

mySQL Database



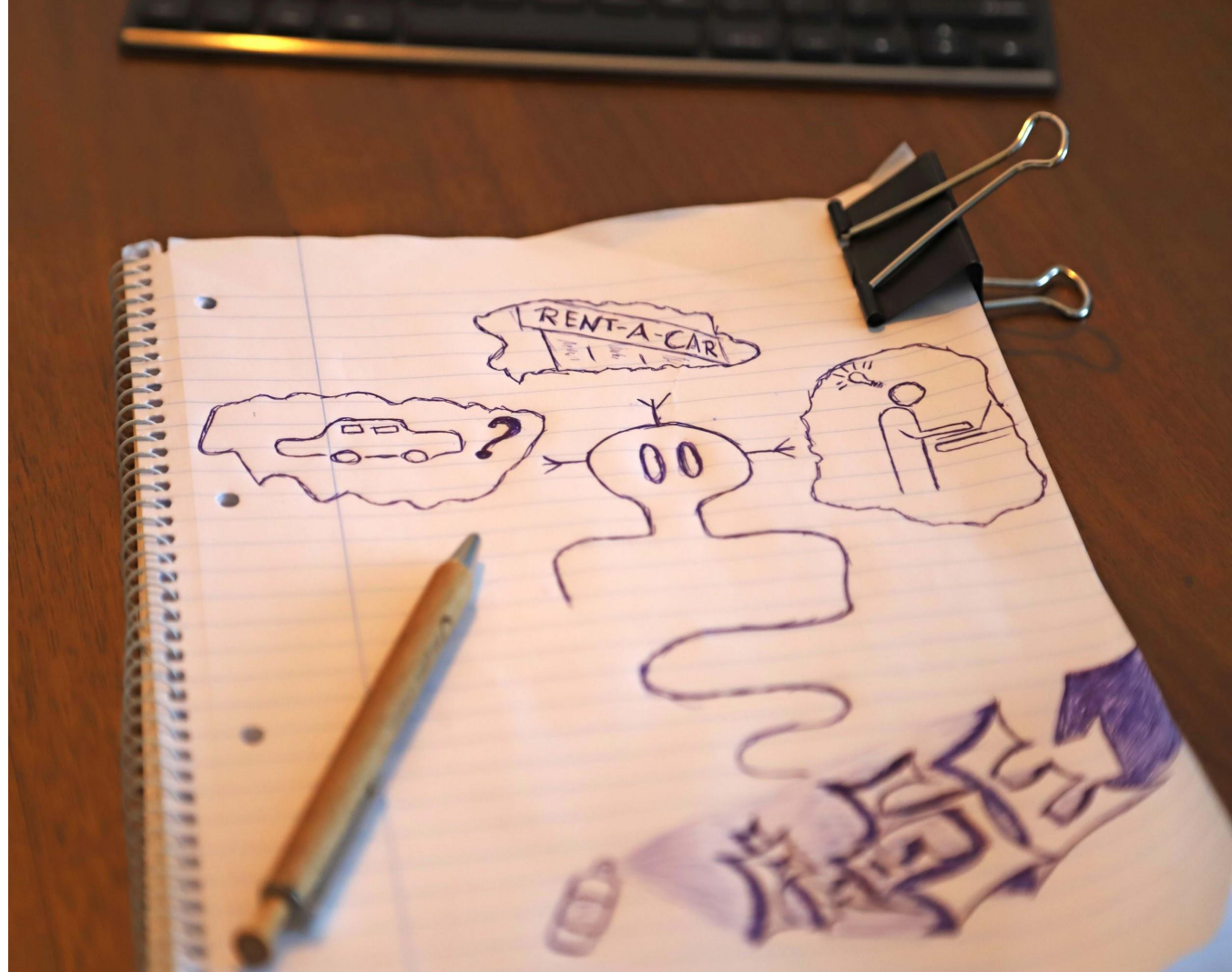
STEP
by
STEP



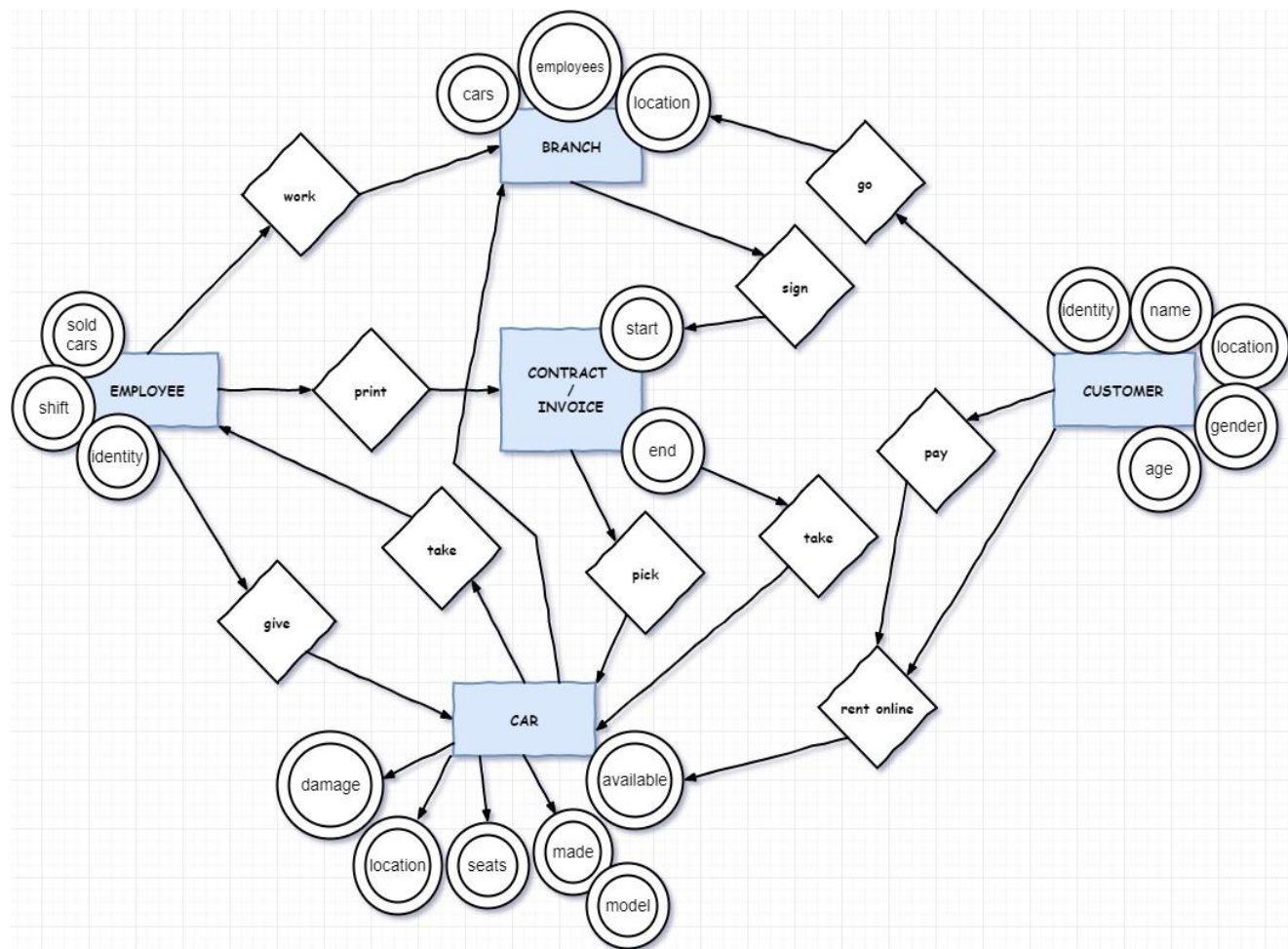
DEVELOPMENT

STEP #1

Define the Purpose
of the Database
(Requirement
Analysis)



