

ACADEMI-CO Vision

SOFTWARE

March 21, 2018

Abstract

Table 1: Revision History

| Date | Version | Description | Author |
|------------|---------|---------------------|---------------|
| 19/03/2018 | 1.0 | First draft | SOFTWARE Team |
| 21/03/2018 | 1.1 | Update User Stories | SOFTWARE Team |

Contents

| | | |
|----------|--|-----------|
| 1 | Introduction | 4 |
| 1.1 | Purpose | 4 |
| 1.2 | Scope | 4 |
| 1.3 | Definitions, Acronyms, and Abbreviations | 4 |
| 1.4 | References | 4 |
| 1.5 | Overview | 4 |
| 2 | Positioning | 4 |
| 2.1 | Business Opportunity | 4 |
| 2.2 | Problem Statement | 5 |
| 2.3 | Product Position Statement | 5 |
| 3 | Stakeholder and User Descriptions | 5 |
| 3.1 | Market Demographics | 5 |
| 3.2 | Stakeholder Summary | 6 |
| 3.3 | User Summary | 6 |
| 3.4 | User Environment | 7 |
| 3.5 | Stakeholder Profiles | 8 |
| 3.5.1 | Student | 8 |
| 3.5.2 | Teacher | 8 |
| 3.5.3 | Client | 8 |
| 3.5.4 | Administrator | 9 |
| 3.6 | User Profiles | 9 |
| 3.6.1 | Registered Premium User | 9 |
| 3.6.2 | Registered Free User | 10 |
| 3.6.3 | Visitor | 10 |
| 3.6.4 | Moderator | 10 |
| 3.7 | Key Stakeholder or User Needs | 11 |
| 3.8 | Alternatives and Competition | 11 |
| 3.8.1 | StackExchange | 11 |
| 3.8.2 | StackOverflow | 11 |
| 3.8.3 | Social Media | 11 |
| 4 | Product Overview | 11 |
| 4.1 | Product Perspective | 11 |
| 4.2 | Summary of Capabilities | 11 |
| 4.3 | Assumptions and Dependencies | 12 |
| 5 | Product Features | 12 |
| 5.1 | Create an Account | 12 |
| 5.2 | Post | 12 |
| 5.3 | Visualize | 12 |

| | | |
|-----------|--|-----------|
| 5.4 | Search | 12 |
| 5.5 | Login/Logout | 12 |
| 5.6 | Homepage | 12 |
| 5.7 | Voting System | 12 |
| 5.8 | Content Organization | 12 |
| 5.9 | Tags | 13 |
| 5.10 | Inbox | 13 |
| 5.11 | Add Administrator | 13 |
| 5.12 | Send Candidacy for Moderation | 13 |
| 5.13 | Elect Moderator | 13 |
| 5.14 | Moderation Tools | 13 |
| 5.15 | Metadata | 13 |
| 5.16 | Create a Premium Account | 13 |
| 5.17 | Create a Custom Tag | 13 |
| 5.18 | Advertisement Banners | 14 |
| 5.19 | Help Page | 14 |
| 5.20 | Flag | 14 |
| 5.21 | Format | 14 |
| 5.22 | Dashboard | 14 |
| 5.23 | Upload Documents | 14 |
| 6 | Constraints | 14 |
| 7 | Quality Ranges | 14 |
| 8 | Precedence and Priority | 15 |
| 9 | Other Product Requirements | 16 |
| 9.1 | Applicable Standards | 16 |
| 9.2 | System Requirements | 16 |
| 10 | Documentation Requirements | 16 |
| 10.1 | User Manual | 16 |
| 10.2 | Online Help | 16 |
| 10.3 | Installation Guides, Configuration, and Read Me File | 16 |
| 11 | Planning | 16 |
| 12 | Risks | 17 |

1 Introduction

1.1 Purpose

This document aims to clarify the motivations and objectives behind the ACADEMI-CO project.

1.2 Scope

This document will be used as a reference as to what is expected from the ACADEMI-CO project and the SOFTWARE team.

1.3 Definitions, Acronyms, and Abbreviations

User: Any user of the website (visitor or registered)

Visitor: User who did not create an account

Registered user: User who created an account (free or premium)

Free user: User who created a free account

Premium user: User who created a paying account

Moderator: Trusted user with special authorizations and tools to regulate the content

Administrator: Person responsible for website maintenance

Client: Website owner

1.4 References

1.5 Overview

This document details the product's standing in the context of the current market, its stakeholders and foreseen users, its features and other specifications as well as its constraints and other requirements. It also better defines the project in regards to its priorities, planning and risks.

