

## **Pay Parking**

In the context of a paid parking lot, which operates the following tariffs (10 for the first parking hour, 5 every subsequent hour), with a maximum capacity of 10 parking spaces, we need an activity management system.

Parking is rounded by adding to the nearest hour (example: 10 min parked is charged one hour; 1h 1m is charged 2h).

### Activities:

- Any customer can see the number of available parking spots;
- When a new car enters the parking lot, the parking system registers the registration number of the car;
- When leaving a car park, the parking system issues a summary, depending on the duration of parking;
- Any customer can query the list of cars parked in the parking lot at a given time.

### Technical requirements:

- The implementation will be done using a Console Application, all data being stored in memory, no need for permanent storage anywhere;
- Respecting the principles of the OOP;
- Write a code as clean and easy to understand;
- Establishing the critical business cases of the problem, for which to create Unit Tests.