**Report 1: Introduction**

1. **Project Information**

* Project Name: **Question & Answer system for Mathematics**
* Project Code: **MathHub**
* Product Type: **Website**
* Start Date: **May 11th 2015**
* End Date: **Aug 16th 2015**

1. **Introduction**

MathHub is a website that help people easy to communicate, discussion and sharing knowledge about mathematics. MathHub worthy become home for everyone who love mathematics.

1. **Current Situation**

The mathematics community in Viet Nam is a large community with over 10,000 people, they really need an official site for them to communicate, discussion and sharing knowledge. There are some websites about mathematics in Viet Nam, but no site can meet their needs.

Almost mathematics websites in Viet Nam are one of 2 types: Study site and Forum.

* + Study sites just help people study and do exam online, people cannot communicate or discussed in these sites. So that these sites are necessary, but cannot become official site for mathematics community. There are some study sites in Viet Nam: [pitago.vn](http://pitago.vn/), [olm.vn](http://olm.vn/), [olympiaplus.vn](http://olympiaplus.vn/); but there are not famous and some sites just for high school students.
  + Forum is a very good place for people to communicate and discussion, but in recent time forum gradually revealed many weaknesses since the advent of social networks. The first main weakness is that user post question, discussion, sharing knowledge … into forum, so that it cannot have a clear rule to prevent the noise. User post a question and maybe receive a lot of discussion, but without any solution; this is really a big noise but usually appear in forum. Another weakness is that forum does not have some social functions like add friend, live chat and follow so that users hard to communicate and interact together. There are 2 famous mathematics forum in Viet Nam: [mathscope.org](http://forum.mathscope.org/) and [diendantoanhoc.net](http://diendantoanhoc.net/), each site has thousands member but still was not leading site in the mathematics community.

In foreign countries, people gradually like Question – Answer (QA) sites, these sites are helpful when people want an answer for their question as soon as possible. There is a very famous QA site is [stackexchange.com](http://stackexchange.com/). The things make this site become difference are that they only focus on QA and has a great scoring system (vote up and vote down).

1. **Problem Definition**

* Mathematics community needs a website as a home that they can easily communicate, interaction, discussion, sharing knowledge.
* Users only need answer (but discussion or noise) for their question as soon as possible that forum cannot help.
* Users need a place that they can show their best and gain reputation in the community.

1. **Proposed Solution**

After research a lot of domestic and foreign, we decide to develop MathHub that gathers strengths of famous sites to meet the needs of the mathematics community in Viet Nam. MathHub will become a home for them to easily communicate, interaction, discussion, sharing knowledge.

5.1 MathHub will has some main features:

* With QA, system people will get answers for their question very easy and fast. Moreover, they also have reputation in the community if their answer was voted up a lot via scoring system.
* With Discussion – a system like a forum that will be a great place for people who want to discuss with other about mathematics.
* With Blog, people also can share their knowledge to another or they just want to store great solutions for some problems.
* Social functions like add friend, follow, live chat, notification and invite friend to a post will really helpful for people in community to communicate together.
  1. Advantages and Disadvantages:
* Advantages:
  + - * People will get answers to their question very easy and fast without noise.
      * People have reputation in the community when they are active and positively contribute to the community.
      * Website has many functions for users to communicate and interact together easily.
      * User can use LaTeX to write math formulas.
* Disadvantages:
* Website was not support user to draw in geometry.
* Many users in Viet Nam are not familiar with QA system.
* Not support mobile version.

1. **Terminology**

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| **No** | **Terminology** | **Meaning** |
| 1 | **Question & Answer system (QA system)** | This is a system functions of website to help users post question and answer. |
| 2 | **Blog system** | This is a system functions of website to help users post articles to sharing knowledge. |
| 3 | **Discussion system** | This is a system functions of website to help users discussion some problem together. |
| 4 | **Scoring system** | This is a system functions of website to help users vote for Question or Answer they like or dislike. Moreover, users who be voted will gain reputation in community. |
| 5 | **Post** | This is abstract name to call Question, Answer, Comment, Blog, Discussion. |
| 6 | **Question** | It is used to call a question that user post into QA system. |
| 7 | **Answer** | It is used to call an answer that user post into QA system. |
| 8 | **Article** | It is used to call an article that user post into Blog system. |
| 9 | **Discussion** | It is used to call a discussion that user post into Discussion system. |
| 10 | **Comment** | It is used to call a comment that user comment to Question, Answer, Blog, Discussion and reply other comment. |
| 11 | **Report** | It is a function help user report violate posts. |
| 12 | **Vote up** | It is a function in Scoring system for user to vote Question or Answer they like. |
| 13 | **Vote down** | It is a function in Scoring system for user to vote Question or Answer they dislike. |
| 14 | **Tag** | It is used to call a tag (or also call label) to classify Question, Article, Discussion. |

1. **Project Team**
   1. **Stakeholders**

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| --- | --- | --- | --- | --- |
| **No** | **Name** | **Role** | **Position** | **Email** |
| 1 | Nguyễn Ngọc Anh | Project Manager | Instructor | anhnn4@fpt.edu.vn |
| 2 | Nguyễn Ngọc Thanh Hải | Developer, BA, Designer, SA | Team leader | hainntse60916@fpt.edu.vn |
| 3 | Nguyễn Đăng Minh | Developer, BA, Designer, SA | Team member | minhndse60942@fpt.edu.vn |
| 4 | Văn Minh Hoàng Quân | Developer, Tester, BA | Team member | quanvmhse61002@fpt.edu.vn |
| 5 | Thân Văn Tâm | Developer, Tester, BA | Team member | tamtvse61014@fpt.edu.vn |

* 1. **Norms**
* Team members as coworkers: all team members are equal; every team member's opinion will be thoughtfully considered; each team member will keep all commitments by the agreed upon due date.
* Team member communication: team members will speak respectfully to each other; will not talk down to each other; will positively recognize and thank each other for team contributions.
* Team member interaction in meetings: team members will listen without interrupting; hold no side or competing conversations; follow the rules for effective meetings; attend the meeting on time; always work from an agenda.
* Team problem solving, conflicted resolution, and decision-making: team members will make decisions by consensus, but the majority will rule if timely consensus, not reached; conflicts will be resolved directly with the persons in conflict.
  1. **Rules**
* Respect the majority's opinion.
* Always express your views.
* Must ask another member for support when meet difficult problems.
* Restrict make decisions without team discussion.
* Must finish tasks on time. Penalize 10k when delays task.
* Can change deadline or change task if cannot handle.
* Do not commit error code to source server.
* Do not resolve conflict if it relates to another’s code.