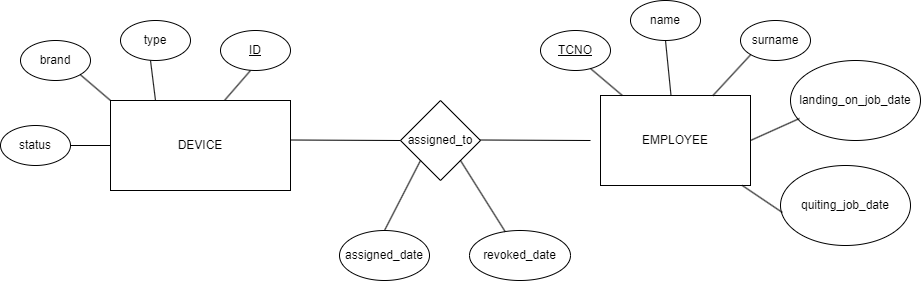
## Conceptual Schema



## Logical Schema

DEVICE [ID, type, brand, status]

EMPLOYEE [TCNO, name, surname, landing\_on\_job\_date, quiting\_job\_date]

ASSIGNED\_TO [ETCNO, DID, assigned\_date, revoked\_date]

\*ETCNO is a foreign key refers to EMPLOYEE

\*DID is a foreign key refers to DEVICE

## Physical Schema

DEVICE [ID, type, brand, status]

CREATE TABLE DEVICE (

ID VARCHAR (100),

type VARCHAR (100),

brand VARCHAR (100),

status ENUM('working', 'broken', 'under repair', 'idle'),

CONSTRAINT pk\_device PRIMARY KEY ( ID ));

EMPLOYEE [TCNO, name, surname, landing\_on\_job\_date, quiting\_job\_date]

CREATE TABLE EMPLOYEE (

TCNO VARCHAR (10),

name VARCHAR (100),

surname VARCHAR (100),

landing\_on\_job\_date DATE,

quiting\_job\_date DATE NULL,

CONSTRAINT pk\_employee PRIMARY KEY ( TCNO )

CONSTRAINT chk\_tcno\_numeric CHECK (TCNO REGEXP '^[0-9]+$'));

ASSIGNED\_TO [ETCNO, DID, assigned\_date, revoked\_date]

\*ETCNO is a foreign key refers to EMPLOYEE

\*DID is a foreign key refers to DEVICE

CREATE TABLE ASSIGNED\_TO (

ETCNO VARCHAR (10),

DID VARCHAR (100),

assigned\_date DATE,

revoked\_date DATE,

CONSTRAINT fk\_did FOREIGN KEY ( DID ) REFERENCES DEVICE ( ID )

ON DELETE CASCADE

ON UPDATE CASCADE,

CONSTRAINT fk\_etcno FOREIGN KEY ( ETCNO ) REFERENCES EMPLOYEE ( TCNO )

ON DELETE CASCADE

ON UPDATE CASCADE,

CHECK (revoked\_date IS NULL OR revoked\_date > assigned\_date),

CONSTRAINT pk\_assigned\_to PRIMARY KEY ( ETCNO, DID ));