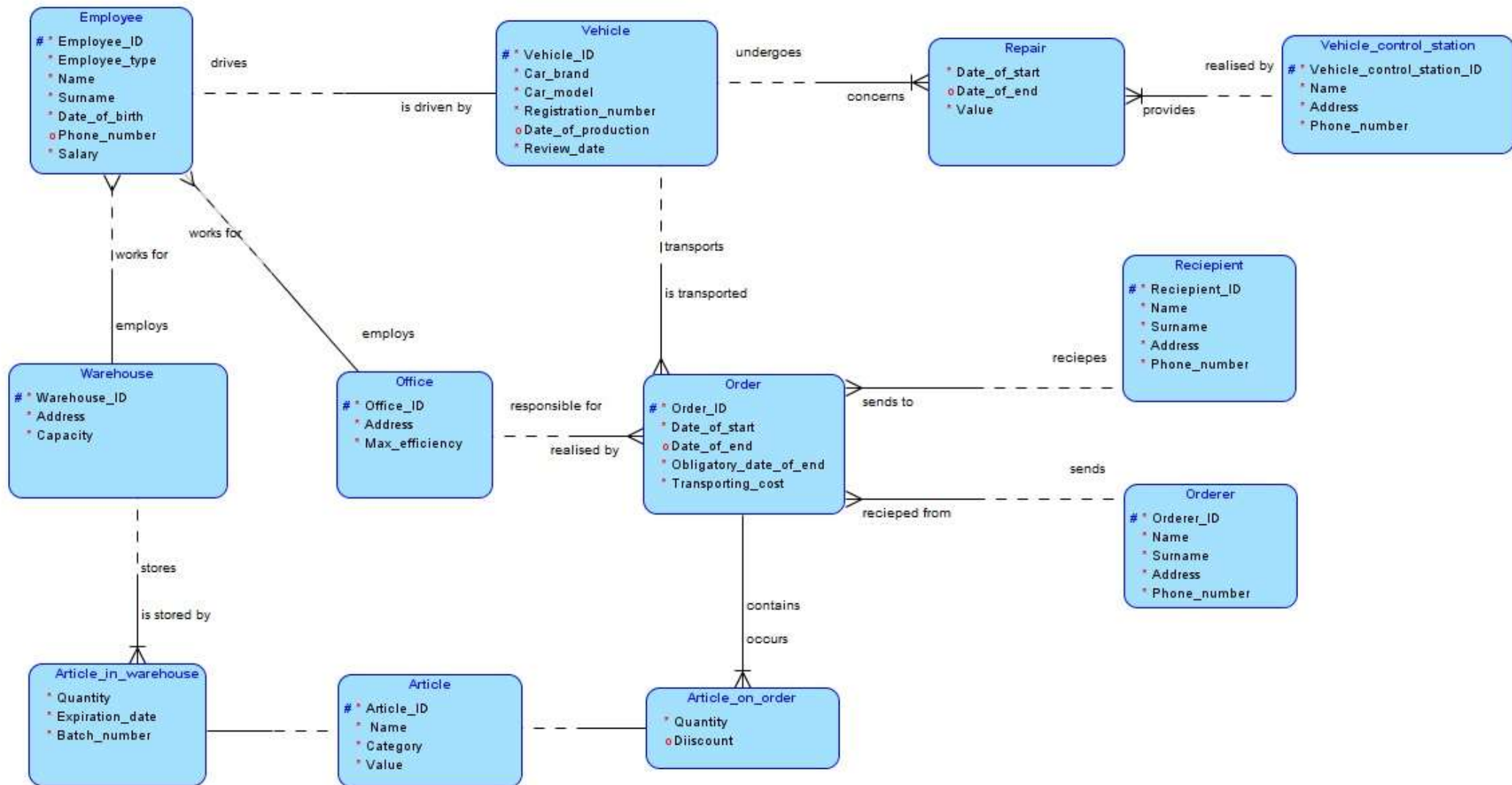


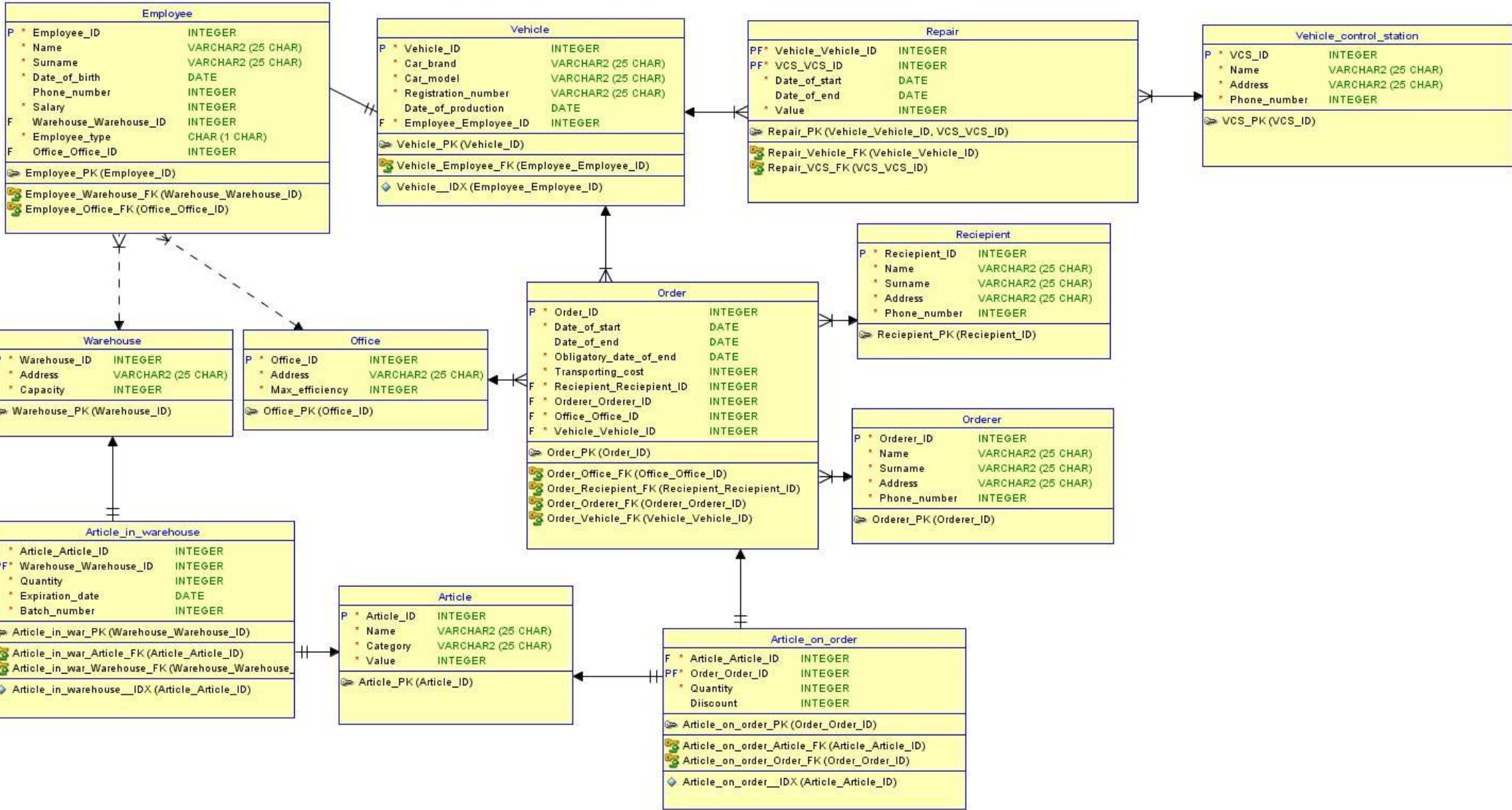
Wojciech Celej

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Temat: Model bazy danych dla firmy transportowej

