

Project Proposal

Nachhilfebörse HTL - Leonding

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Introduction

Our project “Nachhilfebörse HTL-Leonding” is a school internal tutoring-market website which helps students to find the right tutor. There exists already a tutoring market at our school, but it is inconvenient and does not have a high number of users. This is the reason why we decided to renew our current tutoring market.

Since the easy access and a broad awareness of such a platform is inevitable we want to place it more centrally into the HTL Leonding’s school life. This involves an easy login via the already existing school accounts as well as a more central placement of the coaching platform within the school’s homepage. A link and a brief description of the tutoring market will be placed on an appealing spot on the official HTL Leonding homepage, which leads directly to our website.

Initial Situation

At the HTL Leonding the organization and handling of a tutor exchange platform is under the responsibility of Ms. Keck. Her main task is to collect students who are willing to offer coaching services to other students.

In order to do so she hands out list to the class teachers where new tutors can write down their name and personal information. This information will be entered in a Microsoft Access Database, where all tutors with their personal data are saved. Afterwards the list appears in the internal area of the htl leonding website in the Nachhilfebörse tab. Additionally the list is printed and then hung up in every first-grad-class and in front of the room E33.

When students want to address a possible coach they have to consult the list, find the student in his/her class or contact him/her via email or telephone and agree on a price and meeting times.

This system has a number of shortcomings:

1. No images on the contact list -> students are sometimes too shy to ask for the chosen tutor in front of the whole class -> contact barrier
2. System is outdated, inefficient and time-consuming for the administrator
3. Displaced and ancient form of publication. Students who need coaching are mostly not aware that there is a tutoring market
4. No quality assurance and data. The information on the list might be incorrect and everyone can get personal information about the tutors
5. No other info, like availability times, minimum remuneration etc.

Available Software in the market

There are various products in the market, here are three of them:

- **talentify.me**: An austrian-wide tutoring market, with an attractive web-design. One clear disadvantage of this platform is the lengthy sign-up procedure where a student id, a user name, and an extra password has to be provided.
- **lernquadrat.at**: A tutoring market for Austria, Germany and Switzerland, which offers plenty of possibilities of tutoring (single & group tutoring, crash courses) in a lot of convenient locations. One advantage of this website is the easy registration process, but on the other hand the user cannot choose his/her teacher and the design is not appealing.
- **www.betreut.at/nachhilfe**: An austrian-wide tutoring offering website. Clear disadvantages of this website are that the searching criterias are not specialised on tutoring (the user has to enter details of his/her family when he/she wants to sign up) and the website has a few bugs.

General Conditions and Constraints

For our project “Nachhilfebörse - HTL Leonding” we do need two main resources. Firstly we need the authentication module for logging in, because the data privacy of the students is a crucial requirement for our headmaster. Furthermore we need to find a school server, where our software can run in the end which includes a database to save all the students, who offer tutoring.

For publishing our website we will use a school domain.

Further constraints are:

- Knowledge in asp.net is needed. Our team has some basic experiences in web design and backend implementation in .net, because we have already had some website-designing lessons and we learned how to cope with databases. Nevertheless asp.net has never been used by us. Moreover, the web design in asp.net is handled differently, which is also not familiar to us.
- We will have to align the whole product with Mrs Keck, because she is in charge and has to maintain the system in the future. We have already had two initial meetings to compare and match our ideas. Later on, she will be in charge of the administration account on our website.
- Our website will only be available in German, because the school language is German too.

Project Objectives and System Concepts

The main idea of our project is to ease the process for searching for the right tutor and also decrease the work hours for the responsible persons.

If a student wants to use our website he/she first has to login with his/her school account, because the data privacy of our students is very important to our headmaster.

After logging in the student has to decide whether he/she wants to take or give tutoring. If he/she wants to give tutoring he/she has to make a detailed profile with his/her name, a picture of him/her, his/her department, his/her grade, the subjects he/she wants to give tutoring in and more information about himself/herself. If he/she wants to take tutoring lessons he/she can immediately start searching for the right teacher.

