***Individual Release Planning***

***Assignment For Course PA2521***

Zhipeng Dong

dzp0713@gmail.com

BTH University

Sweden, Karlskrona

9208111295

**1. Brief Product Description**

I will divide this part into two parts, the first part is description of our product, the second part is description of the features in this product.

* 1. **Description of our Product**

Our system is an online learning and course management system. This system will serve Swedish universities. It is similar withe the famous online learning system-Itslearning. This system aim at serving Swedish universities’ students and teachers. This system not only need to satisfy the basic teaching requirements, but also need to provide a efficiency way for students to manage his status on the course. Our product is a multifunctional web-platform software system product, this system not only requires stable internet connection, but also requires data center and other servers.

**1.2 Description of the features in this product**

From the requirements description, we found there are 208 requirements have been listed on GitHub. After I summary and analyze these requirements, I think this system could be divide into several main module/high-level features. These features will be displayed below.

1-Log in and Log out: Users need a username and password to log into the system. And when they want to quit the system, they can log out.

2-Upload and Download File: Users can upload or download files when using this system.

3-Manage personal Information: Users can add, delete, update, modify their personal information, when they using this system.

4-Communicate with other users: This system provides a platform for communication between users, it is such like a discussion forum, everyone can send personal opinion in discussion forum.

5-Search function: This system provides users with a search service, users can search within this system, quickly find their own need information.

6-Course Management: The system shall be able to allow teacher to manage the course. Such like upload students' grades, publish teaching plans, and so on.

**2. Company Size and Investment in Product**

I will divide this part into two parts, the first part is description of our company, the second part is description of the resource.

**2.1 Company profile**

Our company is a small size software development company. We have already developing online system products for several years. As our goals are developing an online learning and course management system. We have a lot of experience on this domain. There are many agile development teams in our company, in order to complete this development task, we will use two agile development teams. And for each team there are 8 members.

Both teams will involved in the whole development process. And each member will involved in the product at the beginning of this development.

**2.2 Resource**

Equipment:

1. Adequate hardware support

2. Adequate technical support

3. Adequate testing support

Environment:

1. Independent office

2. Development team dedicated meeting room

3. Daily necessities

4. Safety prevention equipment

Budget:

2,500,000 Swedish Kr

Time:

One and a half years.

**3. Roadmap**

I will divide this part into three parts, the first part is roadmap view, the second part is detailed description of different stakeholders’ viewpoints. The third part is prioritization of viewpoints.

**3.1 Roadmap view**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Stage | Stage 1 | Stage 2 | Stage 3 | Stage 4 |
| Date | Jan.2017-Apr.2017 | May.2017-Aug.2017 | Sep.2017-Feb.2018 | Mar.2018-June.2018 |
| During time | 4 months | 4 months | 6 months | 4 months |
| Goal | Implement the first version of the product. The user can see the initial state of the product. And the user can comment on this initial product. | Implement the second version of the product. The user’s comments in the previous version are resolved. And in this version, the product has achieved more functionality. | Implement the third version of the product. The basic functionality of this product has been fully realized. Product can meet most of the requirements of stakeholders. | Implement the last version of the product. The product is already complete. We can add some new function to make the product become better. |
| Focused Theme /Features | 1. User Interface  2. Log in and log out  3. Manage personal information  4. Search function | 1. Upload and download files  2. Notify  3. Evaluation function  4.Course management | 1. Communicate with other users  2. Others  3. Modify the previous function to enhance the product. | Some additional features that could help the product become better. Such like register function and quality requirement. |
| Source | Two agile development teams including 16 members. | Two agile development teams including 16 members. | Two agile development teams including 16 members. | Two agile development teams including 16 members. |
| Statisfied Viewpoint | Old engineer students  Old non-engineering students  New students  Administrator | Old engineer students  Old non-engineering students  New students  Administrator  Teacher  Manager | Old engineer students  Old non-engineering students  New students  Administrator  Teacher  Manager  Developer | Old engineer students  Old non-engineering students  New students  Administrator  Teacher  Manager  Developer |
| Metrics | 1.Number of release backlogs  2.Response time of accessing the interface  3.The number of sub-webpages | 1.Number of release backlogs  2.Response time of uploading and downloading | 1.Number of release backlogs  2.Response time of accessing information | 1.Number of release backlogs  2.New functions performance |