2 Positioning

2.1 Business Opportunity

ACADEMI-CO is a unique idea, taking a pre-existing and proven model and applying it to a whole new and more global purpose, effectively reaching a large untapped market. The monetization opportunities it offers are both numerous and flexible.

2.2 Problem Statement

The problem is a lack of means of communication between students and potential helpers

that affects university students and teachers.

The impact of which is a whole sector of potential customers, waiting for better means of communication.

A successful solution would be a web service providing easy and accessible means of fast communication, with a focus and incentivisation on mutual assistance.

2.3 Product Position Statement

For students and teachers in universities

who need easy and efficient communication means,

Academi-co is a forum-like web service

that provides tools to facilitate communication and help

unlike StackExchange.

Our product is for general academic purpose, instead of focusing on one specific domain.

3 Stakeholder and User Descriptions

3.1 Market Demographics

Our target demographic is academic students and teachers and especially the students, which are mostly a young demographic, completely versed in the use of modern web-based technology. The usefulness of the service should bring a rapid increase in the number of users and, with that, multiple non-intrusive monetization opportunities, like add banners. Those have been a proven steady source of income that typically bodes well with that type of public, as multiple sites (like youtube.com) can attest.

3.2 Stakeholder Summary

| Name | Description | Responsibilities |
|---------------|---|---|
| Student | Student who needs or can give help | <ul style="list-style-type: none">• Brings new content to the service (questions/answers)• Communicates about the product and brings new users |
| Teacher | Teacher that wants to interact with students to help them and share various content with them | Brings new content to the service by answering the students and sharing useful documents/information |
| Client | Buyer of the product | Provides funding and resources for the product and benefits from its long-term monetary opportunities |
| Administrator | Person who will be in charge of the service's maintenance | Keeps the system running and up to date |

3.3 User Summary

| Name | Description | Responsibilities |
|----------------|---------------------------------------|---|
| Connected User | Interacts to ask and answer questions | <ul style="list-style-type: none">• Creates threads• Posts answers to threads• Shares information |

| Name | Description | Responsibilities |
|--------------|---|--|
| Premium User | Interacts to ask and answer questions, and gets additional tools (e.g custom tags and document sharing) | <ul style="list-style-type: none">• Creates threads• Posts answers to threads• Shares documents/information• Can create custom tags |
| Visitor | Someone that needs information that has been already discussed by Connected Users | <ul style="list-style-type: none">• See other peoples' posts |
| Moderator | A volunteer user who maintains order in the forum | <ul style="list-style-type: none">• Moderate posts/comments• Creates threads• Posts answers to threads• Shares information |

3.4 User Environment

Web-based application accessed through a browser on computers, tablets and smartphones.

3.5 Stakeholder Profiles

3.5.1 Student

| | |
|-------------------------|--|
| Description | University student in any kind of academic field |
| Type | A casual user, experienced in the use of web-based applications |
| Responsibilities | <ul style="list-style-type: none">• Producing content• Relaying information about the service (word of mouth) |
| Success Criteria | <ul style="list-style-type: none">• Able to easily find answers to his questions• Help the others |
| Involvement | Is the main user |
| Deliverables | None |

3.5.2 Teacher

| | |
|-------------------------|--|
| Description | University teacher in any kind of academic field |
| Type | A casual user, experienced in the use of web-based applications |
| Responsibilities | <ul style="list-style-type: none">• Producing content• Relaying information about the service (word of mouth) |
| Success Criteria | Able to easily deliver answers to student's questions |
| Involvement | Is a user |
| Deliverables | None |

3.5.3 Client

| | |
|-------------------------|--|
| Description | Financial contributor |
| Type | Business executive |
| Responsibilities | Provides financial support |
| Success Criteria | Obtained a reliable source of income through optimal monetization techniques |
| Involvement | Main executive authority behind the project |
| Deliverables | None |

3.5.4 Administrator

| | |
|-------------------------|--|
| Description | Website maintainer <ul style="list-style-type: none">• Website maintainer• Gives moderator rights |
| Type | IT Expert |
| Responsibilities | <ul style="list-style-type: none">• Maintains the website• Solves potential future website issues |
| Success Criteria | A working and easy to maintain website |
| Involvement | Is the person to contact if there are any maintenance problems |
| Deliverables | Product's documentation |

