ESE 2015 Software Requirements Specification (v1.4) 08/12/15

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.

System provider:

       wants to provide a working system and earn a commission on confirmed tutorships.

Bank:

       helps the service provider to earn his commission.

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. Students have the possibility to leave a feedback about the tutors which can maximise the tutors visibility. The platform offers a search page where the student can filter the results according to his needs. Possible filter criterias are: subject, class, fee. 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 bank gets his commission, at which point he reveals their contact information (e-mail address, full name).

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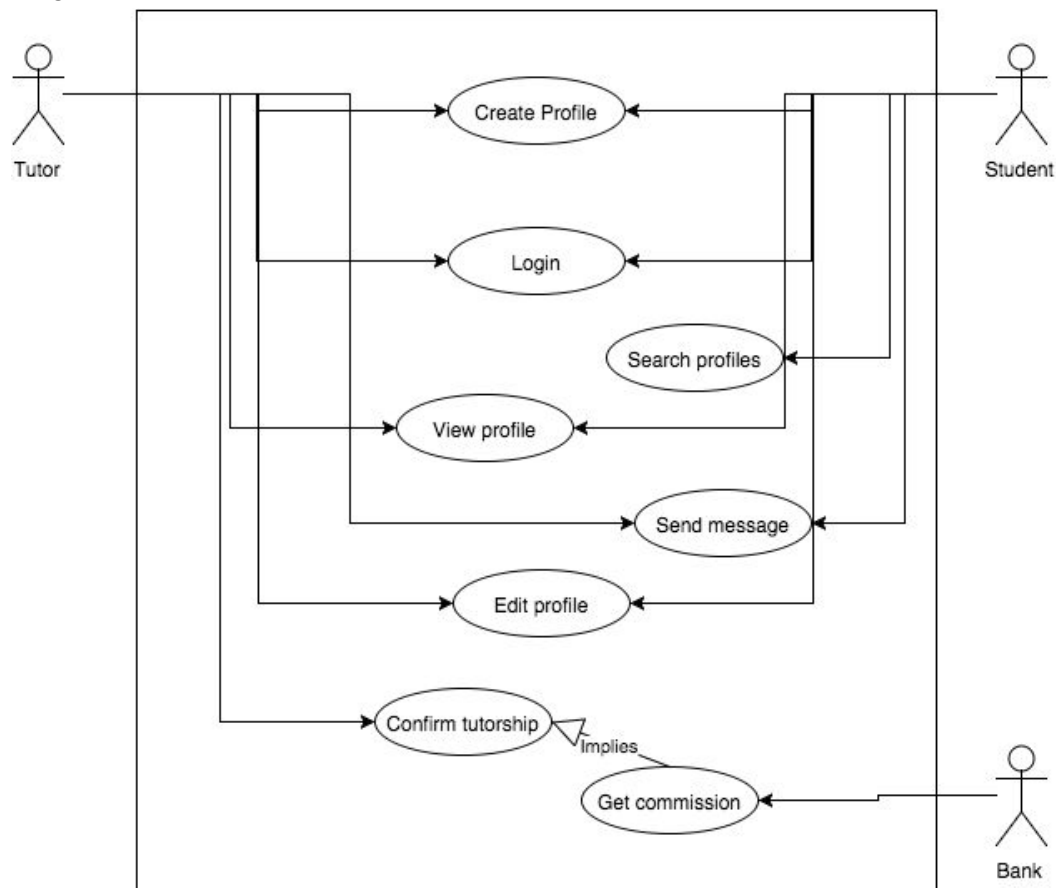https://tutor24.ch/, http://www.nachhilfe-vermittlung.ch/, http://owltutors.ch/

2. Overall description
2.1) Use cases
1) Create profile
2) Search profiles
3) View profiles
4) Send message
5) Confirm tutorship
6) Get commission
7) Edit profile
8) Rate tutor

Diagram:

Create Profile (Student)	Student	ID: UC-1A
Description:	As a student I need to create a profile to use all services.	
Pre-Condition:	The student needs a valid email address.	
Post-Condition:	The student's name, surname, email and password he chooses are persisted in the database.	
Alternative Scenario:	If the mail address is not valid or is already in use or the password does not meet the requirements, the form is displayed again, with an error message.	
Notes:	This use case is very similar to "Create Profile (Tutor)", only the entered data differ and the goal	

Create Profile (Tutor)	Tutor	ID: UC-1B
Description:	As a tutor I want to create a profile which maximizes my visibility and raises interest in me as a tutor.	
Pre-Condition:	The tutor needs a valid email address.	
Post-Condition:	The tutors personal data, consisting of his first name, surname, email, password, as well as his teaching detail, his subject, classes, the expected fee and a short bio are persisted in the database.	
Alternative Scenario:	If the mail address is not valid or is already in use or the password does not meet the requirements, the form is displayed again, with an error message.	

