



Zeeguu Requirements Document

Version 1.1

Authors :

Oliver Holder
Christian Grier Mulvenna
Henry Salas
Tai-Ting Chen
Evi Xhelo
Ai Deng
Jakob Vokac
Chris Ausema

Clients :

Mircea Lungu
Carlos Paz Rodriguez

Supervisor :

Lars Holdijk

University of Groningen
February 2018

1 Introduction

Zeeguu is an innovative new tool for learning languages. By integrating multiple translating software, such as Google Translate and Microsoft Translator, Zeeguu allows its users to read articles with real time translation at their finger tips and practice their vocabulary with interactive exercises. Right now, Zeeguu supports five different languages to learn (English, Dutch, German, Spanish and French) and three base languages (English, Dutch and Chinese).

The interaction in Zeeguu is still rather simple. Anyone, who wishes to use it, simply signs up with an access key and inputs some basic information (your name, email address, password, which language you wish to learn and what your base language is). Once the account is created, the user can choose to read articles, practise their vocabulary or look at the words they have learned.

Our project is to expand the Zeeguu Dashboard (*ZD*) to allow teachers to supervise their students as they learn how to use it. We would allow teachers to have their separate accounts, be able to invite students into 'classes' and oversee their progress with an intuitive visual interface. Apart from these basic requirements, we can expect to integrate other features that we will find out about in the near future as well.

2 Introducing User Stories

In order to present the requirements for the *ZD* system, we are going to use user stories. Since the system is dedicated to the work space of the teachers, our main user is the teacher. For several requirements, we have also included the customer as part of the user stories to showcase why a requirement is being implemented.

As the main user of the website, a teacher is responsible for one or more classes. The purpose of *ZD* is to facilitate the work of the teachers and to provide them with a means of sharing knowledge.

ZD user stories can be divided into two parts :

1. Classes, which can also be looked at from two perspectives :
 - (a) user stories w.r.t one classroom and what it stands for
 - (b) user stories concerning all the classes that a teacher works inWe use the same name for both perspectives.
2. Students, for user stories that mainly concern to their activity

Throughout the user stories, we usually use these two subsections to provide some more clarity into the requirement.

3 Critical User Stories

3.1 Classes

1. As a teacher, I can create a new class so that students who have the invite code can join.
2. As a teacher, I can view the full list of classes that I am teaching on my dashboard.
3. As a teacher, I want to have access only into my own class(es) so that I can look into the classroom's activity.
4. As a teacher, I can edit the details of any of my classes such as change the name or the maximum capacity at any time so that I can alter them in case of there being any changes.

3.2 Students

1. As a teacher, I can see the work activity for each one of the students in my class(es) so that I can get a better idea of their activity in individual and collective terms, i.e :
 - ◇ I can see what percentage of the time the student spends reading.
 - ◇ I can see what percentage of the time the student spends doing exercises.
 - ◇ I can see how much time (in hours and minutes) the student spends on both activities.
2. As a teacher, I can see the words that the student has translated, so that I can check that the translation is correct.

4 Important User Stories

4.1 Classes

1. As a teacher, I have class(es) which have a name, maximum capacity.
2. As a teacher, I can see the full list of students that are in a class.
3. As a teacher, I can sort the list of students alphabetically.
4. As a teacher, I can sort the list of students based on the time students dedicated to (a) reading and to (b) exercises so that I can get an idea of who worked most/least and how much students are working.
5. As a teacher, I can make articles available to the student of any class in two ways :
 - (a) I can present the URL link to the article, so that they can access it directly.
 - (b) I can use a custom text, either by copy and pasting or by writing it on my own.

6. As a teacher, I can filter class information by date, so that I can see when the students were most or least active.
7. As a teacher, I can delete an empty class of my own, so that I will not have redundant classrooms.
8. As a teacher, I can see a table right on top of any class that I am looking at, which represents statistical information about the class, so that I can get a general idea of the activity of the students in there.
I would like the layout of the table to be the following :
 - (a) The rows of the table are going to represent the students of the class (name and surname).
 - (b) The row-col intersection is going to show the student's activity (row) on that day (col).
 - (c) I would like to have two different colours for the two different activities : reading and doing exercises.
9. By default, the table will show me the overview based on the past week.
10. I can also choose to look at the overview of the past :
 - ◇ 2 weeks
 - ◇ 1 month
 - ◇ 6 months
 - ◇ 1 year
11. The next time I am looking at the same class, the overview will show the information on the same time stamp as the one I requested the last time.