3.6 User Profiles

3.6.1 Registered Premium User

| | |
|-------------------------|--|
| Description | Registered premium (paying) user |
| Type | Casual user |
| Responsibilities | <ul style="list-style-type: none">• Producing content• Relaying information about the service (word of mouth) |
| Success Criteria | <ul style="list-style-type: none">• Able to easily find answers to his questions• Help the others |
| Involvement | None |
| Deliverables | Additional features (e.g creating custom tags, managing threads with own tags) |

3.6.2 Registered Free User

| | |
|-------------------------|--|
| Description | Registered user with a free account |
| Type | Casual user |
| Responsibilities | <ul style="list-style-type: none">• Producing content• Relaying information about the service (word of mouth) |
| Success Criteria | <ul style="list-style-type: none">• Able to easily find answers to his questions• Help the others |
| Involvement | None |
| Deliverables | None |

3.6.3 Visitor

| | |
|-------------------------|--|
| Description | Unregistered (anonymous) user |
| Type | Casual user |
| Responsibilities | None |
| Success Criteria | Able to easily find answers to his questions |
| Involvement | None |
| Deliverables | None |

3.6.4 Moderator

| | |
|-------------------------|--|
| Description | Registered user chosen to become a moderator |
| Type | Trustworthy user, experienced with forums |
| Responsibilities | Ensures the proper functioning of the administrative policies |
| Success Criteria | <ul style="list-style-type: none">• Able to easily find answers to his questions• Help the others• Able to moderate posts/comments |
| Involvement | Makes sure that the policies and guidelines of the website are respected by the casual users |
| Deliverables | Moderating tools |

3.7 Key Stakeholder or User Needs

| Need | Priority | Concerns | Current Solution | Proposed Solutions |
|----------------------------|----------|-----------------------|--|---|
| Get help on specific topic | 1 | Students and teachers | Find a specialized site or an available person | Global and centralized forum for academic questions |
| Discuss academic subjects | 2 | Students and teachers | Use social networks or contacts to find interested persons | Create and find threads on that subject with tags |

3.8 Alternatives and Competition

3.8.1 StackExchange

Big userbase, wide range of subjects

3.8.2 StackOverflow

Big userbase with steadily and quickly available help.

3.8.3 Social Media

Social media (Facebook, Twitter, Google+, etc.) - Global and easy to use.

4 Product Overview

4.1 Product Perspective

ACADEMI-CO is a standalone web-based product.

4.2 Summary of Capabilities

| Stakeholders Benefit | Supporting Features |
|--|---|
| Students can easily and efficiently find help for their problems | Threads creation and tag based search |
| Paying customers get easy tools for sharing knowledge | Uploading documents, creating custom tags |
| Client can flexibly monetize the site | Advertisement banners on the website and premium accounts |

4.3 Assumptions and Dependencies

ACADEMI-CO is a standalone web-based product, working on different browsers (Firefox, Chrome, Safari, Internet Explorer, Edge).

5 Product Features

5.1 Create an Account

As a user, I want to securely create an account, so that I can post on the website.

5.2 Post

As a registered user, I want to create threads and answer existing ones, so that I can ask for help or help others.

5.3 Visualize

As a user, I want to read ergonomically presented threads, so that I can get answers in a digestible way.

5.4 Search

As a user, I want to search on the website, so that I can easily find and visualize existing threads and look for a specific user.

5.5 Login/Logout

As a registered user, I want to login and logout to the website, so that I can post.

5.6 Homepage

As a user, I want to be brought to a quality interface when opening the website, so that I get an easy and immediate access to the site's core content.

5.7 Voting System

As a registered user, I want to rate threads and answers, so that other users may find the content I deemed most useful.

5.8 Content Organization

As a user, I want to see the most useful content in priority, so that I increase my chances of finding what I am looking for.

5.9 Tags

As a user, I want to have subjects-related tags, so that I can identify the content's topics.

5.10 Inbox

As a user, I want to have a private inbox, so that I can receive notifications.

5.11 Add Administrator

As the super-user or an administrator, I want to add new administrators, so that the website can be maintained.

5.12 Send Candidacy for Moderation

As a user, I want to apply for a moderator position, so that it can be reviewed by administrators and I can participate to maintaining the website's content.