Search profiles	Student	ID: UC-2
Description:	As a student I want to search the tutors' profiles, in order to find the most suitable one for my needs.	
Pre-Condition:	None. (Even users without an account are allowed to perform this action.)	
Post-Condition:	The suitable tutors' profiles are listed, based on the sorting function determined by the student.	

Alternative Scenario:	If no tutor satisfies the requirements, a message is displayed. If no criteria is given, all tutors are listed.

View profile	Tutor, Student	ID: UC-3
Description:	As a tutor/student I want to explore others' tutor profiles.	
Pre-Condition:	User has to be logged in to view Tutor profiles	
Post-Condition:	The requested tutor profile is shown to the user.	
Notes:	Some personal information is kept hidden for privacy. Only tutor profiles are visible	

Send message	Tutor, Student	ID: UC-4
Description:	As a tutor/student I want to send messages to other users, in order to discuss the terms of a tutorship.	
Pre-Condition:	The tutor/student writing the message must be logged in.	
Post-Condition:	The message will be readable by the recipient on his next login or during his current session. The recipient gets a mail notification.	
Notes:	The first message will usually be delivered by the student, after a "search profile" action.	

Confirm tutorship	Tutor	ID: UC-5
Description:	As a student I want to confirm the tutorship with a tutor.	
Trigger:	The tutorship is requested by the tutor.	
Pre-Condition:	Tutor and student discussed the terms of the tutorships by message.	
Post-Condition:	A message for the payment of the commission is delivered to the student.	
Main Scenario:	> The student and the tutor discuss the tutorship. > The student and the tutor agree on the terms.	

	> The tutor offers the tutorship. > The tutorship is confirmed by the student. > The commission must be paid. > Student and tutor get a message with the contact data. > The student is able to rate the tutor and gets a message informing him about this

Get commission	Bank	ID: UC-6
Description:	As bank I get a commission on every tutorship confirmed between student and tutor.	
Trigger:	A tutorship is confirmed between student and tutor.	
Post-Condition:	A commission is paid through the bank's API.	
Alternative Scenario:	If the payment is not approved, another message is sent to the student.	

Edit Profile	Tutor, Student.	ID: UC-7
Description:	As a tutor, I want to be able to add new classes and grades to my profile or edit my description or fee. As a student or tutor I want to change personal datas.	
Pre-Condition:	Tutor/student must be logged in.	
Post-Condition:	The new and altered data is persisted in the database.	

Rate Tutor	Student	ID: UC-8
Description:	As a Student, I want to rate tutors.	
Pre-Condition:	A tutorship between student and tutor has been confirmed and the student received a message, informing him that he is able to rate his tutor.	
Post-Condition:	The comment and rating of the student is persisted to the database.	

Notes:	The ratings and comments that have been persisted to the database will be visible on the tutor's' profile. Not yet in the diagram
Main Scenario:	> The student decides to rate his tutor and follows the link in the message > The student leaves a comment of a few lines and a rating from 1 to 5 > The tutors rating is updated and the comment is visible on his profile page

Login	Tutor, Student	ID: UC-9
Description:	As a tutor/student I want to login get access to restricted areas.	
Pre-Condition:	User needs a valid email and password.	
Post-Condition:	User gets access to restricted areas such as edit profile, view tutor profile, etc.	
Alternative Scenario:	If either email or password is invalid, login page is shown again with error message.	

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 offer the tutorship agreed with a student.
- Bank: 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.

3.1 Additional Functional requirements
All functional requirements that do not arise directly from the use cases

Title: Pre Defined Courses and Classes	ID: AFR-1
Summary: A tutor should be able to choose his classes and courses out of a predefined list	
Rational: A tutor can only choose his courses and classes out of a premade list, so that its impossible to add non-sense courses or classes.	

3.2 Non-functional requirements

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.	