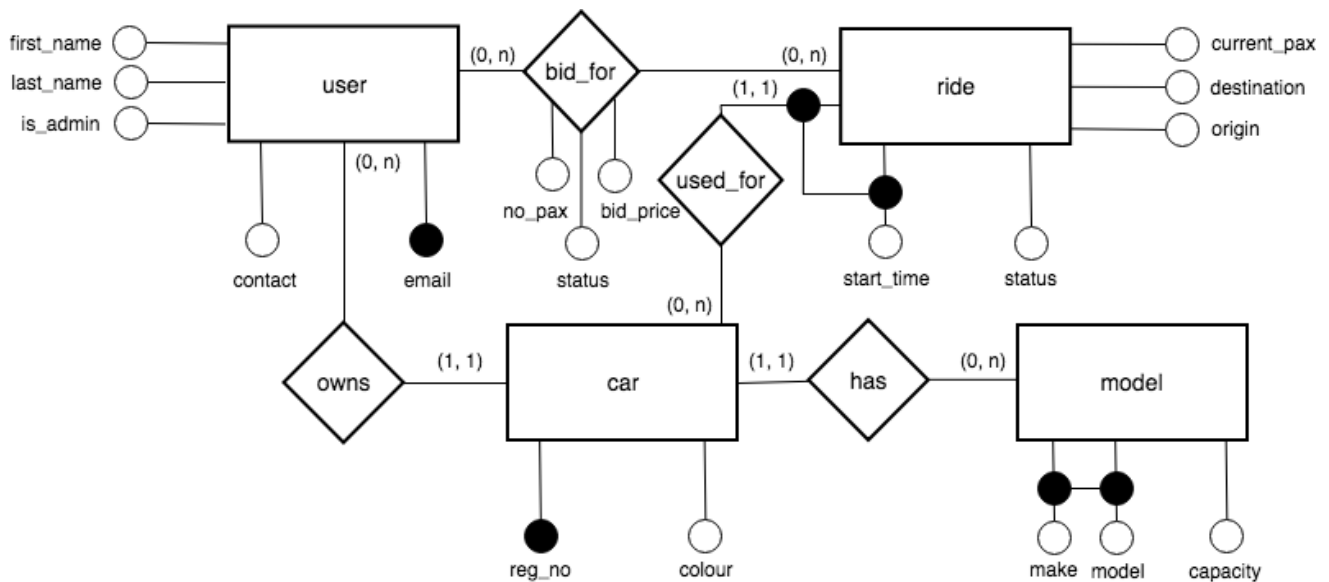# ER Diagram

DDL

```sql
create table "user"
(
    email varchar(256) not null constraint user_pk primary key,
    contact numeric(8),
    first_name varchar(50) not null,
    last_name varchar(50) not null,
    is_admin boolean default false not null
);

create table model
(
    model varchar(256) not null,
    make varchar(256) not null,
    capacity integer not null constraint capacity_min check (capacity > 0),
    constraint model_pk primary key (model, make)
);

create table car
(
    reg_no varchar(8) not null constraint car_pk primary key,
    colour varchar(50),
    email varchar(256) not null constraint car_email_fk references "user",
    make varchar(50) not null,
    model varchar(50) not null,
    constraint car_model_fk foreign key (make, model) references model (make, model)
);
```

```sql
create table ride
(
    start_time timestamp not null,
    status varchar(10) not null
    constraint ride_status_type check (((status) = 'in progress') OR ((status) ='completed')),
    current_pax integer not null,
    destination varchar(256) not null,
    origin varchar(256) not null,
    reg_no varchar(8) not null constraint ride_reg_no_fk references car,
    constraint ride_pk primary key (start_time, reg_no)
);

create table ride_bid
(
    email varchar(256) not null constraint ride_bid_email_fk references "user",
    start_time timestamp not null,
    reg_no varchar(8) not null,
    no_pax integer not null constraint min_pax check (no_pax > 0),
    bid_price double precision,
    status varchar(13) not null constraint bid_status_type check (((status) = 'pending') OR
((status) = 'successful') OR ((status) = 'unsuccessful')),
    constraint ride_bid_pk primary key (email, start_time, reg_no),
    constraint ride_bid_start_time_fk foreign key (start_time, reg_no) references ride
);
```