1. Model ER
2. Model relacyjny
3. Skrypt DDL





```
CREATE TABLE article (
  article_id INTEGER NOT NULL,
  name      VARCHAR2(25 CHAR) NOT NULL,
  category  VARCHAR2(25 CHAR) NOT NULL,
  value     INTEGER NOT NULL
);

ALTER TABLE article ADD CONSTRAINT article_pk PRIMARY KEY (
  article_id );
```

```
CREATE TABLE article_in_warehouse (
  article_article_id  INTEGER NOT NULL,
  warehouse_warehouse_id  INTEGER NOT NULL,
  quantity            INTEGER NOT NULL,
  expiration_date      DATE NOT NULL,
  batch_number        INTEGER NOT NULL
);

CREATE UNIQUE INDEX article_in_warehouse__idx ON
  article_in_warehouse ( article_article_id ASC );
```

```
ALTER TABLE article_in_warehouse ADD CONSTRAINT
  article_in_war_pk PRIMARY KEY ( warehouse_warehouse_id );
```

```
CREATE TABLE article_on_order (
  article_article_id  INTEGER NOT NULL,
  order_order_id     INTEGER NOT NULL,
  quantity           INTEGER NOT NULL,
```

```
  diiscount          INTEGER
);
```

```
CREATE UNIQUE INDEX article_on_order__idx ON
  article_on_order ( article_article_id ASC );
```

```
ALTER TABLE article_on_order ADD CONSTRAINT
  article_on_order_pk PRIMARY KEY ( order_order_id );
```

```
CREATE TABLE employee (
  employee_id      INTEGER NOT NULL,
  name             VARCHAR2(25 CHAR) NOT NULL,
  surname          VARCHAR2(25 CHAR) NOT NULL,
  date_of_birth    DATE NOT NULL,
  phone_number     INTEGER,
  salary           INTEGER NOT NULL,
  warehouse_warehouse_id  INTEGER,
  employee_type    CHAR(1 CHAR) NOT NULL,
  office_office_id  INTEGER
);
```

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

```
CREATE TABLE office (
  office_id  INTEGER NOT NULL,
  address    VARCHAR2(25 CHAR) NOT NULL,
  max_efficiency  INTEGER NOT NULL
```

```
);
```

```
ALTER TABLE office ADD CONSTRAINT office_pk PRIMARY KEY (  
office_id );
```

```
CREATE TABLE "Order" (  
    order_id          INTEGER NOT NULL,  
    date_of_start     DATE NOT NULL,  
    date_of_end       DATE,  
    obligatory_date_of_end DATE NOT NULL,  
    transporting_cost  INTEGER NOT NULL,  
    reciepiant_reciepiant_id INTEGER NOT NULL,  
    orderer_orderer_id  INTEGER NOT NULL,  
    office_office_id    INTEGER NOT NULL,  
    vehicle_vehicle_id  INTEGER NOT NULL  
);
```

```
ALTER TABLE "Order" ADD CONSTRAINT order_pk PRIMARY KEY (  
order_id );
```

```
CREATE TABLE orderer (  
    orderer_id  INTEGER NOT NULL,  
    name        VARCHAR2(25 CHAR) NOT NULL,  
    surname     VARCHAR2(25 CHAR) NOT NULL,  
    address     VARCHAR2(25 CHAR) NOT NULL,  
    phone_number INTEGER NOT NULL  
);
```

```
ALTER TABLE orderer ADD CONSTRAINT orderer_pk PRIMARY KEY (  
orderer_id );
```

```
CREATE TABLE reciepiant (  
    reciepiant_id  INTEGER NOT NULL,  
    name           VARCHAR2(25 CHAR) NOT NULL,  
    surname        VARCHAR2(25 CHAR) NOT NULL,  
    address        VARCHAR2(25 CHAR) NOT NULL,  
    phone_number   INTEGER NOT NULL  
);
```

```
ALTER TABLE reciepiant ADD CONSTRAINT reciepiant_pk PRIMARY  
KEY ( reciepiant_id );
```

```
CREATE TABLE repair (  
    vehicle_vehicle_id  INTEGER NOT NULL,  
    vcs_vcs_id          INTEGER NOT NULL,  
    date_of_start       DATE NOT NULL,  
    date_of_end         DATE,  
    value               INTEGER NOT NULL  
);
```

```
ALTER TABLE repair ADD CONSTRAINT repair_pk PRIMARY KEY (  
vehicle_vehicle_id,  
vcs_vcs_id );
```

```
CREATE TABLE vehicle (  
    vehicle_id  INTEGER NOT NULL,
```

```

car_brand      VARCHAR2(25 CHAR) NOT NULL,
car_model      VARCHAR2(25 CHAR) NOT NULL,
registration_number VARCHAR2(25 CHAR) NOT NULL,
date_of_production DATE,
employee_employee_id INTEGER NOT NULL
);