STEP #2



The
Entity-Relationship
Model

STEP #2.1

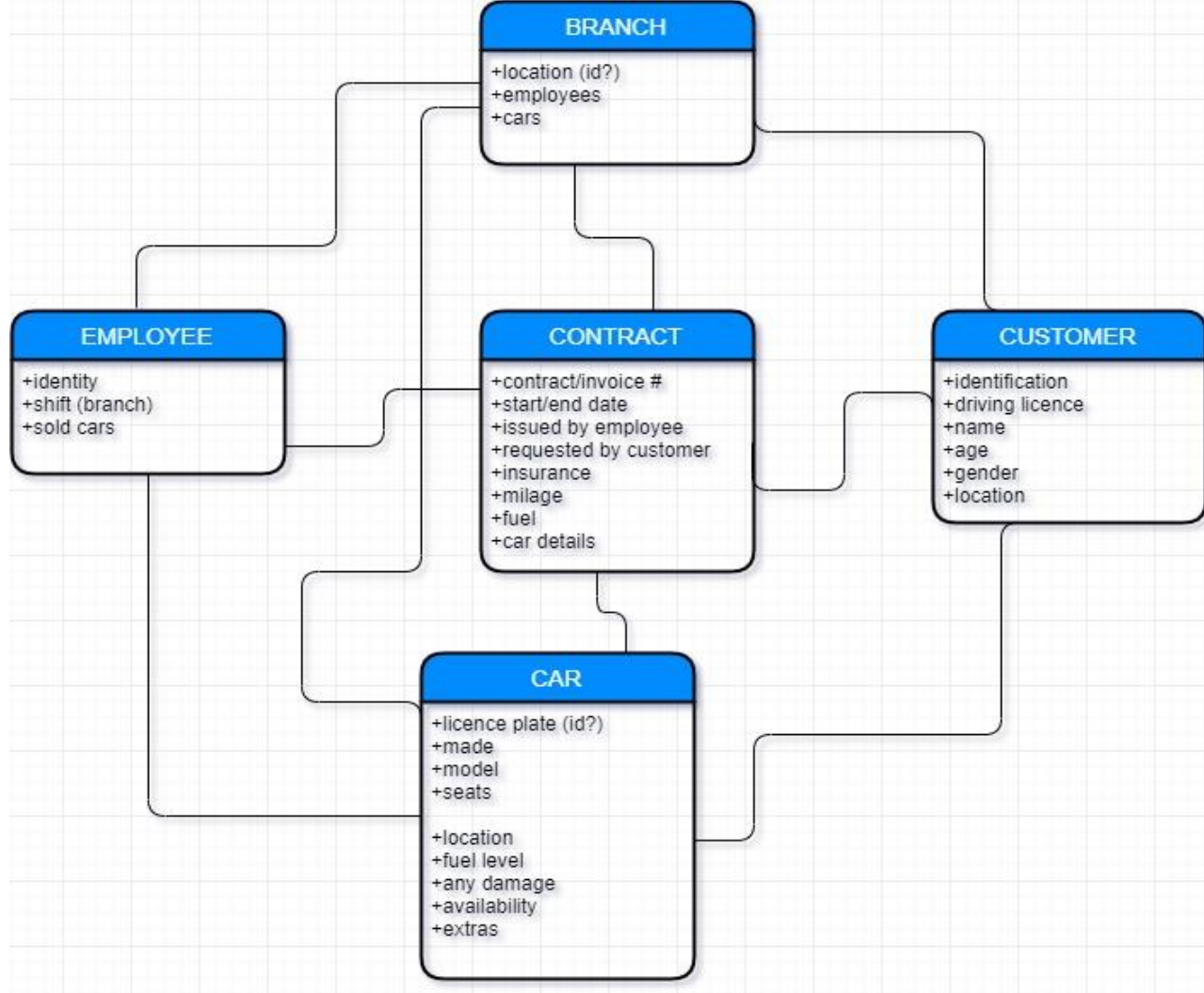
Need to approach the deep water, slowly but surely...



