**Jcarl Industry**

**Use Case Template**

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Date: August 12, 2014

**Table of Contents**

Approvals 3

Use Case List 4

1 Project Processing 4

1.1 Process contract into project input

1.2 Supplier Quotation

1.3 Order Processing

1.4 Manpower Management

2 Quotation Processing 9

2.1 Material Costing

2.2 Labor Costing

2.3 Project Quotation

3 Supplies Processing 12

3.1 Process Supplies Order

3.2 Check/Update Inventory

4 Employee Management 14

4.1 Salary Computation

Revision History

| **Version** | **Date** | **Revision Description** |
| --- | --- | --- |
| 1.0 |  | Approved Use Case |

# Approvals

We have carefully assessed the Use Cases for this project. This document has been completed in accordance with the requirements of the System Development Methodology.

MANAGEMENT CERTIFICATION

✓ the document is accepted.

\_\_\_\_\_\_ the document is accepted pending the changes noted.

\_\_\_\_\_\_ the document is not accepted.

We fully accept the changes as needed improvements and authorize initiation of work to proceed. Based on our authority and judgment, the continued operation of this system is authorized.

Joshua Zambales August 12, 2014

John Michael Santos August 12, 2014

Pia Encarnacion August 12, 2014

Japheth Samaco August 12, 2014

Javier Flavier August 12, 2014

# Use Case List

|  |  |  |
| --- | --- | --- |
| **Use Case ID** | **Primary Actor** | **Use Cases** |
| 1.1 | Contractor | Process Contractor into Project input |
| 1.2 | Contractor | Supplier Quotation |
| 1.3 | Contractor | Order Processing |
| 1.4 | Contractor, Admin | Manpower Management |
| 2.1 | Contractor (User or Admin) | Material Costing |
| 2.2 | Contractor (User or Admin) | Labor Costing |
| 2.3 | Contractor (User or Admin) | Project Quotation |
| 3.1 | Contractor (User or Admin) | Process Supplies Order |
| 3.2 | Contractor, Warehouse Personnel | Processing for warehouse inventory |
| 4.1 | Foreman | Salary Computation |

# 1 Project Processing

## Create Project

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Use Case ID:** | 1.1 | | | |
| **Use Case Name:** | Create Project | | | |
| **Created By:** | Joshua Zambales | | **Last Updated By:** | Joshua Zambales |
| **Date Created:** | August 10, 2014 | | **Last Revision Date:** | August 10, 2014 |
| **Actors:** | | Contractor | | |
| **Description:** | | User wants to create a project in a system. | | |
| **Trigger:** | | Contract between client and contractor | | |
| **Preconditions:** | | N/A | | |
| **Postconditions:** | | 1. User created a project 2. Project is ready to be continuously updated until accomplishment | | |
| **Normal Flow:** | | [Provide a detailed description of the user actions and system responses that will take place during execution of the use case under **normal, expected** conditions. This dialog sequence will ultimately lead to accomplishing the goal stated in the use case name and description.   1. User chooses “create project” 2. User enters project information (name, date start, date finished(estimate), description, employees to be deployed, materials needed. 3. System validates if project name is already used 4. System displays success message | | |
| **Alternative Flows:**  **[Alternative Flow 1 – Not in Network]** | | 2a. In step 4 of the normal flow, if the customer is not in the bank network   1. System will prompt customer to accept network fee 2. Customer accepts 3. Use Case resumes on step 5 Note: Insert a new row for each distinctive alternative flow. ] | | |
| **Exceptions:** | | 2a. In step 2 of the normal flow, if the customer enters an invalid input   1. Creation is disapproved 2. Message to customer to re-enter correct input in field 3. Customer enters correct input 4. Use Case resumes on step 3 of normal flow   2b. In step 2 of the normal flow, the customer enters an existing project name   1. Creation is disapproved 2. Message to customer to re-enter another project name 3. Customer enters correct input 4. Use case resumes on step 3 of normal flow | | |

