

## A4: Conceptual Data Model

SegFault is a collaborative platform for programmers to learn, discuss different approaches, present ideas and share knowledge in a Q&A style. To this end, the following sections provide detailed insight into the project's conceptual data model, featuring class diagrams and business rules.

### 1. Class diagram

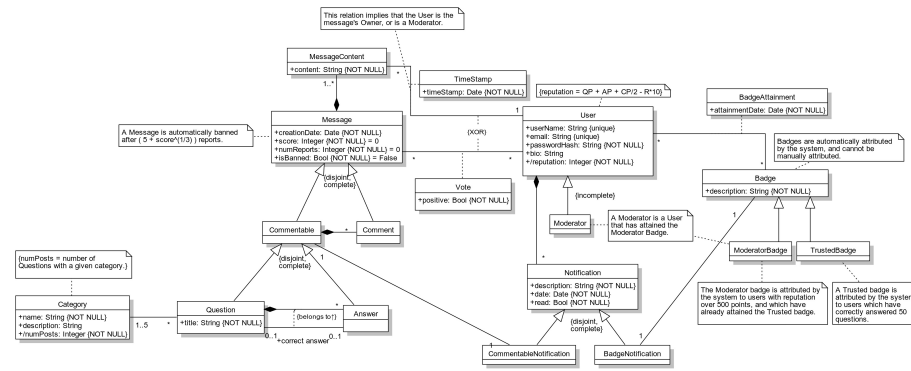


Figure 1: UML Diagram. [Link here.](#)

### 2. Additional Business Rules

Identifier	Name	Description
BR01	Correct Answer restriction	There can only be one answer marked as correct, per question.
BR02	Self voting restriction	Users can't vote on their own messages.
BR03	Reputation points	Reputation points will be calculated according to the formula: $QuestionPoints + AnswerPoints + \frac{CommentPoints}{2} - Reports * 10$ .
BR04	Number of categories	A question must have between one and five categories, <i>inclusive</i> .
BR05	Moderator Badge	Having achieved 500 reputation points and been awarded the Trustworthy Badge, a Member automatically gets a 'Moderator' badge, and thus becomes a Moderator.
BR06	Trusted Badge	Having correctly answered over 50 questions, a Member automatically gets a 'Trusted' badge.

Identifier	Name	Description
BR07	Delete Answer	Whenever an Answer is deleted the respective Comments should be deleted as well.
BR08	Delete Question	Whenever a Question is deleted the respective Answers (their comments) and the Question comments should be deleted as well.
BR09	Banned Message	A message is automatically eliminated after being reported over $(5 + score^{\frac{1}{3}})$ times.
BR10	Edited Message	An edited message must be adequately marked as such.

---

## Revision history

- 15/03/2018: Updated the UML diagram according to the professor's recommendations.
- 16/03/2018: Added business rules to the UML diagram.

---

GROUP1763, 16/03/2018

André Cruz, up201503776@fe.up.pt  
Daniel Marques, up201503822@fe.up.pt  
Edgar Carneiro, up201503784@fe.up.pt  
João Carvalho, up201504875@fe.up.pt