This is the feature-based product roadmap for the online learning and course management system. There will be four stages in the future of this project. The first stage will during four months, in the first stage, we will complete some of the basic functions of this product. And the user can see the initial state of the product and also can comment on this initial product. The second stage and the third stage will during ten months, in these two stages, we will complete the basic functionality of this product. And try our best to meet all the requirements of stakeholders. The last stage will during four months, in this stage, the product will complete totally. We can add some new function to make the product become better. This roadmap was designed based on the importance of different viewpoints.

**3.2 Detailed description of different stakeholders’ viewpoints**

Based on the discussion forum on itslearning. We know that these requirements are from different students’ opinion and different students play different roles. I will summary the different roles and viewpoints.

|  |  |  |
| --- | --- | --- |
| Role | Viewpoints | Importance |
| New Student | Manage personal information  User Interface  Log in and log out  Upload and download files  Communicate with other users… | New students are very important to our system, the new students are students who are firstly using our system. Their satisfaction is important to us, because if their satisfaction is low, our products may not be accepted by the user. |
| Old Student | Manage personal information  User Interface  Log in and log out  Upload and download files  Communicate with other users… | Old students are the most important user for our system. Because they are already familiar with the use of our system, they can give us some useful advice to improve our system. And the number of old students is large. |
| Teacher | Manage personal information  User Interface  Log in and log out  Upload and download files  Course management… | Teacher is an important part, because they are also an important user of our system. Lots of features and functions in our system are designed for teacher. |
| Administrator | Log in and log out  Notify  Management… | The main work for administrator is to manage students’ information. It is very important for our system, we need to consider their satisfaction. |
| Developer | Built database to store data  Protect users’ information  High compatibility to run in different environment… | The developers are very important for the development process. Their work will change our product. So we need to consider developers. |

**3.3 Prioritization of viewpoints**

According to the number of users and using frequency, I divide the prioritization into 4 levels. The level 1 is the highest level. Then decrease progressively step by step.

Level 1: New Student and old students. Also could call students.

Level 2: Teacher.

Level 3: Administrator.

Level 4: Developer.

**4. Releases**

From the requirements description, we found there are 208 requirements have been listed on GitHub. I come up with 10 types of requirements to classify our requirements.

They are: Upload and download files, communicate with other users, log in and log out, notify, manage personal information, search function, user interface, evaluation function, course management and others.

In this part, I will divide this product into 4 releases.

In the first release, I want to select four main functions to achieve. They are user interface, log in and log out, manage personal information and search function.

In the second release, I also want to select four main functions to achieve. They are upload and download files, notify, evaluation function and course management function.

In the third release, I want to achieve communicate with other users function and other unimplemented little functions. And I want to modify the previous functions to enhance our product.

In the fourth release, I will add some features which can help the product become better, and implement some rest of the requirements.

In order to building our roadmap, I will describe the value to stakeholders and then organize our roadmap. I plan the release based on the roadmap, our primary goal is to develop a working product as soon as possible.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Release | Release 1 | Release 2 | Release 3 | Release 4 |
| Date | Jan.2017-Apr.2017 | May.2017-Aug.2017 | Sep.2017-Feb.2018 | Mar.2018-June.2018 |
| Goal | Release the first version of the product. The user can see the initial state of the product. The project is already a working system. | Release the second version of the product. Not only continue to complete the unfinished functions but also according to the users’ feedback to improve the product. | Release the third  Version of the product. To achieve the full functionality of this product, as much as possible to meet the requirements of stakeholders. | Release the last  Version of the product. Add some new functions  to make the product become better. |
| Features need to be achieved | 1. User Interface  2. Log in and log out  3. Manage personal information  4. Search function | 1. Upload and download files  2. Notify  3. Evaluation function  4.Course management | 1. Communicate with other users  2. Others  3. Modify the previous function to enhance the product. | Some additional features that could help the product become better. Such like register function and quality requirement. |

**5. Release planning strategy**

In this part, I will introduce both release planning method and prioritization method that I selected. And I will also discuss the reason why I selected them.

