
-- ORDS ENABLE SCHEMA             0
-- ORDS ENABLE OBJECT             0
--
-- ERRORS                        2
-- WARNINGS                      0
```

#### 4. Tables :

- classes

❖	COLUMN_NAME	❖	DATA_TYPE	❖	NULLABLE	DATA_DEFAULT	❖	COLUMN_ID	❖	COMMENTS
1	CLASS_ID		NUMBER(4,0)		No	(null)		1		(null)
2	CLASS_NAME		VARCHAR2(20 BYTE)		No	(null)		2		(null)
3	SALLARY_BASE		NUMBER(10,0)		No	(null)		3		(null)

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- Countries

❖ COLUMN_NAME	❖ DATA_TYPE	❖ NULLABLE	DATA_DEFAULT	❖ COLUMN_ID	❖ COMMENTS
1 ID	NUMBER(4,0)	No	(null)	1 (null)	
2 NAME	VARCHAR2(20 BYTE)	No	(null)	2 (null)	
3 SYMBOL	VARCHAR2(20 BYTE)	No	(null)	3 (null)	
4 CURRENCY_NAME	VARCHAR2(20 BYTE)	No	(null)	4 (null)	
5 REGION_ID	NUMBER(10,0)	No	(null)	5 (null)	

- Departement

❖ COLUMN_NAME	❖ DATA_TYPE	❖ NULLABLE	DATA_DEFAULT	❖ COLUMN_ID	❖ COMMENTS
1 DEPARTEMENT_ID	NUMBER(4,0)	No	(null)	1 (null)	
2 DEPARTEMENT_NAME	VARCHAR2(20 BYTE)	No	(null)	2 (null)	

- Employee

❖ COLUMN_NAME	❖ DATA_TYPE	❖ NULLABLE	DATA_DEFAULT	❖ COLUMN_ID	❖ COMMENTS
1 EMPLOYEE_ID	NUMBER(4,0)	No	(null)	1 (null)	
2 EMPLOYEE_NAME	VARCHAR2(20 BYTE)	No	(null)	2 (null)	
3 DEPARTEMENT_DEPARTEMENT_ID	NUMBER(4,0)	No	(null)	3 (null)	

- Full Timer

❖ COLUMN_NAME	❖ DATA_TYPE	❖ NULLABLE	DATA_DEFAULT	❖ COLUMN_ID	❖ COMMENTS
1 EMPLOYEE_ID	NUMBER(4,0)	No	(null)	1 (null)	
2 SALARY	NUMBER(20,0)	Yes	(null)	2 (null)	
3 CLASSES_CLASS_ID	NUMBER(4,0)	No	(null)	3 (null)	

- Job History

❖ COLUMN_NAME	❖ DATA_TYPE	❖ NULLABLE	DATA_DEFAULT	❖ COLUMN_ID	❖ COMMENTS
1 ID	NUMBER(10,0)	No	(null)	1 (null)	
2 DURATION	NUMBER(10,0)	No	(null)	2 (null)	
3 DEPARTEMENT_DEPARTEMENT_ID	NUMBER(4,0)	No	(null)	3 (null)	
4 JOBS_ID	NUMBER(10,0)	No	(null)	4 (null)	
5 DEPARTEMENT_DEPARTEMENT_ID2	NUMBER(4,0)	No	(null)	5 (null)	

- Location

❖ COLUMN_NAME	❖ DATA_TYPE	❖ NULLABLE	DATA_DEFAULT	❖ COLUMN_ID	❖ COMMENTS
1 ID	NUMBER(10,0)	No	(null)	1 (null)	
2 STREET_NAME	VARCHAR2(100 BYTE)	No	(null)	2 (null)	
3 POSTAL_CODE	NUMBER(10,0)	No	(null)	3 (null)	
4 CITY	VARCHAR2(20 BYTE)	No	(null)	4 (null)	
5 PROVINCE	VARCHAR2(20 BYTE)	No	(null)	5 (null)	
6 COUNTRIES_ID	NUMBER(4,0)	No	(null)	6 (null)	

- Logs

❖ COLUMN_NAME	❖ DATA_TYPE	❖ NULLABLE	DATA_DEFAULT	❖ COLUMN_ID	❖ COMMENTS
1 ID	NUMBER(20,0)	No	(null)	1 (null)	
2 WRITE_DATE	DATE	No	(null)	2 (null)	
3 DESCRIPTION	VARCHAR2(100 BYTE)	No	(null)	3 (null)	
4 MACHINES_ID	NUMBER(10,0)	No	(null)	4 (null)	

- Machines

❖ COLUMN_NAME	❖ DATA_TYPE	❖ NULLABLE	DATA_DEFAULT	❖ COLUMN_ID	❖ COMMENTS
1 ID	NUMBER(10,0)	No	(null)	1 (null)	
2 NAME	VARCHAR2(20 BYTE)	No	(null)	2 (null)	
3 JOBS_ID	NUMBER(10,0)	No	(null)	3 (null)	



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- Part Timer

	❖ COLUMN_NAME	❖ DATA_TYPE	❖ NULLABLE	DATA_DEFAULT	❖ COLUMN_ID	❖ COMMENTS
1	EMPLOYEE_ID1	NUMBER(4,0)	No	(null)	1 (null)	
2	WORK_HOUR	NUMBER(24,0)	No	(null)	2 (null)	
3	QUALS_ID	NUMBER(20,0)	No	(null)	3 (null)	

- Quals

	❖ COLUMN_NAME	❖ DATA_TYPE	❖ NULLABLE	DATA_DEFAULT	❖ COLUMN_ID	❖ COMMENTS
1	ID	NUMBER(20,0)	No	(null)	1 (null)	
2	NAME	VARCHAR2(20 BYTE)	No	(null)	2 (null)	
3	SALARY_RATE	NUMBER	No	(null)	3 (null)	

- Region

	❖ COLUMN_NAME	❖ DATA_TYPE	❖ NULLABLE	DATA_DEFAULT	❖ COLUMN_ID	❖ COMMENTS
1	ID	NUMBER(10,0)	No	(null)	1 (null)	
2	NAME	VARCHAR2(20 BYTE)	No	(null)	2 (null)	