

ESE 2015 Software Requirements Specification

1. Introduction

1.1) Purpose

The system offers a platform for students who want help preparing for an exam. Unlike various existing web portals that are often very generic it specifically targets university students using very specific matching criterias. The goal is to connect students who have the knowledge to support each other.

1.2) Stakeholders

Student: wants help in a certain subject.
 wants to find a tutor who has a good knowledge of this subject.
 wants to be able to contact and interact with tutors.

Tutor: wants a rich profile that highlights his qualities.
 wants to maximise his visibility.
 wants an easy way to communicate with potential students.

Service Provider: wants to earn a commission for every successful matching

1.3) System overview

The software's target is to connect students with tutors and in order to do so, they can create profiles displaying all the information they want to share. Students and tutors can have different priorities on what is relevant information. It is in the tutors interest to have a rich profile. It shows all the subject that he could tutor with the option to also show the grade that he got as proof of his knowledge on the subject. The tutor can also add a editable timetable showing his availability. Students have the possibility to leave a feedback about the tutors which can maximise the tutors visibility. The platform offers both a quick and an advanced search where the student can filter the results according to his needs. Possible filter criterias are: subject, time, location, money, etc. Once the student found a suitable tutor he can contact him using the internal messaging system provided by the software. After discussing their engagement they can confirm their relationship once they want to appoint their first meeting. At this point the service provider gets his commission, at which point he reveals their contact information (e-mail address, phone number).

1.4) References

The following websites can be used as reference but they are all very generic, meaning their goal is to accommodate a wide range of subjects and profiles. This software targets university students specifically, so it uses much more concrete matching criterias.

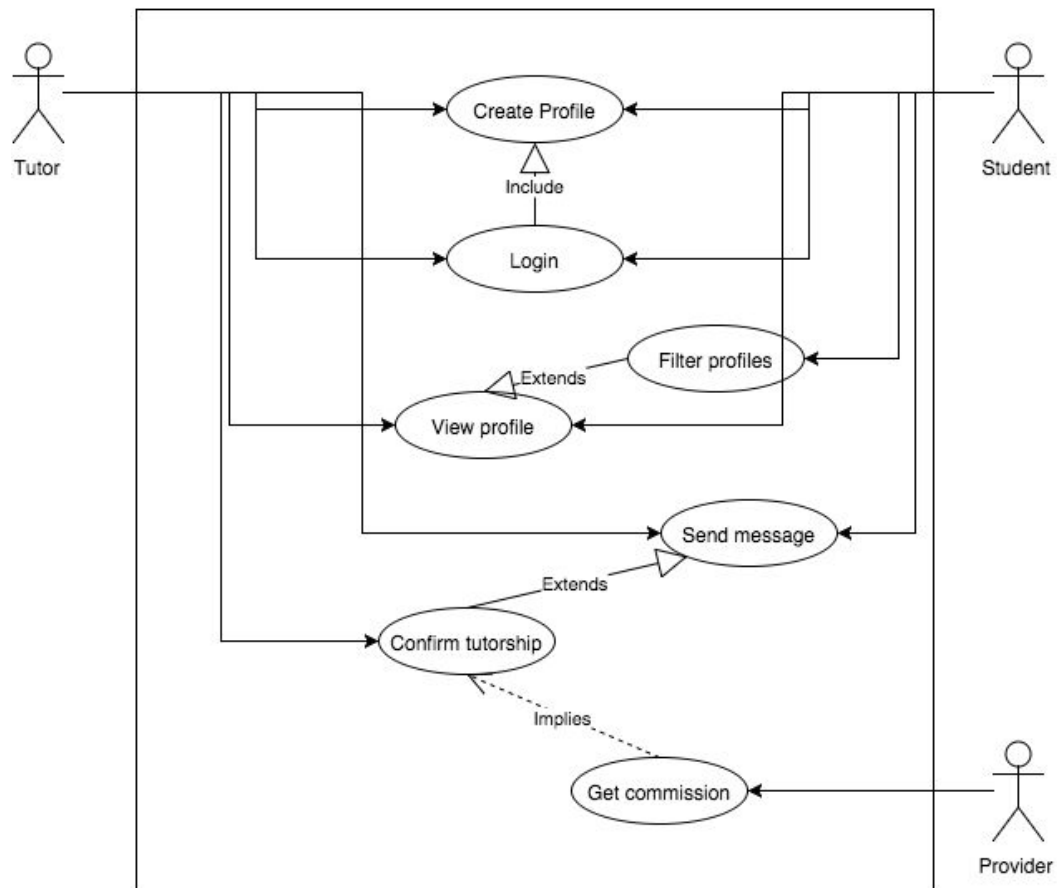
<https://tutor24.ch/>, <http://www.nachhilfe-vermittlung.ch/>, <http://owltutors.ch/>

2. Overall description

2.1) Use cases

- 1) Create profile
- 2) Filter profiles
- 3) View profiles
- 4) Send message
- 5) Confirm tutorship
- 6) Get commission
- 7) Edit profile

Diagram:



1) Create profile

- Actors:

Tutor, Student.

- Description:

As a tutor or student I want to create a profile.

- Pre-condition:

The tutor/student needs a valid email address.

