ACME EVENTS

DP – GROUP 21

Acme Events

Acme, Inc. is a holding that encompasses many companies worldwide, including Acme Events, Inc. Their business consists in helping managers to organize parties and rent his club, helping publicists to spread the publicity of the events and helping clients to learn about events and sign up for it.

The goal of this project is to develop a web information system that Acme Events, Inc. can use to run their business. This document provides an informal requirement specification. Ask your students for clarifications and details, if necessary.

C-level requirements

Information requirements

1. The actors of the system are administrators, managers, and clients. For every actor, the system must store a name, an optional middle name, a surname, an optional photo, an email, an optional phone number, an optional address, and an arbitrary number of social profiles. The system must store the following data regarding such profiles: a nick, the name of the social network, a link to a profile in that social network. The system also stores the identification document number (DNI or similar) for every client.

2. Clients can have a credit card, for every credit card the System must store a holder name, a brand name, a card number, a expiration month, a expiration year and a CVV code. The valid brand names are VISA, DINNERS, MASTER and AMEX.

3. Actors can exchange messages. For every message, the system must keep track of the sender, the recipient, the moment when it was sent, the subject, the body, its priority, and some optional tags. Priorities are HIGH, NEUTRAL, or LOW; no other values are expected. Every actor has the following message boxes: in box, out box, trash box, and spam box. When an actor receives a message, it gets to the in box unless the system flags it as spam, in which case it gets to the spam box. When he or she sends a message to another user, it's saved to the out box. When an actor removes a message from a box other than trash box, it is moved to the trash box; when he or she removes it from the trash box, then it is actually removed from the system. The previous boxes are predefined and the actors must not be allowed to delete them, to change their names, or to move them. Actors are allowed to create new boxes that they can manage arbitrarily.

4. Managers publish clubs. For every club, the system must store a name, an address, a description and some optional pictures. When a club is created and saved in final mode, it should be accepted by an administrator. Until the club is not accepted, events cannot be created for this club and the club is not visible by the others actors of the system.

5. Managers publish events. For every event, the system must store a ticker, a title, the moment when it's published, an optional poster, a description, a price, the moments of starting and ending of the event, a status and the category and the club to which it belongs. Note the events that are saved in draft mode aren't visible to others actors until they are saved in final mode. The possible status are "AVAILABLE" and "CANCELLED".

6. The catalogue of categories is provided by the system. For every category, the system must store a title.

7. The categories of events are organized into a hierarchy by the administrators. Every category belongs to a parent category, but the root category, which is called "CATEGORY".

8. A client may follow a club. When a client follow a club, he can see all his events. The system must store the moment when a club is followed.

9. Once an event is saved in final mode, the clients who follows the respective club receives a notification. The notification is received in the notification box.

10. A client can participate to an event of one of the clubs he follows. To participate in an event, the client should have a valid credit card vinculated. For every participation, the system must store the moment when the participation was done and the number of credit card used.

11. A clients can publish opinions about his events. For each opinion, the system must store a title, a description and a score and the moment where the opinion is saved. Opinions cannot be removed or updated. A client can only publish opinions of events he has participated and who are already finished. A client can only publish one opinion per event.

Functional requirements

12. **An actor who is not authenticated must be able to:**
    1. Register to the system as a manager or a client.
    2. List all the accepted clubs that are in the system and see their information and navigate to the responsable manager.
    3. List all the manager that are in the system and see their information and navigate to their clubs and social profiles.

13. **An actor who is authenticated must be able to:**
    1. Do the same as an actor who is not authenticated, but register to the system.
    2. Edit his or her personal data.

3. Manage his or her social profiles, who include creating, updating and deleting them.
4. Exchange messages with other actors and manage them.
5. Manage his or her message boxes, except for the system boxes.

14. **An actor who is authenticated as a manager must be able to:**
    1. Manage an arbitrary number of clubs, which includes listing, showing, creating, updating and deleting them. A club who have at least one event saved in final mode can't be deleted.
    2. Manage the events of their clubs, which includes listing, creating, updating and deleting them. A manager may update or delete an event only if it's saved in draft mode.
    3. Cancel an event. When a event is cancelled a notification must be send at all the clients who participe at this event. Only events saved in final mode can be cancelled.
    4. List the participations of his events and the total number for each event.
    5. List the opinions of his events and the median of his scores for each event.