**5.1 Release Planning Method:**

The release planning method that I selected is Theme-based Product Release Planning.

Theme-based Product Release Planningis a product management method. It will help the project manager to tap hidden business opportunities. This strategy focus on creating more value for the project in the release planning phase. This strategy mainly focuses on the value of one theme and the relationship between other functions or features. It aims at offering features in a particular release with considering of their dependence. And the dependency divide into two parts, they are direct dependency and indirect dependency. The direct dependency mainly includes coupling and synergy. The indirect dependency mainly includes precedence and NAND.

**Motivation:**

There are five reasons to explain why I chose Theme-based Product Release Planning method as our release planning method.

Reason 1: After review the 208 requirements, I have found that these requirements can be divided into several different themes. If we use Theme-based Product Release Planning method we will reduce lots of time.

Reason 2: I have already listed ten types of requirements, it will be easier to combined with the Theme-based Product Release Planning method to get a good release planning.

Reason 3: The Theme-based Product Release Planning method can map our roadmap well.

Reason 4: Theme-based Product Release Planning method is easy to learn and use.

Reason 5: In order to reducing the dependency and constraints, I will use Theme-based Product Release Planning method.

**5.2 Prioritization Method:**

The prioritization method that I selected is MoScoW method.

MoScoW sorting method is proposed by DSDM Consortium. It is a numerical requirements prioritization method. It can give a hierarchical order of preference for groups of requirements. The goal of MoScoW is to deliver the best benefits for the project. It is very important for agile development project management.

MoScoW method is when doing iteration planning, the requirements are divided into four categories. They are M (Must have), S (Should have), C (Could have) and W (Won’t have it right now).

Must have: For iteration goal, no delivery can not meet the standard. The development of this kind of requirements will directly give business value to the project.

Should have: For iteration goal, there are still alternatives, even if there is no delivery, does not affect the matter. The requirements in Should have need to be implemented but can be released in the later release.

Could have: For iteration goal is not directly related, if the delivery can be extra points, but even ignore the matter will not affect the matter. The requirements in Could have means we could implement them when we are free.

Won’t have it right now: For this category, it has nothing to do with the iteration goal.

**Motivation:**

There are five reasons to explain why I chose MoScoW method as our prioritization method.

Reason 1: It is quick to perform and easy to learn and use.

Reason 2: It will help us to divide all the requirements into several categories. So we can use this method to decide which requirements need to put in the first release.

Reason 3: MoScoW method is suitable for our goals.

Reason 4: MoScoW method is not suitable for large requirements project. As we know that, our project include 208 requirements, so it is not a large requirements project. We can use this method.

Reason 5: MoScoW method is an ordinal level method. It can be used for sorting different kinds of requirements.

**6. Execution of Release planning**

As we know that, our project include 208 requirements. At first, I download all the 208 requirements. Then I communicated with the stakeholders to deep understand all the requirements. I have found there are many requirements are duplicate requirements, so the second step is to find out all the duplicate requirements and put them together. Next step, I divide this system into several different themes. At last, I used MoScoW method to prioritize these requirements per theme.

I have already classified them by 10 different types. And each type divide into 4 parts. They are Must have, Should have, Could have and Won’t have.