## Supplier Quotation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Use Case ID:** | 1.2 | | | |
| **Use Case Name:** | Supplier Quotation | | | |
| **Created By:** | Pia Encarnacion | | **Last Updated By:** | August 11, 2014 |
| **Date Created:** | August 11, 2014 | | **Last Revision Date:** |  |
| **Actors:** | | Contractor | | |
| **Description:** | | Once the quotation of all materials from a supplier is received, the information of the items and of the supplier will be processed into usable data. | | |
| **Trigger:** | | Request quotation from supplier | | |
| **Preconditions:** | | 1. Contract has contacted supplier 2. Contractor has received the quotation from the supplier | | |
| **Postconditions:** | | 1. The system will contain data of the materials of a certain supplier based on the quotation 2. Data is organized and detailed 3. Data can be accessed for project processing 4. Supplier is assigned to a project based on the requirements of that project 5. Total cost of materials of a project will be computed | | |
| **Normal Flow:** | | 1. Contractor contacts supplier and requests a quotation of materials 2. Contractor inputs details of the supplier into the system 3. Contractor inputs all the details of each material (like price and quantity) into the system 4. System will assign the supplier to a project //does the system do this? 5. System processes all the data required for a project (including total cost) | | |
| **Alternative Flows:** | | 2a. If the supplier is already part of the database   * + - 1. System will prompt the user that the supplier has been recorded before       2. System will show the details and all the data from the aforementioned supplier       3. Contractor adds information of new materials       4. Use Case resumes on step 4   2b. If the supplier is already part of the database   1. System will prompt the user that the supplier has been recorded before 2. System will show the details and all the data from the aforementioned supplier 3. Contractor updates information of materials 4. Use Case resumes on step 4   2c. If the supplier is already part of the database   * + - 1. System will prompt the user that the supplier has been recorded before       2. System will show the details and all the data from the aforementioned supplier       3. Contractor updates information of supplier  1. Use Case resumes on step 4   3a. If the material is already part of the database   * + - 1. System will prompt the user that the material has been recorded before       2. System will show the details and all the data from the aforementioned material       3. Contractor updates information of the material       4. Use Case resumes on step 4   4a. If the supplier cannot be matched with a project   1. System will still keep the data about the supplier 2. These data will be used for future use 3. Project will continue to find a supplier; repeat Use Case beginning with step 1 | | |
| **Exceptions:** | | 3a. In step 3 of the normal flow, if the price contains non-numerical values   1. System will prompt the user 2. User inputs proper price value | | |
| **Includes:** | | Supplier, 2.1 Material Costing | | |
| **Frequency of Use:** | | Once, when the project will be created, or if the contractor should require more supplies | | |
| **Special Requirements:** | | - | | |
| **Assumptions:** | | 1. Prices are in Philippine Peso or in U.S. dollars  2. Measurements follow the metric system | | |
| **Notes and Issues:** | | What information of the supplier and/or its materials that may be left unanswered? | | |

## 1.3 Order Processing

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Use Case ID:** | UC-1.3 | | | |
| **Use Case Name:** | Order Processing | | | |
| **Created By:** | Pia Encarnacion | | **Last Updated By:** | August 12, 2014 |
| **Date Created:** | August 12, 2014 | | **Last Revision Date:** |  |
| **Actors:** | | Contractor – primary | | |
| **Description:** | | The user will create a Purchase Order to the supplier that will be based on the needs of a project. | | |
| **Trigger:** | | The supplier is assigned to a project based on the required materials of the project | | |
| **Preconditions:** | | 1. System contains records of all the materials from the supplier 2. A project must specify the exact materials it will use 3. Supplier is assigned to a project 4. Supplier has all the materials needed for said project | | |
| **Postconditions:** | | 1. Contractor is ready to send the Purchase Order 2. Total cost of materials is computed by the system | | |
| **Normal Flow:** | | 1. Once a project has found a supplier, the system will create the Purchase Order by including all the needed materials that will be ordered from the supplier 2. The system-processed Purchase Order form is ready to be sent to the supplier | | |
| **Alternative Flows:** | | N/A | | |
| **Exceptions:** | | 1a. System fails to process the purchase order   1. System will restart 2. System will continue to process a purchase order as requested by the user | | |
| **Includes:** | | UC-1.2 | | |
| **Frequency of Use:** | | On command | | |
| **Special Requirements:** | | N/A | | |
| **Assumptions:** | | N/A | | |
| **Notes and Issues:** | | 1. Will the system automatically create the Purchase Order once a project has a supplier, or will it be processed on the user’s command? | | |

