## **Exercises**

Elixir isn't object oriented. So, we don't have classes. In this exercises, we going to make the architecture of a simple project thinking only in modules.

So, look as these functions:

```
def buy item

def sell item

def park car

def goto place

def close

def open

def sound_security_alarm

def pay_taxes

def calculate_exchange item, payment

def find_empty_parking_lot
```

- 1. Find way to divide this problem in 4 modules. List the modules and its functions(stating if they are private) below:
- 1. ... 2. ... 3. ... 4. ...
  - 2. How I define these modules in Elixir?
  - 3. List an couple of function to realize these operations. Insert the functions in module.
  - 4. Thinking as client using this module, how you call these functions:
  - 5. Looking to the functions, make sense a client to see all functions. Oh boy! It doesn't. Make some of them private.
  - 6. Make a guard in buy method so it only accepts a string.
  - 7. Observe this code:

```
iex> fun = &Math.zero?/1
&Math.zero?/1
iex> is_function(fun)
true
```

- (a) What're stored in fun?
- (b) What is represented in zero?/1?