No.1 User Interface

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Number of RQ | Name | Must have | Should have | Could have | Won’t have |
| No.11 | Personal initial pages | **√** | --------------- | --------------- | --------------- |
| No.12 | Course start pages | **√** | --------------- | --------------- | --------------- |
| No.21 | Course information | **√** | --------------- | --------------- | --------------- |
| No.39 | Course start pages component | **√** | --------------- | --------------- | --------------- |
| No.40 | Personal initial pages component | **√** | --------------- | --------------- | --------------- |
| No.64 | Course links | **√** | --------------- | --------------- | --------------- |
| No.19 | The language for user interface | **---------------** | **√** | --------------- | --------------- |
| No.23 | Discussion forum function | **---------------** | **√** | --------------- | --------------- |
| No.144 | The layout design of course page | --------------- | **√** | --------------- | --------------- |
| No.145 | The user interface need easy to use | --------------- | **√** | -------------- | --------------- |
| No.207 | System compatibility processing | --------------- | **√** | --------------- | --------------- |
| No.66 | The calendar function | --------------- | --------------- | **√** | --------------- |
| No.68 | Show the contents of message | --------------- | --------------- | **√** | --------------- |
| No.164 | Support for custom layouts | --------------- | --------------- | **√** | --------------- |

No.2 Log in and log out

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Number of RQ | Name | Must have | Should have | Could have | Won’t have |
| No.27 | Login/logout | **√** | --------------- | --------------- | --------------- |
| No.61 | Login failed prompt | **√** | --------------- | --------------- | --------------- |
| No.62 | Login success prompt | **√** | --------------- | --------------- | --------------- |
| No.88 | Fill in the login information | **√** | --------------- | --------------- | --------------- |
| No.1 | User registration interface | --------------- | **√** | --------------- | --------------- |
| No.103 | Automatically exit login function | --------------- | **√** | --------------- | --------------- |
| No.137 | Login at the same time | --------------- | **√** | --------------- | --------------- |
| No.63 | First login | --------------- | --------------- | **√** | --------------- |
| No.89 | Provide relevant restriction info to the users | --------------- | --------------- | **√** | --------------- |
| No.104 | The automatic logout can be turn on and turn off | --------------- | --------------- | **√** | --------------- |
| No.109 | User communication session manager | --------------- | --------------- | **√** | --------------- |
| No.187 | Automatically log out | --------------- | --------------- | --------------- | **√** |
| No.197 | Automatically sign out | --------------- | --------------- | --------------- | **√** |

