pkg UML

Notes (top, left to right):

- Every actor has the following pre-defined message boxes: in box, out box, trash box and spam box. Actors must not be allowed to delete them, to change their names, or to move them.

- A message may be stored in several boxes and removing a message from the "trash box" removes it from every other 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 an actor 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's moved to the "trash box".

- When an actor removes a message from "trash box" then it's actually removed from the system.

- Whenever a price is shown, the corresponding VAT tax must be computed and shown in parenthesis next to the price.

- Tickers must be adhere to the following pattern: "yymmdd-xxxxx", where "yymmdd" refers to the year, month, and day; and "xxxxx" to a random uppercase alpha-numeric string

- Phone numbers should adhere to the following patterns: "+CC (AC) PN", "+CC PN", or "PN". Phone numbers are not require to adhere to the previous patterns.

- Whenever a phone number that does not match this pattern is entered, the system must be ask for confirmation, if the user confirms the number, it then must be stored.

- Email addresses must adhere to any of the following patterns: "identifier@domain", "alias-identifier@domain in>", administrators may have email addresses of the form "identifier@", or "alias -identifier@>".

- An actor is considered suspicious if he or she publishes some data that includes spam words.

- The education record may refer to a period that hasn't finished yet if the studying.

- A professional record may refer to a period that hasn't finished yet

- Banners must be shown as little intrusively as possible.

- Section numbers must be positive and consecutive

Left side notes:

- Complaints and notes cannot be updated or deleted once they are saved to the database. So, it's required that the system must ask for a double confirmation before saving these entities.

- The referee, creator of the report, must be able to update or delete the report as long as he or she doesn't save it in final mode.

- The corresponding customer or handy worker cannot see the report until it is saved in final mode.

- A referee can write a note regarding any of the reports that he or she is written as long as it was saved in final mode.

- The creator must add a comment when creates the note.

- The notes can be written by the referee, the handy worker who is involved in the corresponding complaint.

- A message is flagged as spam if the subject or the body contains any words defined as spam words.

- When an application is ACCEPTED, the rest of applications associates to the corresponding fix-up task must be REJECTED.

- Multiple phases may overlap, but none of them can be scheduled before or after the period of time during which the corresponding fix-up task must be carried out.

- Once an application is accepted, the corresponding handy worker may associate a work plan with the corresponding fix-up task.

- Phase numbers must be positive and consecutive

- The categories must be grouped appropriately into higher-level categories.

- Every category belongs to a parent category, but the root category, which is called "CATEGORY".

- Customers only can endorse handy workers who have been involved in any of his or her fix-up task.

- Handy workers only can endorse customers for whom he or she's worked

- Once it's saved in final mode, it cannot be edited or deleted.

- A handy worker may not applies twice for the same fix-up task.

- If the status is changed to accepted, then a valid credit card must be provided; in either case, he or she can add a comment to the application.

- A customer may update an application to change its status from pending to either accepted or rejected.

- Every time that an application changes its status, the system must be send a message to both: the corresponding customer and the handy worker to keep them posted. The message must be written in both English and Spanish.

- When a handy worker applies for a fix-up task, he or she can set an offered price, and add some comments

Classes:

<<datatype>> **Authority**
- + ADMINISTRATOR : String = "ADMINISTRATOR"
- + CUSTOMER : String = "CUSTOMER"
- + REFEREE : String = "REFEREE"
- + HANDYWORKER : String = "HANDYWORKER"
- + SPONSOR : String = "SPONSOR"
- + authority : String {NotBlank}

UserAccount
- + username : String {Unique, NotBlank, Size(5, 32)}
- + password : String {NotBlank, Size(5, 32)}
- + isBanned : Boolean

SocialProfile
- + nick : String {NotBlank}
- + socialNetworkName : String {NotBlank}
- + email : String {NotBlank}
- + profileLink : String {NotBlank, Url}

Box
- + name : String {NotBlank}
- + isSystemBox : Boolean

Message
- + sendMoment : Date {Past}
- + subject : String {NotBlank}
- + body : String {NotBlank}
- + priority : String {Pattern("HIGH|NEUTRAL|LOWS")}
- + tags : String[0..1]
- + / isSpam : Boolean

<> **Actor**
- + name : String {NotBlank}
- + middleName : String[0..1]
- + surname : String {NotBlank}
- + photoLink : String[0..1] {Url}
- + email : String {NotBlank, Email}
- + phoneNumber : String[0..1]
- + address : String[0..1] {NotBlank}
- + / isSuspicious : Boolean

EducationRecord
- + titleDiploma : String {NotBlank}
- + startDate : Date {Past}
- + endDate : Date
- + institution : String {NotBlank}
- + attachment : String[0..1] {Url}
- + comments : String[0..1] {NotBlank}

PersonalRecord
- + fullName : String {NotBlank}
- + photosLink : String {Url, NotBlank}
- + email : String {Email, NotBlank}
- + phoneNumber : String[0..1]
- + linkedInProfile : String {Url, NotBlank}

