# Semester Project Vision Document Team MOKATH

Matteo BESANCON, Heloy ESTEVANIN LEAL, Amir HOSSEIN HEIDARI, Ornela TCHAWOU BILLY, Terry VOGELSANG and Karine ZUERCHER

Centre Universitaire D'Informatique, University Of Geneva

March 19, 2018

## Contents

1	Revision History				
2	Intro 2.1 2.2	oduction  Document's goals	<b>4</b> 4 4		
	2.3	Definition, Acronyms and Abbreviations	4		
	2.4	Global view of the document	4		
3	Posi	ition	5		
	3.1	Commercial opportunity	5		
	3.2	Problem Positioning	5		
		3.2.1 Problem	5		
		3.2.2 Affected entities	5		
		3.2.3 Problem Impact	5		
		3.2.4 Possible satisfying solution	5		
	3.3	Product Positioning	5		
		3.3.1 Audience	5		
		3.3.2 Opportunity and Needs	6		
		3.3.3 The Platform	6		
		3.3.4 Competition	6		
4	Use	rs & Stakeholders Description	7		
	4.1	Market Size	7		
	4.2	Stakeholders	7		
		4.2.1 Higher Eductation Institutions	7		
		4.2.2 Our Company: MOKATH	7		
	4.3	Users	8		
		4.3.1 Student	8		
		4.3.2 Teacher	8		
		4.3.3 Institution Administrator	8		
	4.4	User Environment	8		
	4.5	Stakeholders Profiles	9		
		4.5.1 Higher Education Institutions	9		
		4.5.2 Our Company: MOKATH	9		
	4.6	Users Profiles	9		
		4.6.1 Students	9		
		4.6.2 Teachers / Assistant Teacherss	10		
		4.6.3 Institution Administrators	10		

	<ul><li>4.7 Users &amp; Stakeholders Key Requirements</li><li>4.8 Competition and Alternatives</li></ul>	10 10		
5	Product Overview 5.1 Product Perspective 5.2 Features Summary 5.3 Hypothesis 5.4 User Environment 5.5 Cost & Pricing 5.6 Licences & Installation	11 11 11 11 11 11 11		
6	6 Product Essentials Features			
7	Product Constraints	13		
8	Non-Functional Quality Tolerances	14		
9	9 Mutual Features Priority			
10	Other Product Requirements  10.1 Applicable Standards	16 16 16 16 16		
11	Documentation Requirements	<b>17</b> 17		

## Revision History

Date	Version	Description	Author
March 13-14th 2018	0.1	Initial Work	Terry VOGELSANG

### Introduction

### 2.1 Document's goals

## 2.2 Coverage

This document covers the requirements and specifications of the semester project taking place during Spring Semester 2018 @ UNIGE.

### 2.3 Definition, Acronyms and Abbreviations

- **Domain Expert** Could be a student at ease in the domain, a teacher or a teaching assistant
- Student A Higher Education Institution student
- Teacher A Higher Education Institution teacher
- Institution A Higher Education Institution
- Assistant Teacher A Higher Education Institution assistant teacher
- Local Person or people from the same institution

### 2.4 Global view of the document

### **Position**

## 3.1 Commercial opportunity

The growing usage of internet platforms in the domain of knowledge sharing represent a great business opportunity targeting all university student accross the world.

## 3.2 Problem Positioning

#### 3.2.1 Problem

When students encounter an issue and doesn't find any help online, the only solutions at their disposal is to contact a teacher or another student who is at ease in the domain, these are referred as domain expert in this document. The problem is the alternatives rely on teachers and assitant teachers availability and social affinities with other students.

#### 3.2.2 Affected entities

The problem affects students who encounter issues in a certain domain during their University revisions / exercises assessments.

#### 3.2.3 Problem Impact

The problem could impact students grades and results during a student academic cursus.

#### 3.2.4 Possible satisfying solution

Provide an online platform to ease the contact between students needing help and those who could help them because of their good understanding of the problematic domain. The idea is alos to provide a centralized place where teachers could publish solutions, tips and tricks making them widely available through the students community.