4.2 Students

1. As a teacher, I can filter the list of words that a student has translated by date, so that I can see how many/which words the student has translated in a given period.
2. As a teacher, I can go to the article that the student has translated the word from, so that I can see its context.
3. As a user of the website, I can understand what might be wrong any time an error occurs because human readable error messages are implemented.

5 Useful User Stories

1. As a teacher, I can see the weak words in the range of all classes, so that I can get an understanding of the main words that most students struggle with.

2. As a teacher, I would like my students to be able to apply filters to articles depending on their preferences, so that they can read/exercise on topics that they find interesting and avoid the ones that they do not or that they may find disturbing.
3. As a teacher, I can look at the last activity that a student worked on.
4. As a teacher, I can see a list text(s) that a student has read and how much time it was spent on it.
5. As a teacher, I can see the list of exercises that a student has practiced on and how much time was spent on it.

6 Non functional User Requirements

The Zeeguu team and the customers, Mircea and Carlos, have agreed together on the following :

1. The data of the users of the website kept safe and secure.
2. The system should not have an overly complicated website that requires the user to click on multiple links/buttons.
3. The system has to be reliable to the users.
4. The system has to have multiple tests, so that errors and defects are easily tractable in case of any.
5. The customer would like the invite codes of every class to be a unique, character based text, created by them.

7 User Stories not to be Implemented

1. As a teacher, I would like to type my own definition for words that students have translated from articles.
2. As a teacher, when looking at the words that have been translated by a student, I would like to have the them categorized into verbs, nouns and prepositions.
3. As a teacher, I would like to be able to change a student's class via the ZD.
4. As a customer, I would like the dashboard to be reusable for students as well.

8 Meeting Log

8.1 23/02/18 at 6pm

This was the first meeting with the customer. We therefore were introduced to the project and what they want. In introducing the product, we talked about the target audience and the needs of the target audience. To summarise this, we can say that the ZD is for allowing a teacher to learn about their classrooms. We talked about the current state of the Zeeguu platform and what kind of information would allow a teacher to deepen their knowledge on their classes. A large question to be answered by the ZD for a teacher is identifying the words that a problematic for their classrooms.

8.2 02/03/18 at 3pm

In this meeting we clarified some requirements that were too vague. These were the invite codes for classes and the definition of a class. We decided for the invite codes that we may choose any way for this. The two possibilities we discussed were using automatic generation versus allowing the teachers to specify their own codes. In the latter option, the system would check whether the teacher's code is unique for that class. The customer had preference towards this option. For making a class, we were unable to decide what exactly defines a class. This will therefore be continued in the next meeting.

We had several new critical requirements defined too. These are allowing the teacher to see a list of their classes, allowing the teacher to see a list of students in each of these classes and allowing the teacher to copy and paste their own articles for their students.

In addition, we agreed that a student cannot be moved to another class via the ZD. We may want to allow a teacher to delete classes. It was clarified that a teacher may only be allowed to see their own classes. A student may belong to several classes. We mentioned the idea that a student does not need the ability to see who their class mates are. Finally, a student should be presented with a message regarding how their information will be used upon using their account for the first time.

8.3 16/03/18 at 3pm

During this meeting we got introduced more thoroughly to the general idea of how the teachers would like to have the website; most importantly we were told about what we had to do for the upcoming sprint, March 27th, i.e. :

- be able to log in as a teacher
- have a working dashboard with a teacher's classes and a button that creates a new class
- be able to click on a class and have its students' names appear
- click on a student name and have the recent activity w.r.t the words that the student has translated appear

In this meeting, we also explained our team's current 'division'. Since at the time of the meeting we had yet to begin working with our main focus on the dashboard, we regarded it important that we were divided into two groups that would separately deal with the front-end and the back-end applications. This is, of course, temporary as eventually we will transcend into other phases which will require new/different positions and exchange of roles is always a possibility.

