

A2: Actors and User stories

The main goal of SegFault is to establish a 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, its actors and functionalities.

1. Actors

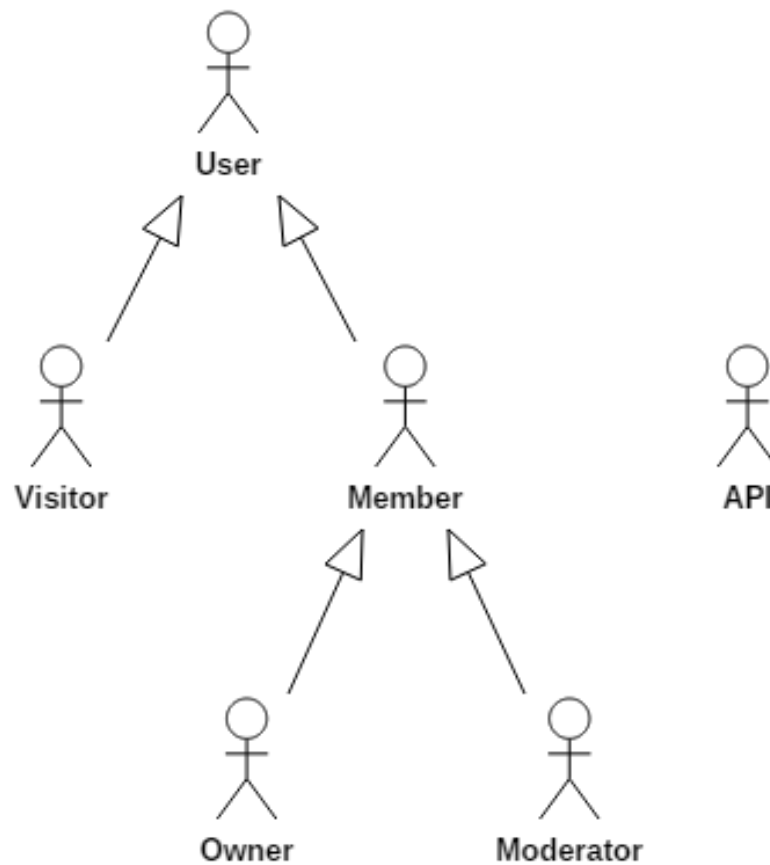


Figure 1: Actors Diagram

Identifier	Description	Examples
User	Generic user with access to public content, such as questions, their answers and their comments.	n/a
Visitor	Unauthenticated user that can register itself or authenticate in the system.	n/a
Member	Authenticated user that can create new questions, answer questions, comment and edit all the its questions, answers and comments. Can also vote other user entries.	jlopes
Owner	A message's author that can change its properties.	jlopes
Moderator	A trusted member of the community that has edit/delete permissions over all messages.	jlopes
API	External APIs that can be used to register and / or authenticate into the system.	GitHub Login, Google+

Table 1: Actor's description.

2. User Stories

2.1. User

Identifier	Name	Priority	Description	Estimated Effort (in hours)
US01	Question Page	High	As a User, I want to consult Questions, their Answers and their Comments, so that I can clarify my doubts.	40
US02	Profile	High	As a User, I want to consult the profile of an authenticated User, so that I can see his biographic information.	10
US03	Search	High	As a User, I want to search for specific posts, so that I can find what I'm looking for faster.	5
US05	Profile Badges	High	As a User, I want to consult the badges of an authenticated User, so that I can better understand his community contributions and privileges.	12
US04	Category Consult	Medium	As a User, I want to consult the questions related to a given category, so that I can search content regarding that category.	4

Identifier	Name	Priority	Description	Estimated Effort (in hours)
US06	About Page	Low	As a User, I want to access the About page, so that I can see a complete website's description.	3

Table 2: User's user stories.

2.2. Visitor

Identifier	Name	Priority	Description	Estimated Effort (in hours)
US11	Sign Up	High	As a Visitor, I want to register myself into the system, so that I can become a Member.	4
US12	Log In	High	As a Visitor, I want to authenticate into the system, so that I can have Member privileges.	2
US13	Sign Up using Github	Low	As a Visitor, I want to register myself into the system using a Github account, so that I can become a Member, spending less time registering.	3
US14	Log In using Github	Low	As a Visitor, I want to authenticate into the system using a Github account, so that I can have Member privileges.	1
US15	Sign Up using Google+	Low	As a Visitor, I want to register myself into the system using a Google account, so that I can become a Member, spending less time registering.	3
US16	Log In using Google+	Low	As a Visitor, I want to authenticate into the system using a Google account, so that I can have Member privileges.	1

Table 3: Visitor's user stories.

2.3. Member

Identifier	Name	Priority	Description	Estimated Effort (in hours)
US201	Logout	High	As a Member, I want to logout from the system, so that my account remains safe and other users can authenticate.	1
US202	Create a Question	High	As a Member, I want to create a Question for the community to answer, so that I can get enlightened regarding my doubt.	5
US203	Answer a Question	High	As a Member, I want to answer a Question created by other Member, so that I help him with his problems and doubts.	5
US204	Edit Profile Information	High	As a Member, I want to edit my own profile information, so that it's updated and adequate (e.g. changing profile picture and editing biography).	6
US205	Edit Account Settings	High	As a Member, I want to edit my own account settings, so that I keep my account safe (e.g. changing password).	6
US206	Vote a Comment	High	As a Member, I want to vote on a Comment, so that other Users know what I think about that Comment.	3
US207	Vote an Answer	High	As a Member, I want to vote on an Answer, so that other Users know what I think about that Answer.	3
US208	Vote a Question	High	As a Member, I want to vote on a Question, so that other Users know what I think about that Question.	3
US209	Create a Comment	Medium	As a Member, I want to comment an Answer or a Question, so that I can contribute to the discussion regarding that Question/Answer.	5
US210	Mark a Question	Low	As a Member, I want to mark a question, so that I have easier access to it.	1
US211	View Marked Questions	Low	As a Member, I want view my marked questions, so that I have easier access to them.	2
US212	Notifications	Low	As a Member, I want to see my notifications, so that I'm always aware of updates on my questions.	6

Identifier	Name	Priority	Description	Estimated Effort (in hours)
US213	Report a Message	Low	As a Member, I want to report a Message, so that the website remains without inadequate content.	6

Table 4: Member’s user stories.