ProfessionalRecord
- + nameCompany : String {NotBlank}
- + startDate : Date {Past}
- + endDate : Date
- + role : String {NotBlank}
- + attachment : String[0..1] {Url}
- + comments : String[0..1]

Curriculum
- + ticker : String {Pattern("xd{6}-[A-Z0-9] {6}"), Unique}

EndorserRecord
- + fullName : String {NotBlank}
- + email : String {Email, NotBlank}
- + phoneNumber : String {NotBlank}
- + linkedInProfile : String {Url, NotBlank}
- + comments : String[0..1] {NotBlank}

MiscellaneousRecord
- + title : String {NotBlank}
- + attachment : String[0..1] {Url}
- + comments : String[0..1] {NotBlank}

Complaint
- + ticker : String {Pattern("xd{6}-[A-Z0-9] {6}"), Unique}
- + moment : Date {Past}
- + description : String {NotBlank}
- + attachments : String[0..1] {Url}

Referee

Administrator

Report
- + moment : Date {Past}
- + description : String {NotBlank}
- + attachments : String[0..1] {Url}
- + finalMode : Boolean

Note
- + moment : Date {Past}
- + role : String {Pattern("CUSTOMER|HANDYWORKER|REFEREES")}
- + commentCustomer : String[0..1] {NotBlank}
- + commentReferee : String[0..1] {NotBlank}
- + commentHandyWorker : String[0..1] {NotBlank}

<> **Endorsable**

Customer
- + / score : Double[0..1] {Digits(3,2), Range(-1,1)}

HandyWorker
- + make : String {NotBlank}
- + / score : Double[0..1] {Digits(3,2), Range(-1,1)}

Sponsor

Sponsorship
- + banner : String {Url, NotBlank}
- + targetPage : String {Url, NotBlank}

Tutorial
- + title : String {NotBlank}
- + moment : Date {Past}
- + pictures : String[0..1] {Url}

Section
- + number : Integer
- + title : String {NotBlank}
- + pictures : String[0..1] {Url}

Endorsement
- + moment : Date {Past}
- + comments : String {NotBlank}

Application
- + registerMoment : Date {Past}
- + status : String {Pattern("PENDING|ACCEPTED|REJECTED$")}
- + offeredPrice : Money
- + handyWorkerComments : String[0..1] {NotBlank}
- + customerComments : String[0..1] {NotBlank}

FixUpTask
- + ticker : String {Pattern("xd{6}-[A-Z0-9] {6}"), Unique}
- + publicationMoment : Date {Past}
- + description : String {NotBlank}
- + address : String {NotBlank}
- + maxPrice : Money
- + startDate : Date
- + endDate : Date

Category
- + name : String {NotBlank, Unique}
- + language : String {NotBlank}

Finder
- + keyword : String
- + startPrice : Money[0..1]
- + endPrice : Money[0..1]
- + startDate : Date[0..1]
- + endDate : Date[0..1]
- + category : String[0..1] {NotBlank}
- + warranty : String[0..1] {NotBlank}

Warranty
- + title : String {NotBlank}
- + description : String {NotBlank}
- + finalMode : Boolean
- + laws : String[0..1] {NotBlank}

Phase
- + number : Integer
- + title : String {NotBlank}
- + description : String {NotBlank}
- + startMoment : Date
- + endMoment : Date

CreditCard
- + holderName : String {NotBlank}
- + brandName : String {NotBlank}
- + number : String {CreditCardNumber, NotBlank}
- + expirationMonth : String {NotBlank, Range(1,12)}
- + expirationYear : String {NotBlank, Digits(2,0)}
- + cvvCode : Integer {Range(100,999)}

Customisation
- + sytemName : String {NotBlank}
- + banner : String {Url, NotBlank}
- + welcomeMessageEn : String {NotBlank}
- + welcomeMessageSp : String {NotBlank}
- + VAT : Double {Digits(3,2), Range(0,1)}
- + countryCode : String {Pattern("v+\d+")}
- + creditCardMakes : String[1..*]
- + timeCacheFinderResults : Integer {Range(1,24)}
- + maxFinderResults : Integer {Range(0,100)}
- + spamWords : String[0..1]
- + positiveWords : String[0..*]
- + negativeWords : String[0..*]

<<Datatype>> **Money**
- + amount : Double {Min(0), Digits(9,2)}
- + currency : String {NotBlank}
- + add(money : Money) : Money
- + subtract(money : Money) : Money
- + applyVAT(money : Money) : Money

Note (score calculation): The score is computed building on the endorsements that they've got. The system must analyse the comments in the endorsements and compute the number of positive words (p) and the number of negative words (n). The score must be computed as p − n normalised to range -1.00 up to +1.00 using a linear homothetic transformation.

Association labels: creates, stores, sender, recipient, sends, receives, handles, involves, correspondsTo, sends, receives, registers, makes, involves, writes, registers, publishes, has, descendant, belongsTo, parent, receives, return, Involves, has