**Summary**

Jcarl is a company that caters to construction needs, whether it's building construction or construction supplies like tiles, waterproofing, furniture, etc.

Given this as a premise, the company is expected to have multiple employees since these services are heavily reliant on manpower (drivers, construction workers, foremen). Handling the information of employees could be problematic in a way that it is hard to handle the information of employees due to their number. In the same way, items, supplies, and stocks also come in substantial numbers which in turn could again be problematic to keep track.  
  
An easier and convenient way to handle multitudes of information from different employees and products could be provided through an implementation of MIS.  
  
Projects could be monitored in a way that employees, supplies, and products deployed in it are displayed. Employees could be tracked where they are assigned, rates could be monitored as well as the working hours they rendered, and remarks could be added. Supplies can also be deployed in certain projects, remarks. Inventory can be easily updated if there are new stocks, products, changes in prices.

**Business Rules**

Given the summary of the system requested, and the Use Cases constructed, the following are some of the business rules deemed by the team.

General Input Requirements:

* Input must be corresponding to the data type (meaning STRING only will accept any string input; an input will letters on a DOUBLE field will not be accepted)
  + Should a case where inputs are wrong, the user will be prompt of the field, and will not move to the next window/step until all fields have correct input
* The system will assume that the any input made by the user will be intended and correct (example would be on the dates, which the system will assume that the user inputs the date according to the format specified)

Project:

* A project must have at least one employee
* A project must have at least one material
* A project may have at least one supplier
* A project may issue at least one PO
* For every project, there is a payroll.

Employee:

* An employee may only be assigned to one payroll (project)
* An employee’s rate may change according to the project

Material:

* A material can be assigned to a project
* A material may or may not come from a supplier. If it doesn't come from a supplier, it only means it's from the warehouse
* A material is listed in a purchase order if it’s not in the inventory
* If in\_warehouse is true, then price is 0
* in\_warehouse checks if the item is in warehouse or simply in possession If true, price will be 0 since it will not be needed in the purchase order. If false, it will be required to be put in the purchase order.

Purchase Order (PO):

* A PO can be assigned to a project and directed to a supplier
* A PO must contain at least one item
* Multiple PO’s can be issued to one supplier
* Price will be computed from the sum of the materials needed

Supplier:

* A supplier may receive at least 1 PO

Payroll:

* amount will also include the deductions/bonuses from the employee (should they have any other debt or payment needed for a certain situation)