## 3.3 Product Positioning

#### 3.3.1 Audience

As said before, the targeted audience includes students who encounter issues in a certain domain during their University revisions / exercises assessments but also

teachers who would be able to publicly and widely share their advices, tips and tricks.

### 3.3.2 Opportunity and Needs

The combination between high demande in online knowledge sharing platforms and the problem encountered by students during their studies tends to open a lot of business opportunities.

#### 3.3.3 The Platform

The online platform would fulfill the needs in communication between students and domain experts. It would ease the sharing of high-valued knowledge and offer a centralized place to browse when encountering an issue. The platform would be distributed as a service to all Universities.

#### 3.3.4 Competition

The main competitors of the project are companies and platforms like Quora [6], StackExchange [7] and MOOCS platforms such as Udemy [8], Coursera [1] and more ...

The difference between our project and the competition stays in the flexible but adapted scope of our project.

Each student will be able to choose between global or local pools of domain experts allowing him to choose wether he wants to communicate with people from his establishment or with people in all world's universities.

A rewarding system will ensure engagement of other local students. After a certain amount of local answers, a student can be rewarded with credits (For example ECTS credits in the European Credit Transfer and Accumulation System [2]) that he can use to validate work in his degree cursus.

## Users & Stakeholders Description

#### 4.1 Market Size

The key elements in the market that motivates the product development are based on a total absence of any platform targeting knowledge sharing integration in the academic cursus. As said before, the increasing usage of online platforms as a knowledge source extends even more the targeted audience.

According to Eurostat, in the EU-28, there were 19.5 million tertiary education students in 2015 [3] repartited in 2465 higher education institutions.

These datas would be an approximate market size in Europa only. Taking the whole rest of the world, it brings us to about 207 million of students around the world according to UNESCO [5]

#### 4.2 Stakeholders

#### 4.2.1 Higher Eductation Institutions

The higher education institutions represent the main partners of our product. They won't be directly in contact with the system but will take the role of the client. Their interest is to subscribe to a reliable and ergonomic system that provides knowledge sharing capabilities accross the institution. The adminsitration of these institutions will be our main point of contact with our users. They'll serve as an intermediary between the final users and our company who offers the product. They will also assume the exchange between proprietary points and cursus credits according to predefined policies on the website.

#### 4.2.2 Our Company: MOKATH

Our company is in charge of the support, sales and development of the product. The MOKATH company is responsible to ensure the maintainability, the security and the compliance of the system and product. The company is also in charge of controlling and managing the development process in order to deliver the products in time. The company must also make sure that there exists a market opportunity.

#### 4.3 Users

#### 4.3.1 Student

The student as a user, will need to be able to both ask and answer questions on the platform. He'll also need to be able to manage his account settings and informations but also to manager the exchange between his earned platform credits and cursus credits.

#### 4.3.2 Teacher

The teacher as a user, will need to be able to answer questions, create course tracks, and certify domain experts in his domain. He'll also need to be able to manage his account settings and informations.

#### 4.3.3 Institution Administrator

The institution administrator as a user, will need to be able to validate credits exchange. He'll also need to be able to manage the institution account settings and informations. This person is the intermediary between the institution and the platform. He'll need to be able to add domains to University's Profile.

#### 4.4 User Environment

The user environment will comprise both web browser and mobile. Instead of developing a dedicated mobile app, a responsive web app will be implemented in order to make the app accessible on both mobile and desktop hosts.

Users will pass most of the time writing questions and answers. The user might be able to login via his Facebook or Google Account.

#### 4.5 Stakeholders Profiles

#### 4.5.1 Higher Education Institutions

These stakeholders represent the clients. More specifically, the direct point of contact will be the Institution Administrator who's going to use our platform to make the Institution available on the platform. The institution administrator will probably be either the community manager of the institutions or an administrative. They are expected to know how to use a web interface. The institution's interests are the fact that our platform can bring comfort and socialization to its campus. The deliverable expected by these stakeholders is the final web app. The success of the project largely depends on these stakeholders engagements.