On the technical side, the tutors data gets saved in a database. When the user now starts to filter the teachers to find the right one he/she always gets a refreshed list of possible matching tutors. This list can be filtered by department, grade, subject, gender, rating or remuneration and then the list can be sorted by Grade, remuneration or rating.

The user also can send the tutor a request via email or SMS.

We also want to implement a rating system so every student can rate his tutor. The user can rate the tutor with 1-5 stars (5 stars is the best) and with a comment, which is required. With this function we want to differ good from bad teachers. Furthermore it helps students to get a more precise impression of the tutoring teacher. Before the ratings will actually appear on the website, the administrator(Mrs Keck) will have a look on the ratings and check if there are no fake or insulting ratings.

Of course our website is going to be responsive so the students can use it on their phones too.

There are three options for us to implement the database and the website asp .net, Java ee and PHP. We are going to use asp .net because it gives us a much more easy going feeling than Java or PHP because asp.net is not a language as Java and Php, it's a framework, which makes your life as a developer a lot easier. Plus you can use a number of languages supported by the .net platform for web development in asp.net like C#, VB.Net, Python etc.

By now, our website looks like this:

Login:

The screenshot shows a web browser window with the address bar displaying 'file:///C:/Users/Danijal/Desktop/bootstrap-3.3.7-dist/NachhilfebörseLogin.html'. The page has a dark blue header with the logo 'Nachhilfebörse' and navigation links 'Log In', 'Kontaktiere uns', and 'Über uns'. The main content area features a background image of a mountain landscape. On the left, a white-bordered box contains the text: 'WHEN YOU FEEL LIKE QUITTING THINK ABOUT WHY YOU STARTED'. On the right, the text 'WILKOMMEN BEI DER NACHHILFEBÖRSE HTL-LEONDING' is displayed above a login form. The form includes two input fields labeled 'Anmeldename' and 'Passwort', and a 'LOG IN' button.

Contact us:

The screenshot shows a web browser window with the address bar displaying 'file:///C:/Users/Danijal/Desktop/bootstrap-3.3.7-dist/Contact.html'. The page has a dark blue header with the logo 'Nachhilfebörse' and navigation links 'Kontaktiere uns', 'Über uns', and 'Log In'. The main content area has a light gray background with the title 'Anfrage einreichen'. Below the title, there is a contact form with three labeled input fields: 'E-mail *' (containing 'Anmeldename'), 'Betreff *' (containing 'Betreff'), and 'Beschreibung *' (containing 'Beschreibung'). Below these fields, a small text block reads: 'Geben Sie Details zu Ihrer Anfrage ein. Ein Mitglied unseres Supportteams wird umgehend antworten.' At the bottom of the form is a button labeled 'Einreichen'.

Opportunities and Risks

Opportunities

The greatest opportunities this project has, is that other schools could be interested in a tutoring website like ours, too.

Risks

The biggest risk is that pupils, who did not get tutoring lessons from a certain tutor could add bad ratings for that tutor(fake ratings). This would be blaming for the tutor and in the worst case scenario the user could delete his/her account on our website. The solution for this massive problem is the administration account, because the administrator (Mrs Keck) will check the ratings/comments before they go online.

Another serious problem is that hackers could hack our website and get personal information about the tutors.

Furthermore a tremendous issue is to find a server in our school where our program can run in the end, because even the sysadmin does not exactly know yet, where our program can run after it is finished.

Finally there is a possibility that our website could not be noticed by students. This could happen if our website would not be advertised enough. To avoid this we want to promote our website on our school homepage and at the beginning of the school year the website should be also advertised to the new pupils.

Planning

Here is a list of our current milestones:

Date	Goal
16.09.2016	Beginning of the project
End of first semester	<ul style="list-style-type: none"> • log in • basic design on all web pages
End April 2017	<ul style="list-style-type: none"> • database incl. tables should be created • list/order/sort/search all tutors on website
End of 4th grade 2017	<ul style="list-style-type: none"> • read data from webpage and save to database • ratings-feature
End of November 2017	<ul style="list-style-type: none"> • contact us (website) • contact tutors via email/sms • admin account
End of january 2018	Project should run on a virtual machine
March 2018	Project finished (on a school server)