## 1.4 Manpower Management

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Use Case ID:** | 1.4 | | | |
| **Use Case Name:** | Manpower Management | | | |
| **Created By:** | Pet Samaco | | **Last Updated By:** | 08/12/14 |
| **Date Created:** | 08/12/14 | | **Last Revision Date:** | 08/12/14 |
| **Actors:** | | Contractor, Admin | | |
| **Description:** | | Presents information of the employee, including currently deployed jobs of the person | | |
| **Trigger:** | | User hits the “”Manpower Management” button | | |
| **Preconditions:** | | 1) Project must have Information of the needed employees to be deployed to the project | | |
| **Postconditions:** | | * + - * 1. System leaves the Manpower Management Tab         2. Information will also be sent to the employee management team, where they may compute the salary of the employees | | |
| **Normal Flow:** | | 1. User inputs the ID of the employee 2. System shows the information on the employee | | |
| **Alternative Flows:** | | N/A | | |
| **Exceptions:** | | 1.a User inputs an invalid employee ID  1. Error message is shown  2. User is brought back to previous window | | |
| **Includes:** | | 4.1 Salary Computation | | |
| **Frequency of Use:** | | Every time the admin needs to check the availability/status of an employee | | |
| **Special Requirements:** | | N/A | | |
| **Assumptions:** | | N/A | | |
| **Notes and Issues:** | | N/A | | |

# 2 Quotation Processing

## 2.1 Material Costing

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Use Case ID:** | 2.1 | | | |
| **Use Case Name:** | Material Costing | | | |
| **Created By:** | Pet Samaco | | **Last Updated By:** | 08/12/14 |
| **Date Created:** | 08/12/14 | | **Last Revision Date:** | 08/12/14 |
| **Actors:** | | Contractor (User or Admin) | | |
| **Description:** | | Presents price and availability of the needed materials for a project | | |
| **Trigger:** | | User hits the “”Material Costing” button | | |
| **Preconditions:** | | 1) All materials have IDs and Prices associated with them | | |
| **Postconditions:** | | * + - * 1. System prints a quotation of all the materials and their prices | | |
| **Normal Flow:** | | 1. System shows the order cart 2. User inputs the ID of the material needed 3. System shows information on the material 4. User inputs the needed amount of the material 5. System places materials in the order cart 6. System/User repeats 1-5 until all the materials are in the order cart 7. User accepts the order cart 8. System gives an ID to the order cart | | |
| **Alternative Flows:** | | 6.a. User finds errors in the order cart  1) User selects the materials with the errors  2) User changes the material order information/removes the material from the cart  3) System goes back to the order cart  6.b User wants to delete the whole order cart  1) User presses the “Delete Order Cart”  2) System removes all materials from the current order cart  3) System goes back to the order cart | | |
| **Exceptions:** | | 1.a User inputs an invalid material ID  1. Error message is shown  2. User is brought back to previous window  2.a User inputs an invalid amount of materials  1. Error message is shown  2. User is brought back to previous window | | |
| **Includes:** | | N/A | | |
| **Frequency of Use:** | | Every time a contract needs materials | | |
| **Special Requirements:** | | N/A | | |
| **Assumptions:** | | N/A | | |
| **Notes and Issues:** | | N/A | | |