STEP #3

The Unified Modeling
Language

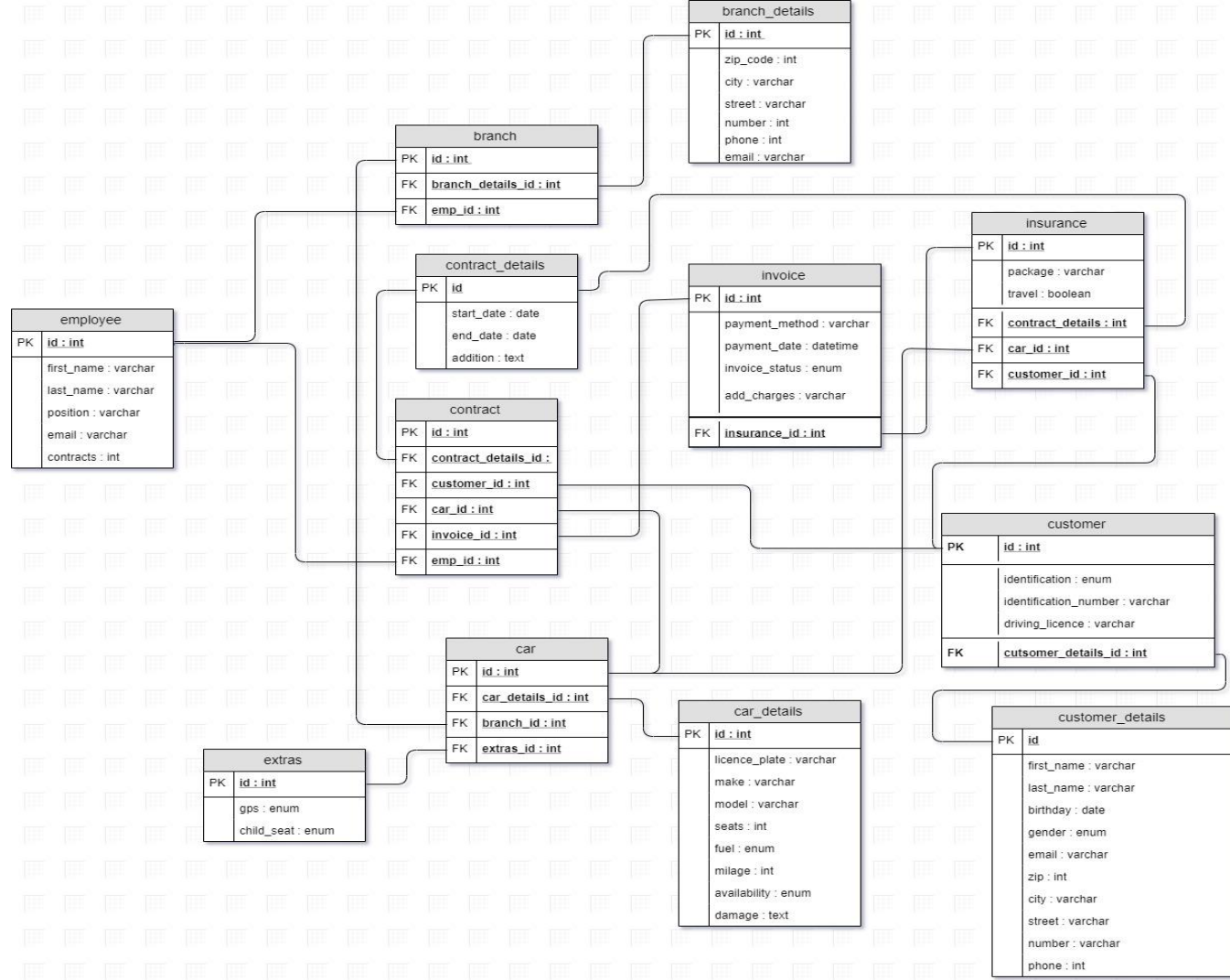
// We have to talk
about Our
relationship...



STEP #4

Get Final Form

// ...time to give
keys to each other!



STEP #5

Almost there:

The screenshot displays the phpMyAdmin interface for the database `cr09_attila_takacs_carrental`. The SQL query editor contains the following code:

```
1 CREATE TABLE contract(id int AUTO_INCREMENT PRIMARY KEY,  
2 employee_id int,  
3 invoice_id int,  
4 car_id int,  
5 customer_id int,  
6 FOREIGN KEY(employee_id) REFERENCES employee(id),  
7 FOREIGN KEY(invoice_id) REFERENCES invoice(id),  
8 FOREIGN KEY(car_id) REFERENCES car(id),  
9 FOREIGN KEY(customer_id) REFERENCES customer(id));
```

The console at the bottom shows the execution of the query:

```
Press Ctrl+Enter to execute query  
Collapse Requery Edit Bookmark Database :  
Queried time : 13:34:48  
CREATE DATABASE cr09_attila_takacs_carrental
```

To the right of the interface is a database schema diagram showing the following tables and their relationships:

- contract_details**:
 - PK: id
 - start_date: date
 - end_date: date
 - addition: text
- contract**:
 - PK: id: int
 - FK: contract_details_id: (to contract_details.id)
 - FK: customer_id: int (to customer.id)
 - FK: car_id: int (to car.id)
 - FK: invoice_id: int (to invoice.id)
 - FK: emp_id: int (to employee.id)
- car**:
 - PK: id: int
 - FK: car_details_id: int (to car_details.id)
 - FK: branch_id: int (to branch.id)

STEP #6

Now you can see how caffeine turns into tables:

