Project Requirements

Project Name: STutor

Team: ESE Team 8

Customer: Niklaus

Revision History

Version	Date	Revision Description
0.1	06.10.2015	Regrouping of the first Project Requirements
0.2	14.10.2015	Added missing requirements.
0.21	20.10.2015	Refined use cases to the actual UI, added a few NFR
0.22	28.10.2015	Fixed Use Case Diagramm
0.23	11.11.2015	Refined use cases to the actual UI, added a few NFR

Date: November 11, 2015

1 INTRODUCTION

1.1 Purpose

This document serves as a description of the project. It includes an overview of the system to be developed, its possible uses, user goals and characterizations and needed specific requirements.

1.2 Stakeholders

Aside from the developers, this project is of interest to the stakeholders, namely the ESE assistants who are client and head of the project, but also the targeted user base: students and tutors (see 1.3).

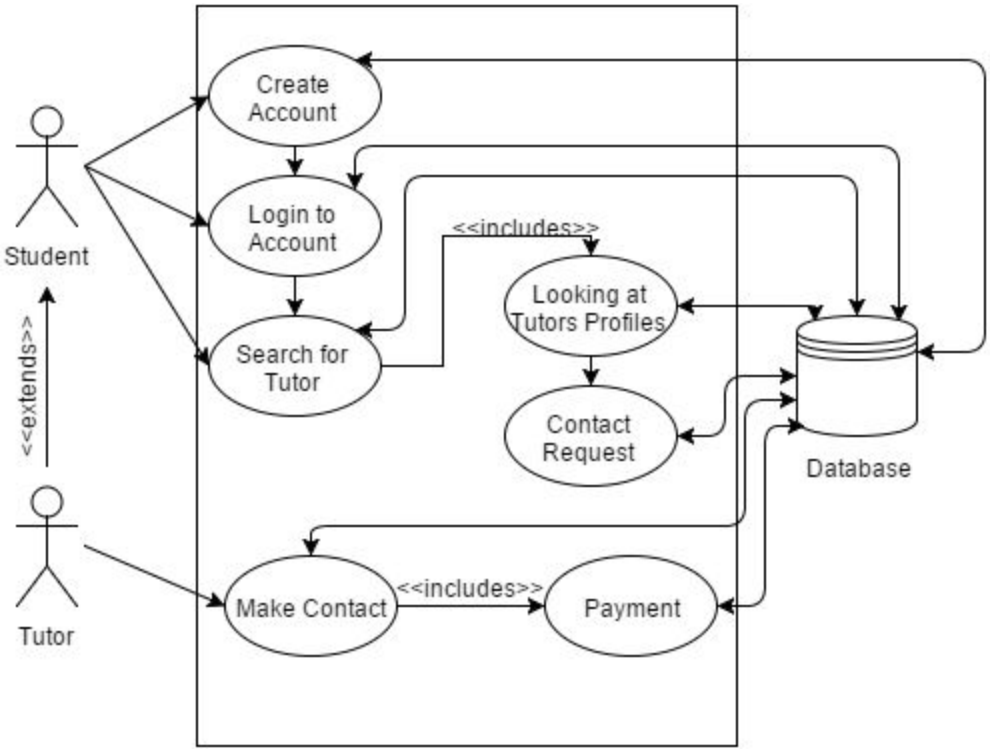
1.3 System Overview

The software system will be a website targeted at university students, who are looking for tutoring in a specific university course, and tutors, who will offer their expertise in those subjects to teach willing students. The platform will enable students to find matching tutors based on their search criteria and connect with them. For this service it will demand a commission on each connect.

2 OVERALL DESCRIPTION

2.1 Diagram

Use Case Diagram (V1.3)



2.2 Use cases

1. **Create Account**
   a. **Actors**
      Student
      Tutor
      Database (secondary)

   b. **Description**
      A User wants to create a new account

   c. **Trigger**
      A User clicks on the ‘If you don't have an account, click here to sign up!’ Button on the login page.

   d. **Pre-conditions**
      User shouldn’t be registered yet

   e. **Post-conditions**
      i. **For Student**
         1. Username and email must stay unique
         2. Password shouldn’t be null
         3. New User should be saved in Database
      ii. **For Tutor**
         1. -

   f. **Main Scenario**
      i. User opens the registration page.
      ii. The new account page opens with its registration form.
      iii. Enters first and last name, username, a password and email.
      iv. If a tutor wants so sign up, the checkbox “Sign Up as Tutor” has to be checked.
      v. Clicks on the “Sign Up” button.
      vi. Data is saved in Database
      vii. Opens the main Page with a welcome notification.

   g. **Alternative Scenarios**
      User Closes the Window or reloads it, all entered data are deleted

      4a. Username or Email already exist in Database
         1. Stay on the Subscribe Page
         2. Notifies user that username/email are already used
      4b. User’s Email is invalid
         1. Stay on the Subscribe Page
         2. Notifies user that email is invalid
      4c. One or more fields are left empty
         1. Stay on the Subscribe Page
         2. Notifies User that field can’t be empty
      4d. User clicks the “Cancel” button
         1. Gets redirected to login page

   h. **Special Requirements**
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i. Notes

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2. Fill in account for Tutor

a. Actors

Tutor
Database (secondary)

b. Description

As a tutor I want to create a rich profile that highlights my skills and maximizes my visibility.

c. Trigger

A User clicks on the “Add Lecture” or “Add Timeframe” Button

d. Pre-conditions

User must be logged in as a tutor and on the profile page.

e. Post-conditions

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f. Main Scenario

i. User clicks on “Add Lectures” or “Add Timeframe”
ii. Enters Lecture, Subject, University and Grade or day and hours
iii. Clicks on the Button “Add this Lecture” or “Add Timeframe”
iv. Data is Saved in Database
v. Opens profile page with updated information

g. Alternative Scenarios

a. User Closes the Window or reloads it, all entered data is deleted
b. User clicks on “Cancel” and gets redirected to profile page
c. User enters invalid hours or grade: stays on the page and gets notified about it
d. One or more fields are left empty: stays on page and gets notified about it

h. Special Requirements

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i. Notes

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3. **Login to Account**

a. Actors

Student
Tutor
Database (secondary)

b. Description

A User wants to login

c. Trigger

User enters the URL address of the Website and gets redirected to the login page

d. Pre-conditions

User is registered

e. Post-conditions

User enters his/her account if username matches password.

f. Main Scenario

1. User enters the URL address of the website and gets access to the login page
2. User enters username and password
3. System verifies match with data in Database
4. Data matches, and a new page opens with the user logged in

g. Alternative Scenarios

3a. Username doesn't exist in Database

1. Goes back to last step with notification to User

3b. Password doesn't match Username in Database (including one empty field)

1. Goes back to last step with notification to User

h. Special Requirements

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i. Notes

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4. Search for Tutor

a. Actors

Student
Database (secondary)

b. Description

As a student, I want to find a tutor that studied the subject I'm preparing for.
As a student, I want to make sure that a tutor can provide his services according to my needs.
As a student, I want to make sure that a tutor has good knowledge of the subject.

c. Trigger

Student enters the lecture he needs tutoring for into the search bar

d. Pre-conditions

i. Student is logged in

e. Post-conditions

i. List of Tutors is Displayed (or none if no one corresponds)

f. Main Scenario

1. Student enters the lecture he needs tutoring for into the search bar
2. If the right Tutor is already displayed proceed to last step
3. Student applies filter (University, subject, gender, minimum grade and what to sort by)
4. Student sees a list of Tutors, decides for one and clicks on “See Profile”
5. Student looks at the Tutor’s Profile

g. Alternative Scenarios

2a. No Tutor matches the filter
    1. List stays empty

h. Special Requirements

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i. Notes

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5. **Contact Request (from Student to Tutor)**

   a. **Actors**

      Student
      Database (secondary)

   b. **Description**

      As a student, I want to contact a tutor and discuss the details of the engagement. In order to do that, I first need to send a request to the tutor, which he has to accept.