#### 4.5.2 Our Company: MOKATH

Our company represent the developer, vendor and maintainer of the platform. The company is responsible to make the platform available to its client. The success criteria is directly measured with the spreading, the usage and the consumer satisfaction of the platform accross higher education institutions. The deliverable must be the final web app and a global after-sale support including client support, FAQ and maintenances.

#### 4.6 Users Profiles

#### 4.6.1 Students

The students can both represent people needing help or people answering questions. The students activities on the platform will mainly include writing questions and answers. A student is probably between 18-30 years old and can be from any country in the world. These stakeholders should have sufficient knowledge in the domaine of web applicationusage as during an higher education cursus, you're often required to interact with web applications services. The student must provide a valid student ID if he wants to register to its local institution domain if he wants to benefit from local knowledge and credits rewards. Though, even officially verified, he'll still be able to post questions and answers anonymously from others users points of view. The expected delivrable by the student is a web app that complies to his needs (Post questions, answer questions, get rewarded with credits).

#### 4.6.2 Teachers / Assistant Teacherss

The teachers and assistant teachers can both represent someone needing help or someone answering questions. These stakeholders activities on the platform will mainly include writing questions and answers. He's probably between 18-70 years old and can be from any country in the world. This stakeholder should have sufficient knowledge in the domaine of web application usage as part of teaching requires you to manager resources distribution through web applications such as Moodle [4]. The success criteria for these stakeholders is to be able to share knowledge about their domains widely and easily. The expected deliverable by the teaching corpus is a web app working as a mean of answering questions and provide solutions, tips and tricks regarding their courses contents.

#### 4.6.3 Institution Administrators

The institution administrators represent the link between our platform and institutions. It's the person in charge of completing and maintaining up to date the informations and settings of the institution they represent. They are responsible of the correctness of each of these informations. They are also in responsible to ensure that students with sufficient in-app credits can exchange them with academic credits easily. The success criteria for institution administrators is for them to be able to simply manage and offer great sharing features to the institutions students. The deliverable expected by these stakeholders is also the final web app. These stakeholders are the most important of the project as they remain the only link between the platform and the institutions.

## 4.7 Users & Stakeholders Key Requirements

#### **Problems**

• Difficulty to get local help in specific domain / course

## 4.8 Competition and Alternatives

## **Product Overview**

- 5.1 Product Perspective
- 5.2 Features Summary
- 5.3 Hypothesis
- 5.4 User Environment
- 5.5 Cost & Pricing
- 5.6 Licences & Installation

## **Product Essentials Features**

## **Product Constraints**

## Non-Functional Quality Tolerances

## Mutual Features Priority

## Other Product Requirements

- 10.1 Applicable Standards
- 10.2 System Requirements
- 10.3 Performance
- 10.4 Environment-Related Requirements

## **Documentation Requirements**

- 11.1 User Manual
- 11.2 Online Assistance
- 11.3 Installation & Configuration Guide
- 11.4 Packaging, Labelling & Copyright

## References

- [1] Coursera | Online Courses From Top Universities, Official Website. https://coursera.org. Accessed: 2018-03-13.
- [2] European Credit Transfer and Accumulation System, Wikipedia. https://en.wikipedia.org/wiki/European\_Credit\_Transfer\_and\_Accumulation\_System. Accessed: 2018-03-13.
- [3] European Tertiary education statistics, Eurostat Statistics Explained, Data extracted in June 2017. http://ec.europa.eu/eurostat/statistics-explained/index.php/Tertiary\_education\_statistics. Accessed: 2018-03-13.
- [4] Moodle | Open-source learning platform. https://moodle.org/. Accessed: 2018-03-14.
- [5] Policy Paper 30: Six ways to ensure higher education leaves no one behind, UNESCO, April 2017. http://unesdoc.unesco.org/images/0024/002478/247862E.pdf. Accessed: 2018-03-13.
- [6] Quora | A place to share knowledge and better understand the world, Official Website. https://quora.com. Accessed: 2018-03-13.
- [7] StackExchange | Hot Questions, Official Website. https://stackexchange.com. Accessed: 2018-03-13.
- [8] Udemy<sup>TM</sup>: Online Courses | Learn On-Demand On Any Device, Official Website. https://udemy.com. Accessed: 2018-03-13.