Juan Esteban Caicedo A. – A00365977 – APO 1

**Functional Requirements Lab Unit 3 Morgan**

|  |  |
| --- | --- |
| Name | Ship loading process. |
| Resúmen | A cargo is added to the ship. |
| Entries | Number of boxes to be transported, weight in grams per box, client (company) to whom the cargo belongs, types of cargo you want to register. |
| Possible results | 1. "The ship was successfully loaded." 2. "Error. The boxes have to have the same weight." 3. "Error. By health rules, a PERISHABLE type cargo and a DANGEROUS type cargo cannot be transported on a same trip". |

|  |  |
| --- | --- |
| Name | Calculation of the total value payable for the transport of the cargo. |
| Summary | The total value payable for the freight transport is calculated. |
| Entries | Load type, kilo value of the type of load, client category, possible surprise discount by the clients category. |
| Results | The total value to be paid for the transport of the cargo is found. |

|  |  |
| --- | --- |
| Name | Printing the total value to be paid for the transport of the cargo. |
| Summary | The total value to be paid for the freight transport is displayed. |
| Entries | Total value payable for the transport of the cargo. |
| Results | "The total value to be paid for the transport of the cargo is (x) pesos". |

|  |  |
| --- | --- |
| Name | Calculation of the total weight the ship carries at the moment. |
| Summary | The total weight of the ship is calculated at the moment. |
| Entries | Weight of each box. |
| Results | The total weight of the cargo carried by the ship is found. |

|  |  |
| --- | --- |
| Name | Printing the total weight of the cargo carried by the ship. |
| Summary | The total weight of the cargo carried by the ship is shown. |
| Entries | Total weight of the cargo carried by the ship. |
| Results | "The total weight of the cargo carried by the ship is (x) kg". |

|  |  |
| --- | --- |
| Name | Unload the ship. |
| Summary | The ship is unloaded to start a new trip, emptying the number of loads transported from the ship. |
| Entries | Number of loads transported. |
| Results | "The ship has been unloaded." |

|  |  |
| --- | --- |
| Name | Calculation of the total number of loads carried by the ship. |
| Summary | Add up the number of loads the ship carries at the moment. |
| Entries | Loads registered. |
| Results | The total number of cargoes carried by the ship is found. |

|  |  |
| --- | --- |
| Name | Determination of the ship's departure. |
| Summary | We see if the ship is possible to departure or not. |
| Entries | Number of loads registered for travel, total weight of loads, registered load types. |
| Possible results | 1. "The ship can sail in optimal condition". 2. "Error. To set sail, the ship must have at least two cargass or a total weight of loads greater than 12,000 kilos." 3. "Error. Maximum weight exceeded. The ship can just carry 28,000 kilos of cargo per trip."”. 4. "Error. By health rules, a PERISHABLE type cargo and a DANGEROUS type cargo cannot be transported on the same journey." |

|  |  |
| --- | --- |
| Name | Search for the existence of a client registration in the company. |
| Summary | It is searched if a client is already registered with the company. |
| Entries | Commercial register number of the client. |
| Possible results | 1. "This client already exists." 2. “This client is not in the system”. |

|  |  |
| --- | --- |
| Name | Entering client data. |
| Summary | Client data is entered. |
| Entries | Client name (company), commercial register number of the client, registry expedition date, type of client, amount of kilos transported over the time with Morgan’s company, amount of money paid over the time to Morgan’s company. |
| Possible results | 1. "New client successfully registered ". 2. “Error. The client array has reached its maximum capacity.” |

|  |  |
| --- | --- |
| Name | Client categorization. |
| Summary | Clients are categorized for surprise discounts. |
| Entries | Total money paid to all Morgan's company services, a total number of kilos transported on different occasions with Morgan's company. |
| Results | "You are currently at level (Normal), (Silver), (Gold), (Platinum)". |

|  |  |
| --- | --- |
| Name | Assignment of surprise discounts. |
| Summary | Surprise discounts are assigned to clients as a gift from Morgan. |
| Entries | Client category, load types. |
| Possible results | 1. "Normal Level: You didn't get any discounts." 2. "Silver Level: You got a 1.5% discount on PERISHABLE load". 3. "Gold Level: You got a 3% discount on PERISHABLE and NON-PERISHABLE cargo." 4. "Platinum Level: You got a 5% discount for all types of cargo." |

|  |  |
| --- | --- |
| Name | Calculation of the weight of a load in kilograms. |
| Summary | The weight of a clients’ load is calculated in kilograms. |
| Entries | Number of boxes to be transported, weight in grams per box. |
| Results | The weight of a clients' load in kilograms is found. |

|  |  |
| --- | --- |
| Name | Check of the available weight on the ship for the registration of a new cargo. |
| Summary | It is checked whether when a cargo is entered, the ship accepts it in terms of weight or not. |
| Entries | Total cargo weight, total weight carried by the ship at the time, maximum weight accepted by the ship. |
| Possible results | 1. "Your new cargo has been accepted on the ship." 2. "Your cargo exceeds the weight limit that the ship can carry." |

|  |  |
| --- | --- |
| Name | Verification of the presence of a Perishable load in the ship. |
| Summary | It is verified the presence of a Perishable load in the ship. |
| Entries | Loads’ list, current load type that the client want to add to the ship. |
| Possible results | 1. There is already a Perishable load in the ship. 2. There isn’t a Perishable load in the ship. |

|  |  |
| --- | --- |
| Name | Verification of the presence of a Dangerous load in the ship. |
| Summary | It is verified the presence of a Perishable load in the ship. |
| Entries | Loads’ list, current load type that the client want to add to the ship |
| Possible results | 1. There is already a Dangerous load in the ship. 2. There isn’t a Dangerous load in the ship. |