No.3 Manage personal information

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Number of RQ | Name | Must have | Should have | Could have | Won’t have |
| No.5 | Individual course management and conduct | **√** | --------------- | --------------- | --------------- |
| No.14 | Course information | **√** | --------------- | --------------- | --------------- |
| No.16 | Personal profile | **√** | --------------- | --------------- | --------------- |
| No.17 | Course participators management | **√** | --------------- | --------------- | --------------- |
| No.20 | Course calendar function | **√** | --------------- | --------------- | --------------- |
| No.25 | User calendar | **√** | --------------- | --------------- | --------------- |
| No.29 | CRUD news | **√** | --------------- | --------------- | --------------- |
| No.30 | Add and remove files | **√** | --------------- | --------------- | --------------- |
| No.52 | Add and remove message | **√** | --------------- | --------------- | --------------- |
| No.55 | Add, remove and edit course info | **√** | --------------- | --------------- | --------------- |
| No.80 | Delete message in discussion forum | **√** | --------------- | --------------- | --------------- |
| No.134 | Student info registration | **√** | --------------- | --------------- | --------------- |
| No.141 | Whole course management | **√** | --------------- | --------------- | --------------- |
| No.167 | Edit comment for files upload | **√** | --------------- | --------------- | --------------- |
| No.170 | Edit comment for published assignment | **√** | --------------- | --------------- | --------------- |
| No.171 | Set assignment deadline | **√** | --------------- | --------------- | --------------- |
| No.194 | Modify personal account | **√** | --------------- | --------------- | --------------- |
| No.201 | Modify personal information | **√** | --------------- | --------------- | --------------- |
| No.43 | CRUD calendar | --------------- | **√** | --------------- | --------------- |
| No.44 | Calendar synchronised | --------------- | **√** | --------------- | --------------- |
| No.45 | Change course calendar | --------------- | **√** | --------------- | --------------- |
| No.46 | Set personal calendar | --------------- | **√** | --------------- | --------------- |
| No.48 | Edit course information | --------------- | **√** | --------------- | --------------- |
| No.50 | CRUD links | --------------- | **√** | --------------- | --------------- |
| No.78 | Profile manager | --------------- | **√** | --------------- | --------------- |
| No.91 | Data backup | --------------- | **√** | --------------- | --------------- |
| No.99 | Set up language and country | --------------- | **√** | --------------- | --------------- |
| No.101 | Trash box | --------------- | **√** | --------------- | --------------- |
| No.133 | Save user information | --------------- | **√** | --------------- | --------------- |
| No.136 | Update | --------------- | **√** | --------------- | --------------- |
| No.138 | Course edit | --------------- | **√** | --------------- | --------------- |
| No.140 | Publish news | --------------- | **√** | --------------- | --------------- |
| No.147 | Privacy of personal info | --------------- | **√** | --------------- | --------------- |
| No.154 | Profile photos | --------------- | **√** | --------------- | --------------- |
| No.156 | Course related events | --------------- | **√** | --------------- | --------------- |
| No.165 | Dashboard management | --------------- | **√** | --------------- | --------------- |
| No.24 | Product access | --------------- | --------------- | **√** | --------------- |
| No.42 | Course administration | --------------- | --------------- | **√** | --------------- |
| No.53 | Edit users’ database | --------------- | --------------- | **√** | --------------- |
| No.33 | Edit personal profile | --------------- | --------------- | --------------- | **√** |
| No.36 | Add and remove participators | --------------- | --------------- | --------------- | **√** |
| No.54 | Edit course statement | --------------- | --------------- | --------------- | **√** |
| No.70 | Manage import calendar | --------------- | --------------- | --------------- | **√** |
| No.126 | Post message | --------------- | --------------- | --------------- | **√** |
| No.173 | Set up new account | --------------- | --------------- | --------------- | **√** |
| No.178 | User profile management | --------------- | --------------- | --------------- | **√** |

No.4 Search function

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Number of RQ | Name | Must have | Should have | Could have | Won’t have |
| No.77 | Search option | **√** | --------------- | --------------- | --------------- |
| No.98 | Set up search engine | **√** | --------------- | --------------- | --------------- |
| No.189 | Search for course schedule | **√** | --------------- | --------------- | --------------- |

No.5 Upload and download files

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Number of RQ | Name | Must have | Should have | Could have | Won’t have |
| No.15 | Special course files | **√** | --------------- | --------------- | ------------- |
| No.31 | Download Special course files | **√** | --------------- | --------------- | ------------- |
| No.57 | Check Special course files | **√** | --------------- | --------------- | ------------- |
| No.76 | Support different kinds of file formats | **√** | --------------- | --------------- | ------------- |
| No.84 | Download files to current location | **√** | --------------- | --------------- | ------------- |
| No.86 | Upload individual files | **√** | --------------- | --------------- | ------------- |
| No.129 | Hand in | **√** | --------------- | --------------- | ------------- |
| No.130 | Upload files | **√** | --------------- | --------------- | ------------- |
| No.169 | Assignment publish | **√** | --------------- | --------------- | ------------- |
| No.180 | Publish bulletins | **√** | --------------- | --------------- | ------------- |
| No.81 | Export grade | ------------ | **√** | --------------- | ------------- |
| No.82 | Upload and download assignment | ------------ | **√** | --------------- | ------------- |
| No.83 | Download papers | ------------ | **√** | --------------- | ------------- |
| No.118 | Resource sharing | ------------ | **√** | --------------- | ------------- |
| No.148 | Hand in files size | ------------ | **√** | --------------- | ------------- |
| No.149 | Website links | ------------ | **√** | --------------- | ------------- |
| No.151 | Hand in options | ------------ | **√** | --------------- | ------------- |
| No.152 | Hand in deadline | ------------ | **√** | --------------- | ------------- |
| No.163 | Literature management | ------------ | **√** | --------------- | ------------- |
| No.174 | Turn off deadline button | ------------ | **√** | --------------- | ------------- |
| No.185 | Course related information | ------------ | **√** | --------------- | ------------- |
| No.72 | RTF format files | ------------ | --------------- | **√** | ------------- |
| No.73 | Streaming video | ------------ | --------------- | **√** | ------------- |
| No.166 | Uploading files | ------------ | --------------- | --------------- | **√** |
| No.184 | Downloading files | ------------ | --------------- | --------------- | **√** |