Another important matter of the meeting was distinguishing the MVP(Minimal Viable Product) that we will have to prepare by the end of the first block, which is a working Zeeguu Dashboard.

Finally, Mircea also invited us to work near his office on Mondays so that he can help us and guide us in the right direction.

8.4 28/03/18 at 2pm

The meeting started with our team presenting to the clients what we had done thus far in the website. The website was well received by both of our clients and they also provided us with more insight as to what they would prefer now that the details were more concrete. More specifically :

- They wanted the names of the students in a class to be slightly bigger so that they would get most of the focus.
- They suggested that in order to view the detail for a single student, we made their names clickable instead of having a separate button for it.
- Overall, w.r.t to the appearance, they suggested that we used colours that would not drive the attention away from the information that the website should present, something like mild colours, pastel ones or perhaps shades of grey and blue.
- They suggested we separated the **create class** button from the other classes ; have a simple design for it.
- They also provided a suggestion about the progress bar in the student activity.

We also talked about what we would have to do for the upcoming sprint. There are going to be some new features added to the classes such as the possibility to edit one and also remove it ; for now the requirement specifies that only empty classes can be deleted. There are also web unit tests that need to be developed as well as the integration with Travis.

In the end of the meeting, we placed the new tasks for the upcoming sprint in our Scrum board and created groups within the team to handle each of them.

8.5 17/04/2018 at 5 pm

This was the first meeting of the new block. We started by looking at the latest version of the system. In the last meeting we got more insight from our customers about the outlook of the dashboard so that was also our main task of the sprint.

The customer was satisfied with the updated look. We went over every single detail and realized some minor bugs which will be fixed by next sprint. Also, we brainstormed about a couple of issues such as whether there should be a last activity on the general information of a student and decided to postpone that detail for now since the customer needs to see it implemented with real data.

The rest of the meeting was about setting up new tasks for the upcoming sprint. It was also decided that we have to start the integration with the main API, Core and Web as well.

Finally, we updated the Scrum Board with the new project for sprint 4 and finished the meeting by 6 :20 pm.

9 Change Log

| When | Which Section | What |
|---------------------------|--------------------------------------|---|
| Feb 27th, 15 :30 - 18 :00 | The document | Started the requirement document. |
| Mar 2nd, 13 :30 - 14 :00 | Requirements Framework | Created this section. |
| Mar 12th, 18 :00 - 21 :30 | Front Page | Added Carlos's second name. |
| Mar 12th, 18 :00 - 21 :30 | Requirements Framework | Clarified some more the structure. |
| Mar 12th, 18 :00 - 21 :30 | Critical Functional Requirements | Simplified, improved and added a new requirement about teachers copying and pasting their own articles. |
| Mar 12th, 18 :00 - 21 :30 | Important Functional Requirements | Improved. |
| Mar 12th, 18 :00 - 21 :30 | Useful Functional Requirements | Improved |
| Mar 12th, 18 :00 - 21 :30 | Non-Functional Requirements | The UI and performance requirements are much more specific now. There is now a new security requirement. |
| Mar 12th, 18 :00 - 21 :30 | Won't Do | We added moving students to different classes and the visibility of other students to students will not be done. The part about categorising words has been improved. |
| Mar 12th, 18 :00 - 21 :30 | Implementation details | The SCRUM point was removed. |
| Mar 12th, 18 :00 - 21 :30 | Open Questions | The open questions now reflect our questions after the second customer meeting. |
| Mar 12th, 18 :00 - 21 :30 | Meeting Log | Both meetings have now been summarised. |
| Mar 20th, 15 :00 - 16 :30 | All sections. | Considerable changes to the sections of the document. |
| Mar 31st, 12 :00 - 14 :30 | Important and critical requirements. | Updated requirements based on the last customer meeting. |
| Apr 22nd, 10 :00 - 16 :00 | All sections. | Requirements are now represented as user stories and updated according to the last customer meeting. |