15. **An actor who is authenticated as a client must be able to:**
    1. Follow or unfollow a club.
    2. List the clubs he follows and navigate to the events that are organized in that clubs ordered by date and grouped by status (AVAILABLE and CANCELLED).
    3. Filter the catalogue of events using the following filters: a single key word that must appear somewhere in its club, ticker, description; a category to which the event must belong; a range of prices; or a range of dates.
    4. Participate in an event of one of the clubs he follows. The client must have a valid credit card vinculated for do this.
    5. List the events he participate.
    6. Publish an opinion about an event he participate and who is already finished.
    7. Manage his credit card, who includes create, edit and delete it.

16. **An actor who is authenticated as an administrator must be able to:**
    1. Create user accounts for new administrators.
    2. Manage the catalogue of categories, which includes listing, showing, creating, updating, and deleting them. Note that categories evolve independently from events, which means that they can be created, modified, or deleted independently from whether they are referenced from an event or not.
    3. List the clubs that aren't accepted yet and accept or refuse them. If the club is refused, a reason must be given by the administrator.
    4. Broadcast a message to all of the actors of the system.
    5. Display a dashboard with the following information:
        - The average, the minimum, the maximum, and the standard deviation of the number of clubs per manager.
        - The average, the minimum, the maximum, and the standard deviation of the number of events per club.

- The average, the minimum, the maximum, and the standard deviation of the maximum price of the events.
- The average, the minimum, the maximum, and the standard deviation of the number of events per client.
- The ratio of planned events.
- The ratio of cancelled events.
- The listing of clubs who have at least 10% or more events with cancelled status.

Non-functional requirements

17. The system must be available in English and Spanish. (Unless otherwise stated, the data are not required to be available in several languages, only the messages that the system dis-plays.)

18. The system must be easy to customise at run time. The customisation includes, but is not limited to: the name of the system (it's "Acme Events" by default); the banner shown at the header; the message that is shown on the welcome page ("Welcome to Acme Events! The best place to make and go to events." is the default welcome message in English; "¡Bienvenidos a Acme Events! El major sitio para publicitar y asistir a eventos." is the default welcome message in Spanish); a list of spam words (it's "sex", "viagra", "cialis", "one million", "you've been selected", "Nigeria", "sexo", "un millón", and "ha sido seleccionado" by default); the default country code in telephone numbers (it's "+34"by default).

19. The system must provide the following leaf categories by default: MODERNO/MODERN, POPULAR/POPULAR, REGGEATON/ REGGEATON, CLASICO/CLASSIC, ELECTRO/ELECTRO, DEEP/DEEP, TECH/TECH, TRAP/TRAP, RAP/RAP, ORQUESTA/ORQUEST, PIANO/PIANO, VIOLÍN/VIOLIN, GUITARRA/GUITAR, ROCK/ROCK, POP/POP. Their names must be displayed appropriately in Spanish or English depending on the language that the principal's selected. The categories must be grouped appropriately into higher-level categories.

20. Photos are not required to be stored in the database, but links to external systems like Pin-terest.com or Flickr.com, just to mention a couple of examples.

21. When an actor gets a message that contains a spam word, it must be stored in the spam box instead of the input box.

22. Every time that an event is saved in final mode or change its status, the system must send a message to both the corresponding manager and the clients who follows the club who the event is organized. The message must be written in both English and Spanish.

23. Events must be shown according to the following colour scheme: events that are AVAILABLE must be shown in green; events that are CANCELLED must be shown in red.

24. Tickers must adhere to the following pattern: "yymmdd-xxxxxx", where "yymmdd" refers to the year, month, and day when the corresponding entity is registered, and "xxxxxx" to a random uppercase alpha-numeric string. No two entities may have the same ticker since it's assumed to be a unique external identifier.

25. Phone numbers should adhere to the following patterns: "+CC (AC) PN", "+CC PN", or "PN": "+CC" denotes a country code in range "+1" up to "+999", "(AC)" denotes an area code in range "(1)" up to "(999)", and "PN" denotes a number that must have at least four digits. Phone numbers with pattern "PN" must be added automatically a default country, which is a parameter that can be changed by administrators. Note that phone numbers should adhere to the previous patterns, but they are not required to. Whenever a phone number that does not match this pattern is entered, the system must ask for confirmation; if the user confirms the number, it then must be stored.

26. Email addresses must adhere to any of the following patterns: "identifier@domain", "alias <identifier@domain>"; administrators may have email addresses of the form "identifier@", or "alias <identifier@>". The identifier is an alpha-numeric string, the domain is a sequence of alpha-numeric strings that are separated by dots, and the alias is a sequence of alpha-numeric strings that are separated by spaces.