2.4. Owner

Identifier	Name	Priority	Description	Estimated Effort (in hours)
US31	Select correct Answer	Medium	As an Owner, I want to select a correct Answer to my own Question, so that other Users know what is the correct Answer without having to read all of the other answers.	5
US32	Delete a Question	Medium	As an Owner, I want to delete my own Question, so that the website does not contain inadequate information.	3
US33	Delete an Answer	Medium	As an Owner, I want to delete my own Answer, so that the related Question does not have inappropriate Answers.	3
US34	Delete a Comment	Medium	As an Owner, I want to delete my own Comment, so that the related Question/ Answer does not have inappropriate comments.	3
US35	Edit a Question	Medium	As an Owner, I want to edit my own Questions, so that I keep them updated and adequate.	2
US36	Edit an Answer	Medium	As an Owner, I want to edit my own Answers, so that I keep them updated and adequate.	2
US37	Edit a Comment	Medium	As an Owner, I want to edit my own Comments, so that I keep them updated and adequate.	2

Identifier	Name	Priority	Description	Estimated Effort (in hours)
US38	Edit a Question's Categories	Medium	As an Owner, I want to edit my Questions' Categories, so that I keep them updated and correct previous mistakes.	2

Table 5: Owner's user stories.

2.5. Moderator

Identifier	Name	Priority	Description	Estimated Effort (in hours)
US41	Select correct Answer	Medium	As a Moderator, I want to select a correct Answer to any Question, so that other Users know what is the correct Answer without having to read all of the other answers.	3
US42	Delete a Question	Medium	As a Moderator, I want to delete any Question, so that the website does not contain inadequate information.	3
US43	Delete an Answer	Medium	As a Moderator, I want to delete any Answer, so that the related Question does not have inappropriate Answers.	3
US44	Delete a Comment	Medium	As a Moderator, I want to delete any Comment, in order to filter inappropriate comments from a discussion.	3
US45	Edit a Question	Medium	As a Moderator, I want to edit any Question, so that I keep them updated and adequate.	2
US46	Edit an Answer	Medium	As a Moderator, I want to edit any Answer, so that I keep them updated and adequate.	2
US47	Edit a Comment	Medium	As a Moderator, I want to edit any Comment, so that I keep them updated and adequate.	2

Identifier	Name	Priority	Description	Estimated Effort (in hours)
US48	Edit a Question's Categories	Medium	As a Moderator, I want to edit the Categories of any Questions, so that I keep them updated and adequate.	2

Table 5: Moderator's user stories.

A1. Annex: Supplementary requirements

A1.1. 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: $\frac{QuestionPoints + AnswerPoints + CommentPoints}{2} - Reports * 10$.
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 becomes a Moderator.
BR06	Delete Answer	Whenever an Answer is deleted the respective Comments should be deleted as well.
BR07	Delete Question	Whenever a Question is deleted the respective Answers (their comments) and the Question comments should be deleted as well.
BR08	Banned Message	A message is automatically eliminated after being reported over $(5 + score^{\frac{1}{3}})$ times.
BR09	Edited Message	An edited message must be adequately marked as such.

A1.2. Technical requirements

Identifier	Name	Description
TR01	Availability	The system must be available 99 percent of the time in each 24-hour period.
TR02	Accessibility	The system must ensure that everyone can access the pages, regardless of whether they have any handicap or not, or the Web browser they use.
TR03	Usability	The system should be simple and easy to use.
TR04	Performance	The system should have response times shorter than 2s to ensure the user's attention.
TR05	Web application	The system should be implemented as a Web application with dynamic pages (HTML5, JavaScript, CSS3 and PHP).
TR06	Portability	The server-side system should work across multiple platforms (Linux, Mac OS, etc.).
TR07	Database	The PostgreSQL 9.4 database management system must be used.
TR08	Security	The system shall protect information from unauthorized access through the use of an authentication and privilege verification system.
TR09	Robustness	The system must be prepared to handle and continue operating when runtime errors occur.
TR10	Scalability	The system must be prepared to deal with the growth in the number of users and corresponding operations.
TR11	Ethics	The system must respect the ethical principles in software development (for example, the password must be stored encrypted to ensure that only the owner knows it).

A1.3. Restrictions

Identifier	Name	Description
C01	Deadline	The system should be ready to be used by the end of May, in order to be properly assessed for delivery.

Revision history

- 22/02/2018: Added introduction and increased the priority of Votes and Badges.

- 23/02/2018: Actor image now has round heads.
- 24/02/2018: Decreased the usage of the word “information” and its variants.
- 25/02/2018: Edited several user stories regarding to reflect the teacher’s suggestions (US01, US02, US03, US206, US207, US208, US38, US48), as well as business rules (BR01, BR02). Also added BR09.
- 01/03/2018: Added US211.

GROUP1763, 09/02/2018