No.6 Notify

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Number of RQ | Name | Must have | Should have | Could have | Won’t have |
| No.87 | Notification alerts | **√** | --------------- | --------------- | ------------- |
| No.112 | Mail generated automatically | **√** | --------------- | --------------- | ------------- |
| No.113 | Unread notifications | **√** | --------------- | --------------- | ------------- |
| No.188 | E-mail notifications | **√** | --------------- | --------------- | ------------- |
| No.196 | Receiving info | **√** | --------------- | --------------- | ------------- |
| No.203 | Grade notifications | **√** | --------------- | --------------- | ------------- |
| No.204 | Exam result notifications | **√** | --------------- | --------------- | ------------- |
| No.124 | Push notifications | ------------ | --------------- | **√** | ------------- |
| No.181 | Latest change notifications | ------------ | --------------- | **√** | ------------- |
| No.85 | User message notifications | ------------ | --------------- | --------------- | **√** |
| No.120 | Notifications | ------------ | --------------- | --------------- | **√** |
| No.190 | E-mail notifications | ------------ | --------------- | --------------- | **√** |

No.7 Evaluation functions

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Number of RQ | Name | Must have | Should have | Could have | Won’t have |
| No.96 | Course feedback | **√** | --------------- | --------------- | ------------- |
| No.107 | Course record | **√** | --------------- | --------------- | ------------- |
| No.125 | Grading | **√** | --------------- | --------------- | ------------- |
| No.161 | Students evaluating | **√** | --------------- | --------------- | ------------- |
| No.172 | Collect files | **√** | --------------- | --------------- | ------------- |
| No.175 | Evaluate the answer for assignment | **√** | --------------- | --------------- | ------------- |
| No.198 | Get feedback from customers | ------------ | **√** | --------------- | ------------- |
| No.71 | Grading export | ------------ | --------------- | **√** | ------------- |

No.8 Course management

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Number of RQ | Name | Must have | Should have | Could have | Won’t have |
| No.65 | Add new users | **√** | --------------- | --------------- | --------------- |
| No.74 | Register option | **√** | --------------- | --------------- | --------------- |
| No.75 | Sign up for participants | **√** | --------------- | --------------- | --------------- |
| No.111 | Register for exams | **√** | --------------- | --------------- | --------------- |
| No.135 | Register automatically | **√** | --------------- | --------------- | --------------- |
| No.179 | Course registration | **√** | --------------- | --------------- | --------------- |
| No.183 | Publish registrations info | --------------- | **√** | --------------- | --------------- |
| No.192 | Course cancelling function | --------------- | **√** | --------------- | --------------- |