## 2.2 Labor Costing

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Use Case ID:** | 2.2 | | | |
| **Use Case Name:** | Javier Flavier | | | |
| **Created By:** | John Michael Santos | | **Last Updated By:** | August 12, 2014 |
| **Date Created:** | August 12, 2014 | | **Last Revision Date:** |  |
| **Actors:** | | Contractor (User or Admin) | | |
| **Description:** | | Allows the user to assess the employees needed for the project and their labor costs | | |
| **Trigger:** | | * User will input information and service hours of an employee * User will send this information for payroll | | |
| **Preconditions:** | | 1. Upon processing the contract into a project, it must have the information of the employees to be deployed 2. Employees listed should have served for a time being in the project involved | | |
| **Postconditions:** | | 1. Working hours of employees are input. 2. Information of the workers received. 3. Summary of payroll now sent to the Manpower Management | | |
| **Normal Flow:** | | 1. The Foreman will go to the respective window 2. User inputs the ID of his desired type of labor. 3. The Foreman will input the necessary data on the employees 4. System shows information on the labor. 5. The system will validate and make changes to the database prior to the input information | | |
| **Alternative Flow 1:**  **Input of Employee Information** | | A. User wants to delete his order cart.  1) User presses “Delete Order Cart” button  2) System removes all orders from the cart.  3) System goes back to the order cart.  B. User want to edit additional information   1. The foreman will input the employees to work in a project 2. System will validate the inputs, and will store the information of the employee 3. The foreman can also input the number of hours the employee has served. Additional hours served by the employees will be incremented to his/her total hours worked for the project | | |
| **Alternative Flow 2:**  **Send Information for Payroll** | | 1. Foreman will fetch the necessary information to compute for the payroll. This will include basic identification details, the number of hours worked, and the rate. 2. System will send it to the Manpower Management | | |
| **Exceptions:** | | * Wrong input for an information field   + System will prompt the use to fill necessary details * Employee was not found in the system   + Foreman will re-input the information gathered from the contract. | | |
| **Includes:** | | 1.4: Manpower Management | | |
| **Frequency of Use:** | | * Working hours will be tallied daily * Workers' Information will be update once a month | | |
| **Special Requirements:** | | * System should be open * User should follow inputs needed in the system | | |
| **Assumptions:** | | 1) There are different types of labor (i.e. construction, trucking, etc.)  2) These types of labor may come from different firms. | | |
| **Notes and Issues:** | | N/A | | |

## 2.3 Process quotation for client

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Use Case ID:** | 2.3 | | | |
| **Use Case Name:** | Process quotation for client | | | |
| **Created By:** | Joshua Zambales | | **Last Updated By:** | Joshua Zambales |
| **Date Created:** | August 10, 2014 | | **Last Revision Date:** | August 10, 2014 |
| **Actors:** | | Contractor (User or Admin) | | |
| **Description:** | | Use case that processes quotation information to be forwarded to the client | | |
| **Trigger:** | | Quotation from Supplier and Estimation of labor and material cost | | |
| **Preconditions:** | | 1. Quotation from supplier for materials must be possessed 2. Estimation of labor and material costs should be computed for 3. Materials should already be listed (including quantity and price) | | |
| **Postconditions:** | | 1. Information with regards to quotation for the client | | |
| **Normal Flow:** | | 1. User chooses create Quotation in the project 2. User inputs labor estimate 3. User inputs material estimate(materials and quantity with cost) based on quotation from supplier 4. System displays list of materials in the project along with the price in a certain format (can be copy pasted to Word file for letter making) 5. Total cost is computed (materials cost, labor cost) | | |
| **Alternative Flows:** | | N/A | | |
| **Exceptions:** | | 2a User enters invalid input for labor estimate   1. System disapproves operation 2. System prompts user to change input into valid input 3. System continues on normal flow step 3   3a User enters invalid input for materials cost estimate   1. System disapproves operation 2. System prompts user to change input into valid input   System continues on normal flow step 4 | | |
| **Includes:** | | Estimate labor cost for project, Material costing | | |
| **Frequency of Use:** | | 1-2 times per project | | |
| **Special Requirements:** | | N/A | | |
| **Assumptions:** | | 1. Materials and quantity are already listed in the project | | |
| **Notes and Issues:** | | Mark up or overhead price is based upon the discretion of the contractor and already included in the contract preceded by the bidding. | | |

# 3 Supplies Processing

## 3.1 Process Supplies Order

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Use Case ID:** | 3.1 | | | |
| **Use Case Name:** | Process supplies order | | | |
| **Created By:** | Joshua Zambales | | **Last Updated By:** | Joshua Zambales |
| **Date Created:** | August 11, 2014 | | **Last Revision Date:** | August 11, 2014 |
| **Actors:** | | Contractor | | |
| **Description:** | | Use case that lists materials and computes for the value of the materials to be purchased from a supplier based on the quotation | | |
| **Trigger:** | | Quotation from supplier | | |
| **Preconditions:** | | 1. Supplier has sent quotation 2. Supplier is assigned to project 3. Products are available for purchase | | |
| **Postconditions:** | | 1. A list of materials and cost is created to be sent to the supplier | | |
| **Normal Flow:** | | 1. Amount of materials is assessed by the contractor 2. Contractor lists down materials and the quantity in the system 3. System displays materials, quantity, and cost in a certain format (can be copy pasted to word file for letter making for supplier) | | |
| **Alternative Flows:** | | 3a If the material to be requested is from warehouse   1. System displays materials, quantity, and cost in a certain format (can be copy pasted to word file for letter making for warehouse personnel) | | |
| **Exceptions:** | | 2a User enters invalid input for Materials or/and quantity   1. System disapproves operation 2. System prompts user to change input into valid input   System continues on normal flow step 3 | | |
| **Includes:** | | N/A | | |
| **Frequency of Use:** | | 2-5 times per project | | |
| **Special Requirements:** | | N/A | | |
| **Assumptions:** | | 1. There is already a quotation from the supplier 2. The contractor knows what and how much materials to purchase based from the quotation from the supplier | | |
| **Notes and Issues:** | | N/A | | |