   c. **Trigger**

      Student has clicked on the “Contact Tutor” button on a Tutor’s profile page

   d. **Pre-conditions**

      i. Student is logged in

   e. **Post-conditions**

      1. Contact request sent to Tutor

   f. **Main Scenario**

      1. Student clicks on the “Contact Tutor” button on a Tutor’s profile page
      2. A pop-up appears asking him if he’s sure
      3. Student clicks on “Yes”
      4. System sends a notification to the Tutor
      5. UI redirects the Student to a page saying “Notification was sent” offering the Student to go back to the main page
      6. The tutor receives a notification

   g. **Alternative Scenarios**

      1. Student clicks “No” on pop-up: Pop-up disappears

   h. **Special Requirements**

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   i. **Notes**

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6. Make Contact (Tutor to Student)

a. Actors

Tutor

b. Description

As a Tutor, I want to effortlessly interact with potential customers
As a service provider, I want to earn a commission on each engagement

c. Trigger

Tutor receives notification email that he got a request by a student without revealing private information about this student so that the Tutor cannot contact the student without paying the commission.

d. Pre-conditions

- Tutor is logged in

e. Post-conditions

- Tutor has paid money to the service provider
- Tutor receives information about the student so that a direct contact can be established

f. Main Scenario

1. Tutor receives notification on the website that s Student requests contact
2. Tutor clicks on “Accept”
3. Tutor accepts the offer, which makes him pay the common fee
4. Tutor pays the commission to the service provider
5. Tutor receives Student contacts as a new notification as soon as the payment is done

g. Alternative Scenarios

3a. Tutor declines the offer and thus has to pay nothing

1. Student receives Notification Email that the request was declined

h. Special Requirements

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i. Notes

3 REQUIREMENTS

3.1 Functional requirements

3.1.1 Tutor

A user can create a tutor profile. For signing up, only the username, full name, password and email address are required. Optionally, a tutor can add a lecture, subject, grade (multiple subjects are possible) and university and also his gender and wage. He can also add times when he would be free to tutor.

The public tutor profile consists of the following information: Username, rating, comments, gender, wage, what lectures he can tutor and when he's free.

3.1.2 Student

A user can create a student profile. Required sign up information is the email address, a password and a username, as well as his first and last name.

3.1.3 Search

The student can search for tutors by lecture, subject, gender, minimum grade and university and sort by rating, grade and wage. The student is able to see the tutor's free times in order to decide whether he fits his needs or not.

3.1.4 Rating

A student can rate his tutor after he's been accepted by this tutor. The grading scale goes from 1 to 6, only integers. He can also make an additional comment. A future student is then able to see the medium rating of a tutor as well as every comment combined with the individual rating without having to contact him.

3.1.5 Initial contact

Initial contact happens within the application. The application contacts the tutor when he was requested by a student. The tutor can accept this request and thus has to pay a given fee before getting the student's email address for further contact.

3.1.6 Access to account

A user can always login into his created account with his username and matching password, or log out of it.

3.2 Non-functional requirements

3.2.1 Privacy

Privacy of the tutor and the student: Full name and contact information should only be revealed after successfully establishing contacts.

3.2.2 Commission

The tutor needs to pay a commission to be able to answer requests.

3.2.3 Portability

The system should run on the desktop browsers Firefox and Chrome.

3.2.4 Accessibility

The website is available 24/7. Multiple people can access it simultaneously. It shouldn't be down for more than an hour in one month.

3.2.5 Response time

Every page not related to the searching of tutors is loaded within 2 seconds. Pages related to the searching of a tutor, including refreshing the filters, will be loaded within 10 seconds.

3.2.6 Security

Passwords are stored safely encrypted in the database, so that even a security breach will not reveal the user passwords.