No.9 Communicate with other users

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Number of RQ | Name | Must have | Should have | Could have | Won’t have |
| No.67 | Receive and reply message | **√** | --------------- | --------------- | --------------- |
| No.69 | Course discuss room | **√** | --------------- | --------------- | --------------- |
| No.117 | Send message | **√** | --------------- | --------------- | --------------- |
| No.121 | Course platform | **√** | --------------- | --------------- | --------------- |
| No.176 | Communication space | **√** | --------------- | --------------- | --------------- |
| No.59 | Access to discussion forum | --------------- | **√** | --------------- | --------------- |
| No.108 | Assignment discussion | --------------- | **√** | --------------- | --------------- |
| No.146 | Receive feedback | --------------- | **√** | --------------- | --------------- |
| No.119 | Campus forum | --------------- | --------------- | **√** | --------------- |
| No.199 | Connect relationship of developers | --------------- | --------------- | **√** | --------------- |
| No.131 | Chart room build | --------------- | --------------- | --------------- | **√** |
| No.186 | Send message | --------------- | --------------- | --------------- | **√** |
| No.193 | Comments replying | --------------- | --------------- | --------------- | **√** |
| No.205 | Communication | --------------- | --------------- | --------------- | **√** |

No.10 Others

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Number of RQ | Name | Must have | Should have | Could have | Won’t have |
| No.3 | Secure product | **√** | --------------- | --------------- | --------------- |
| No.10 | The product can be used | **√** | --------------- | --------------- | --------------- |
| No.13 | Related information can be obtained quickly | **√** | --------------- | --------------- | --------------- |
| No.41 | Access to course administration | **√** | --------------- | --------------- | --------------- |
| No.153 | Profile privacy | **√** | --------------- | --------------- | --------------- |
| No.168 | New student registrations | **√** | --------------- | --------------- | --------------- |
| No.142 | Language transformed function | **√** | --------------- | --------------- | --------------- |
| No.110 | Project database | **√** | --------------- | --------------- | --------------- |
| No.22 | Course links | **√** | --------------- | --------------- | --------------- |
| No.6 | Market | **√** | --------------- | --------------- | --------------- |
| No.7 | Asynchronous system access | **√** | --------------- | --------------- | --------------- |
| No.9 | Course participant administration | --------------- | **√** | --------------- | --------------- |
| No.18 | System user ID management | --------------- | **√** | --------------- | --------------- |
| No.37 | Course participator roles | --------------- | **√** | --------------- | --------------- |
| No.94 | Literature database | --------------- | **√** | --------------- | --------------- |
| No.95 | Admin functionalities | --------------- | **√** | --------------- | --------------- |
| No.139 | Permission setting | --------------- | **√** | --------------- | --------------- |
| No.150 | Visual presentation design | --------------- | **√** | --------------- | --------------- |
| No.208 | Authority management | --------------- | **√** | --------------- | --------------- |
| No.26 | Support Unicode | --------------- | **√** | --------------- | --------------- |
| No.127 | Compatibility for phone | --------------- | **√** | --------------- | --------------- |
| No.128 | Compatibility for files | --------------- | **√** | --------------- | --------------- |
| No.162 | Usability | --------------- | **√** | --------------- | --------------- |
| No.79 | Account activity | --------------- | --------------- | **√** | --------------- |
| No.93 | Recovery mails | --------------- | --------------- | **√** | --------------- |
| No.200 | Requirements deliver | --------------- | --------------- | **√** | --------------- |
| No.115 | University online library | --------------- | --------------- | **√** | --------------- |
| No.100 | Sentiment analysis | --------------- | --------------- | **√** | --------------- |
| No.105 | Course library | --------------- | --------------- | **√** | --------------- |
| No.106 | Edit, add, delete books from the library | --------------- | --------------- | **√** | --------------- |
| No.38 | Participator privileges | --------------- | --------------- | **√** | --------------- |
| No.60 | Change privileges | --------------- | --------------- | **√** | --------------- |
| No.92 | Recovery mails | --------------- | --------------- | **√** | --------------- |
| No.157 | Clear requirement documents | --------------- | --------------- | --------------- | **√** |
| No.158 | Phone app development | --------------- | --------------- | --------------- | **√** |
| No.206 | Database established | --------------- | --------------- | --------------- | **√** |