## 3.2 Processing to warehouse inventory

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Use Case ID:** | 3.2 | | | |
| **Use Case Name:** | Processing for warehouse inventory | | | |
| **Created By:** | Joshua Zambales | | **Last Updated By:** | Joshua Zambales |
| **Date Created:** | August 11, 2014 | | **Last Revision Date:** | August 11, 2014 |
| **Actors:** | | Warehouse personnel, contractor | | |
| **Description:** | | Use case that tracks inventory in warehouse and status of items | | |
| **Trigger:** | | Inventory check, material/equipment request | | |
| **Preconditions:** | | N/A | | |
| **Postconditions:** | | Amended quantity of warehouse materials | | |
| **Normal Flow:** | | 1. User requests for inventory check or material request from warehouse personnel (outside the system) 2. Warehouse personnel hands out inventory check report or/and amended quantity notice 3. User updates inventory list 4. System saves the updated inventory list | | |
| **Alternative Flows:** | | 1a User adds new materials or returns it to warehouse   1. User informs the personnel about material to be placed in warehouse 2. Use case resumes on step 2 | | |
| **Exceptions:** | | 3a User enters invalid input for labor estimate   1. System disapproves operation 2. System prompts user to change input into valid input   System continues on normal flow 3 | | |
| **Includes:** | | N/A | | |
| **Frequency of Use:** | | 1-2 times a week | | |
| **Special Requirements:** | | N/A | | |
| **Assumptions:** | | There is access to warehouse and warehouse personnel | | |
| **Notes and Issues:** | | N/A | | |

# 4 Employee Management

## 4.1 Salary Computation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Use Case ID:** | 4.1 | | | |
| **Use Case Name:** | Salary Computation | | | |
| **Created By:** | John Michael Santos | | **Last Updated By:** | August 12, 2014 |
| **Date Created:** | August 12, 2014 | | **Last Revision Date:** |  |
| **Actors:** | | Foreman | | |
| **Description:** | | Allows the foreman to assess the employees in the current project, tallying its service hours and salary for the payroll | | |
| **Trigger:** | | * User will input information and service hours of an employee * User will send this information for payroll | | |
| **Preconditions:** | | 1. Upon processing the contract into a project, it must have the information of the employees to be deployed 2. Employees listed should have served for a time being in the project involved | | |
| **Postconditions:** | | 1. Working hours of employees are input. 2. Information of the workers received. 3. Summary of payroll now sent to the Manpower Management | | |
| **Normal Flow:** | | 1. The Foreman will go to the respective window 2. The Foreman will input the necessary data on the employees 3. The system will validate and make changes to the database prior to the input information | | |
| **Alternative Flow 1:**  **Input of Employee Information** | | 1. The foreman will input the employees to work in a project 2. System will validate the inputs, and will store the information of the employee 3. The foreman can also input the number of hours the employee has served. Additional hours served by the employees will be incremented to his/her total hours worked for the project | | |
| **Alternative Flow 2:**  **Send Information for Payroll** | | 1. Foreman will fetch the necessary information to compute for the payroll. This will include basic identification details, the number of hours worked, and the rate. 2. System will send it to the Manpower Management | | |
| **Exceptions:** | | * Wrong input for an information field   + System will prompt the use to fill necessary details * Employee was not found in the system   + Foreman will re-input the information gathered from the contract. | | |
| **Includes:** | | 1.4: Manpower Management | | |
| **Frequency of Use:** | | * Working hours will be tallied daily * Workers' Information will be update once a month | | |
| **Special Requirements:** | | * System should be open * User should follow inputs needed in the system | | |
| **Assumptions:** | | - | | |
| **Notes and Issues:** | | - | | |