- Post-condition:

The tutor/student's name, surname, email, address are saved in the database.

2) Filter profiles

- Actors:

Student.

- Description:

As a student I want to filter the tutors' profiles, in order to find the most suitable one for my needs.

- Pre-conditions:

1. The student must have an account.
2. The student must be logged in.

- Post-condition:

The suitable tutors' profiles are listed, based on the sorting function determined by the student.

- Main scenario:

- > The student logs in.
- > The student chooses the course and optionally a sorting function
- > Tutors' profiles are displayed.

3) View profile

- Actors:

Tutor, Student.

- Description:

As a tutor/student I want to explore others' profiles.

- Pre-condition:

Tutor/student must be logged in.

- Post-condition:

The requested profile is shown to the user.

4) Send message

- Actors:

Tutor, Student.

- Description:

As a tutor/student I want to send messages to other users, in order to discuss the terms of a tutorship.

- Pre-condition:
Tutor/student must be logged in.
- Post-condition:
The message will be readable by the recipient on his next login.
- Notes:
The first message will usually be delivered by the student, after a “filter profile” action.

5) *Confirm tutorship*

- Actors:
Tutor.
- Description:
As a tutor I want to confirm the tutorship with a student.
- Trigger:
The tutorship is requested by a student.
- Pre-condition:
Tutor and student discussed the terms of the tutorships by message.
- Post-condition:
A commission is paid.

6) *Get commission*

- Actors:
Provider.
- Description:
As provider I want to get a commission on every tutorship confirmed between student and tutor.
- Trigger:
A tutorship is confirmed between student and tutor.
- Main scenario:
 - > The student searches for a tutor.
 - > The student and the tutor discuss the tutorship.
 - > The tutorship is confirmed.
 - > The commission is paid.

7) *Edit Profile*

- Actors:
Tutor, Student.
- Description:
As a tutor or student i want to change my time-schedule. As a tutor i want to add certificates and grades to my profile or edit my description to increase my chance of getting students
- Pre-condition:
Tutor/student must be logged in.
- Post-condition:

The new and altered data is persisted in the database.

- Notes:

Not yet in the diagram.

2.2) Actor characteristics

- Student: this actor is interested in finding a good tutor for his studies. He is allowed to browse the tutors' profiles, in order to pick the best tutor possible. This is determined by the tutor's grades, feedbacks, time availability and location. The student can sort and filter freely the tutors' profiles, according to these characteristics. He can then send messages to the tutors with whom he may want to study.

- Tutor: this actor is interested in establishing fruitful tutorships with students. He is allowed to add grades, certificates, special characteristics to his profile. He can send messages and view the profile of the students who are interested to study with him. He will then confirm the tutorship agreed with a student.

- Provider: this actor is interested in receiving a commission for every tutorship established. He would like to provide a service that is easy to use and appealing to many students and tutors.

3. Specific requirements

- Functional requirements
 - System must do...

Title: Logging In	ID: FR-1
Summary: Users can log in the system.	
Rational: In order to perform certain activities, a user has to be authenticated.	

Title: Viewing Profile	ID: FR-2
Summary: Users can display profiles.	
Rational: Each students has to be able to view a tutor's profile.	

Title: Creating Profile	ID: FR-3
Summary: Users can create profiles.	
Rational: Each user has to be able to create either a students or tutors profile.	

Title: Searching Tutor	ID: FR-4
Summary: Users should be able to find a tutor matching their needs	
Rational: It should be possible to search tutors based on different selectable criterias. Criterias are the available time slots and grades from the tutor, the course that the students wants to get prepared for, the location and the rating of the tutors. The user should receive a list of tutors that match these criterias.	

Title: Users communication	ID: FR-5
Summary: Each student has to be able to communicate with a tutor by internal messaging.	
Rational: For an initial communication the students should be able to contact the tutor. They can communicate using those internal messages until the students decides to either take lessons from the tutors or find another tutor.	

Title: Rating Tutors	ID: FR-6
Summary: Students should be able to rate tutors.	
Rational: If a student has confirmed a tutorship, he should be able to rate the tutor after having taken the lessons. The rating consists of a comment about his experience with the tutor and should be visible on the tutor's profile for new possible students.	

Title: Requesting commission	ID: FR-7
Summary: The provider requests a commission from the students.	
Rational: The commission is requested from the students by the provider as soon as a tutorship between student and tutor is confirmed.	

Title: Edit Profile	ID: FR-8
Summary: Tutors and Students should be able to change their profile information	
Rational: Both tutor and student should have an option to change their profile or add information.	

- Non-functional requirements (external, performance, etc.)
 - System shall be...

Title: Loading responsiveness	ID: NFR-1
Summary: Loading a page should take less than 3 seconds.	
Rational: A user should ideally receive instant feedback from the system after an action was performed. Therefore the system should respond in less than three seconds. If more time is required the user should be notified.	

Title: User friendliness	ID: NFR-2
Summary: The system shall be user friendly.	
Rational: In order to perform an action a user should have to click on a button no more than three times.	

Title: Data privacy	ID: NFR-3
Summary: Profiles should only show as much information as needed.	
Rational: When viewing a profile only informations needed should be displayed. Especially the contact details should only be displayed after a tutorship was confirmed.	