5.13 Elect Moderator

As an administrator, I want to pick candidate moderators and revoke their privileges, so that the website content's integrity can be maintained.

5.14 Moderation Tools

As a moderator, I want to have intuitive moderation tools, so that I can enforce the website's guidelines and filter inappropriate content.

5.15 Metadata

As a user, I want to access information about the content, so that I can get a better idea of its context.

5.16 Create a Premium Account

As a user, I want to create a premium account, so that I can get additional tools on the website.

5.17 Create a Custom Tag

As a premium user, I want to create custom tags, so that posts related to my topic can be found easily.

5.18 Advertisement Banners

As a client, I want to put advertisement banners on the site's pages, so that I can efficiently and non-intrusively monetize the website.

5.19 Help Page

As a user, I want to be informed about the site's guidelines and tools, so that I can use the site optimally.

5.20 Flag

As a registered user, I want to signal inappropriate content, so that it can be reviewed by a moderator.

5.21 Format

As a registered user, I want to have access to tools to format my posts, so that they can be more interactive and easy to read.

5.22 Dashboard

As a registered user, I want to have a dedicated page, so that I can access content relevant to my interests.

5.23 Upload Documents

As a premium user, I want to upload documents, so that I can share documents

6 Constraints

Must be compatible with popular web browsers (Firefox, Chrome, Safari, Internet Explorer, Microsoft Edge).

7 Quality Ranges

Maintainability: the website must be easy to maintain and update;

Performance: the site must be responsive and the search functionalities must be fast;

Availability: the site must be available at all times from every major web browser, except during scheduled maintenance tasks;

Robustness: the content added to the site must be durably stored;

Usability: the site must be intuitive to use;

Modifiability: the site can support the addition of new languages;

Scalability: the site must support a progressive but large increase of its userbase (workload/storage).

8 Precedence and Priority

- Create account
- Login / logout
- Post
- Visualize
- Tags
- Search
- Voting system
- Content organization
- Homepage
- Create premium account
- Advertisement banners
- Inbox
- Add administrator
- Send candidacy for moderation
- Elect moderators
- Moderation tools
- Metadata
- Dashboard
- Flags
- Help page
- Upload documents
- Create custom tag
- Format

9 Other Product Requirements

9.1 Applicable Standards

Compatibility with common web browsers.

9.2 System Requirements

An internet connection and a web browser.

10 Documentation Requirements

10.1 User Manual

None

10.2 Online Help

Help page (cf. specifications)

10.3 Installation Guides, Configuration, and Read Me File

None

11 Planning

cf. planning visualization

12 Risks

| Priority | Description | Impact on the project | Occurrence indicator | Mitigation strategy | Alternative plan |
|----------|---|-------------------------------------|---|---|---|
| 1 | Lack of experience from the development team | Buggy or missing features, delays | Spending longer than expected on researching tools, bugs and integration problems | Use external knowledge bases (Google, Stefan, Steve) | Reassign workload, abandon/simplify requirement |
| 2 | Too many new requirements appearing during development | Delays | User story analysis reveals new requirements more than once | Analyze each user story thoroughly at the start of the project, adjust planning accordingly | Simplify vision of the impacted features, scale down requirements |
| 3 | Bad planning management | Dependency issues, missing features | Missing dependencies when starting a task | Regular planning/dependencies review | Rework the project planning, and work reassignment |
| 4 | Bad development time management (can be caused by external factors) | Delays | Missing feedback from the developer, being increasingly behind personal schedule | Expect longer work days than planned | Work reassignment |

| Priority | Description | Impact on the project | Occurrence indicator | Mitigation strategy | Alternative plan |
|----------|---|--|--|--|--|
| 5 | Unforeseen browser compatibility issues | Delays, sections of the site unsupported on certain browsers | Encountering compatibility issues that were not accounted for during development | Very regular testing and team prepared to encounter and tackle such problems | Simplify the visuals/features causing the problem on the impacted browsers |
| 6 | Lack of developers availability | Delays, missing features | Developers regularly unable to attend meetings and/or deliver their work | Flexible plannings and obtaining commitment | Review scope and redistribute work |
| 7 | Lack of appeal from the site | Loss in userbase and potential revenue | Insufficient growth in the userbase during a benchmark period | Get feedback on the site from potential users and graphic design specialists | Rework the site's appearance and add incentives for user activities |