**7. Result of Release plan**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Release No. | Release 1 | Release 2 | Release 3 | Release 4 |
| Date | Jan.2017-Apr.2017 | May.2017-Aug.2017 | Sep.2017-Feb.2018 | Mar.2018-June.2018 |
| Achieved theme | Basic and most of Must have requirements in different themes. | All the Must have requirements in different themes. Should have requirements in theme 1-5. | All the Should have requirements in different themes.  Could have requirements in theme 1-5. | All the Could have requirements in different themes.  All the Won’t have requirements in different themes. |
| Goals | The first version of the product that could be run with a simple interface. To build a initial product as soon as possible. | Focus on the theme to implement relative requirements. | Focus on the theme to implement relative requirements. | Focus on the theme to implement relative requirements. |
| Detail requirements | Must have requirements include:  User Interface (#11, #12, #21, #39, #40, #64).  Manage personal info (#5, #14, #16, #17, #20, #25, #29, #30, #52, #55, #80, #134, #141, #167, #170, #171, #194, #201)  Search function (#77, #98, #189)  Evaluation functions (#96, #107, #125, #161, #172, #175)  Course management (#65, #74, #75, #111, #135, #179)  Communicate with other users (#67, #69, #117, #121, #176)  Others (#3, #10, #13, #41, #153, #168, #142, #110, #22, #6, #7) | Must have requirements include:  Login and logout (#27, #61, #62, #88)  Upload and download files (#15, #31, #57, #76, #84, #86, #129, #130, #169, #180)  Notify (#87, #112, #113, #188, #196, #203, #204)  Should have requirements include:  User Interface (#19, #23, #144, #145, #207)  Login and logout (#1, #103, #137)  Manage personal info (#43, #44, #45, #45, #48, #50, #78, #91, #99, #101, #133, #136, #138, #140, #147, #154, #156, #165)  Search function (--)  Upload and download files (#81, #82, #83, #118, #148, #149, #151, #152, #163, #174, #185) | Should have requirements include:  Notify (--)  Evaluation functions (#198)  Course management (#183, #192)  Communicate with other users (#59, #108, #146)  Others (#9, #18, #37, #94, #95, #139, #150, #208, #26, #127, #128, #162)  Could have requirements include:  User Interface (#66, #68, #164)  Login and logout (#63, #89, #104, #109)  Manage personal info (#24, #42, #53)  Search function (--)  Upload and download files (#72, #73) | Could have requirements include:  Notify (#124, #181)  Evaluation functions (#71)  Course management (--)  Communicate with other users (#119, #199)  Others (#79, #93, #200, #115, #100, #105, #106, #38, #60, #92)  Won’t have requirements include:  User Interface (--)  Login and logout (#187, #197)  Manage personal info (#33, #36, #54, #70, #126, #173, #178)  Search function (--)  Upload and download files (#166, #184)  Notify (#85, #120, #190)  Evaluation functions (--)  Course management (--)  Communicate with other users (#131, #186, #193, #205)  Others (#157, #158, #206) |
| Resource (members) | Two agile development teams including 16 members. | One agile development teams including 8 members. | One agile development teams including 8 members. | Two agile development teams including 16 members. |
| Resource  (money) | 800,000 kr  Within the budget | 400,000 kr  Within the budget | 400,000 kr  Within the budget | 800,000 kr  Within the budget |

**How matches the roadmap:**

Our release plan is based on the roadmap. From the goal part, we know that our primary goal is to build a initial product as soon as possible. Based on the roadmap, I plan the other three releases to complete all the requirements based on different themes.

For release 2, the software has a deeper improvement with more basic functions. The product becomes more functional, the verson 2 can satisfy the mainly requirements from our stakeholders.

For release 3, the requirements are added to better the system. Our product become more reliable and perfect. Many feature that will improve product availability are added.

For release 4, the requirements should be executed within the time and budget. In this release some remain requirements have been achieved. The product has reached the deliverable state. In order to make the product in a best state to complete the deliver process, we make the final product promotion and inspection.