```

```

CREATE UNIQUE INDEX vehicle__idx ON
vehicle ( employee_employee_id ASC );

```

```

ALTER TABLE vehicle ADD CONSTRAINT vehicle_pk PRIMARY KEY (
vehicle_id );

```

```

CREATE TABLE vehicle_control_station (
vcs_id      INTEGER NOT NULL,
name        VARCHAR2(25 CHAR) NOT NULL,
address     VARCHAR2(25 CHAR) NOT NULL,
phone_number INTEGER NOT NULL
);

```

```

ALTER TABLE vehicle_control_station ADD CONSTRAINT vcs_pk
PRIMARY KEY ( vcs_id );

```

```

CREATE TABLE warehouse (
warehouse_id INTEGER NOT NULL,
address      VARCHAR2(25 CHAR) NOT NULL,
capacity     INTEGER NOT NULL
);

```

```

ALTER TABLE warehouse ADD CONSTRAINT warehouse_pk
PRIMARY KEY ( warehouse_id );

```

```

ALTER TABLE article_in_warehouse
ADD CONSTRAINT article_in_war_article_fk FOREIGN KEY (
article_article_id )
REFERENCES article ( article_id );

```

```

ALTER TABLE article_in_warehouse
ADD CONSTRAINT article_in_war_warehouse_fk FOREIGN KEY (
warehouse_warehouse_id )
REFERENCES warehouse ( warehouse_id );

```

```

ALTER TABLE article_on_order
ADD CONSTRAINT article_on_order_article_fk FOREIGN KEY (
article_article_id )
REFERENCES article ( article_id );

```

```

ALTER TABLE article_on_order
ADD CONSTRAINT article_on_order_order_fk FOREIGN KEY (
order_order_id )
REFERENCES "Order" ( order_id );

```

```

ALTER TABLE employee
ADD CONSTRAINT employee_office_fk FOREIGN KEY (
office_office_id )
REFERENCES office ( office_id );

```

```

ALTER TABLE employee
  ADD CONSTRAINT employee_warehouse_fk FOREIGN KEY (
warehouse_warehouse_id )
  REFERENCES warehouse ( warehouse_id );

ALTER TABLE "Order"
  ADD CONSTRAINT order_office_fk FOREIGN KEY ( office_office_id
)
  REFERENCES office ( office_id );

ALTER TABLE "Order"
  ADD CONSTRAINT order_orderer_fk FOREIGN KEY (
orderer_orderer_id )
  REFERENCES orderer ( orderer_id );

ALTER TABLE "Order"
  ADD CONSTRAINT order_recieipient_fk FOREIGN KEY (
recieipient_recieipient_id )
  REFERENCES recieipient ( recieipient_id );

ALTER TABLE "Order"
  ADD CONSTRAINT order_vehicle_fk FOREIGN KEY (
vehicle_vehicle_id )
  REFERENCES vehicle ( vehicle_id );

ALTER TABLE repair
  ADD CONSTRAINT repair_vcs_fk FOREIGN KEY ( vcs_vcs_id )

```

```

REFERENCES vehicle_control_station ( vcs_id );

ALTER TABLE repair
  ADD CONSTRAINT repair_vehicle_fk FOREIGN KEY (
vehicle_vehicle_id )
  REFERENCES vehicle ( vehicle_id );

ALTER TABLE vehicle
  ADD CONSTRAINT vehicle_employee_fk FOREIGN KEY (
employee_employee_id )
  REFERENCES employee ( employee_id );

```