
ACME LOGISTICS

Acme, Inc. is a holding that encompasses many companies worldwide. One of them is Acme Logistics, Inc., whose objective consists of supporting the logistics process associated to the fishing market, where fishermen can relate their products and organize markets, and businesses may acquire said produce.

The objective of this project is to develop a web information system so that Acme Logistics may carry their business. This document provides the initial draft of requisites the system will fulfill.

1. Information requeriments

1. The actors of this system will be fishermen, buyers, businessmen, transporters and administrators. The sistem must store their names, surnames, national ID, city and phone number; optionally, they can also store a postal address, an email address and a credit card.
2. Every stored ID must be valid, following the structure NNNNNNNN-L, where N are numbers and L a letter, which must be correct for the associated number.
3. Stored phone numbers must be valid, following the structure +NN NNNNNNNN where N is a number.
4. The system must store valid credit cards. The system will store the following information about them: holder name, brand name, number, expiration month, expiration year, and a CVV code, which is an integer between 100 and 999.
5. Fishermen can register their daily catch to keep an account of their reserves. The system must store the variety of fish and the quantity captured.
6. The system will store certain types of fish and measures by default. For both, the system will store their names.
7. Fishermen can publish a market offer on the wall. About the market, the system must store a date and place, a duration, the type of fish, the amount to be sold and the price by type and measure of fish. Optionally, a market

can be placed as static, which means it will periodically be published at set intervals.

8. All actors can access the default wall, where every published market will be ordered by date. The wall cannot be edited, but actors may create other walls specifically for certain fishermen. For every custom wall, the system must store a name, the list of fishermen associated, and the markets published by them.
9. Actors can follow each others. The system must store for every actor a list of followers and a list of actors that follow him or her.
10. Businessmen can register a store, of which they'll be owners. The system must store a name, a postal address, city, a credit card and an identification number.
11. Businessmen can send orders to fishermen for one of their stores. The system must store for each order the ID of the store, the associated fisherman, variety and quantity of fish, and optionally, a transporter ID, in case the services of one were required
12. Transporters can publish transport offers for which the system must store: transport ID, origin, destination, maximum cargo (in kilograms), price per kilogram, and a period in which the transport is available.
13. Transport IDs must be valid. For that they must follow the structure NNNN-LL-LL where N are numbers and L are letters.
14. Businessmen can mark an order as delivered, which will be notified to the associated fisherman with a generated message. Once delivered, it won't be able to be marked as not delivered.
15. All actors can exchange messages. The system must store for every message: sender, receiver, subject, body and send date.
16. Messages will be classified in three boxes: inbox, outbox and trashbox. For each, the system must store their name and the messages it possess. Said boxes cannot be deleted. A received message will appear on inbox, a sent message will appear on outbox, and a deleted message will be moved to trashbox. A message which is deleted from trashbox will be deleted from the system altogether.
17. Businessmen can publish products in their stores for their local customers. For each product, the system must store the variety, quantity, measurement and price according to quantity and measure
18. Buyers can buy products in businessmen's stores. Each purchase will generate a ticker similar to the orders of businessmen on fishermen.

2. Functional requirements

1. An actor which is not authenticated will be able to:
 - 1.1. Register as fisherman.
 - 1.2. Register as buyer.
 - 1.3. Register as businessman.
 - 1.4. Register as transporter.
 - 1.5. Display the default wall.
2. An actor authenticated as buyer will be able to:
 - 2.1. Do the same as a non authenticated actor, except register to the system.
 - 2.2. Edit personal data.
 - 2.3. Search for fishermen by name or city.
 - 2.4. Search markets by city.
 - 2.5. Create a custom wall.
 - 2.6. Follow fishermen.
 - 2.7. Search a store by name or city.
 - 2.8. Browse and purchase products offered by a store. He or she may choose to pay with their profile's credit card or introduce a different one manually.
 - 2.9. Exchange messages with other actors.
 - 2.10. Change the names of his or her mailboxes.
3. An actor authenticated as fisherman will be able to:
 - 3.1. Do the same as a non authenticated actor, except register to the system.
 - 3.2. Edit personal data
 - 3.3. Register his or her daily catch.
 - 3.4. Publish markets. Also, he or she can mark a market as static so it will be published automatically monthly, always the same day as indicated in the market.
 - 3.5. Accept orders. This will include altering the quantity and measurements of the assigned fish on his or her reserves.
 - 3.6. Exchange messages with other actors.
 - 3.7. Change the names of his or her mailboxes.
4. An actor authenticated as businessman will be able to:
 - 4.1. Do the same as a non authenticated actor, except register to the system.
 - 4.2. Edit personal data.
 - 4.3. Search fishermen by name or city.
 - 4.4. Search markets by city.
 - 4.5. Create a custom wall.
 - 4.6. Follow fishermen.
 - 4.7. Register a store.
 - 4.8. Publish products on a store of which he or she is the owner.
 - 4.9. Send an order to a fisherman. This includes contracting a transporter who's available on the delivery date, origin and destination. This implies sending a generated message to the transporter indicating the order. This process cannot be reversed.
 - 4.10. Mark an order as delivered, which implies sending a generated message to the fisherman. This process cannot be reversed.
 - 4.11. Exchange messages with other actors.
 - 4.12. Change the names of his or her mailboxes.

5. An actor authenticated as transporter will be able to:
 - 5.1. Edit personal data.
 - 5.2. Publish a transport route.
 - 5.3. Exchange messages with other actors.
 - 5.4. Change the names of his or her mailboxes.
6. An actor authenticated as transporter will be able to:
 - 6.1. Edit personal data.
 - 6.2. Exchange messages with other actors.
 - 6.3. Change the name of his or her mailboxes.
 - 6.4. Search fishermen by name or city.
 - 6.5. Search markets by city.
 - 6.6. Create custom walls.
 - 6.7. Search a store by name or city.
 - 6.8. Ver productos ofrecidos por la tienda
 - 6.9. Register and modify the varieties of fish and the measurements.
 - 6.10. Display a dashboard, which includes:
 - 6.10.1. The average, maximum and minimum of messages sent by actors.
 - 6.10.2. The average, maximum and minimum of messages received by actors.
 - 6.10.3. The average, maximum and minimum of markets published daily.
 - 6.10.4. The average, maximum and minimum of markets published monthly.
 - 6.10.5. Number of actors registered as fishermen.
 - 6.10.6. Number of actors registered as buyers.
 - 6.10.7. Number of actors registered as businessmen.
 - 6.10.8. Number of actors registered as transporters.
 - 6.10.9. The average, maximum and minimum of orders made daily.
 - 6.10.10. The average, maximum and minimum of orders made monthly.

3. Non-functional requeriments

1. The system must be available in English and Spanish (The data itself doesn't have to be, only the messages which the system displays).
2. The system will run in Spain, so it will have to comply with the following regulations: the Spanish LOPD, the Spanish LSSI and the transpositions law.
3. The system must be as efficient and hard to hack as possible.
4. The system will have the euro (€) as default currency. This currency cannot be changed.
5. The number of results shown after a search will always be 10 for each page.