

Turkish Sign Language (TSL) Web Page Project

Aka: "Türk İşaret Dili Kaynak Sitesi"

A Brief Description

You are required to build up a web page that aims to teach TSL to the users online. Luckily, there's already a prototype of the project (<http://www.cmpe.boun.edu.tr/tid/>) that would help you to imagine the targeting software but its functionalities are currently far from the requirements of this project. The project can be thought as a Youtube-like web page that is specialized to teach sign language using pre-recorded sign videos.

Motivation

This will be a real life project where the resulting software will be open for public use. Hundreds of visitors are expected to visit the web page in a day and learn/practice TSL. After success, this will be the first comprehensive TSL learning system ever available.

Details of the Project

Language

The default language of the project will be Turkish as well with all strings and graphics. All the content except user contributions will also be available in English.

User Interface

The current user interface of the project can be used as initial design instead of designing the system from scratch. But designing a better user interface from scratch that fits your plans would be also OK.

Development Environment

Since the CmpE Web supports PHP and MySQL and the finalized project will be hosted there, the software will be written using PHP and MySQL. Simplicity and user friendliness are the main themes, so a basic knowledge of AJAX will also be needed. The sign videos will be in flv format, thus, only the sign player will be in Flash. No need to know Flash.

The system is expected to work fine in IE6, IE7, Mozilla Firefox and Opera browsers. The fonts would seem OK both on Windows and Linux.

User Contributions

The portal will be in Web 2.0 standards, that is, it will grow with user contributions such as commenting a video, rating it, creating user defined courses (labeling).

Normally, the video content is already available. But some signs are performed differently on different regions of Turkey. So for each word there can be different signs. If the user wants to add a sign, she will be able to send her video through her webcam or adding an avi file. Your system will save it, convert it to flv format and show as another version of the current video.

User Types/Interactions

The users will be assigned to a group. There will be system admins, moderators (teachers), and unprivileged users (students). The system admin would add/modify/delete sign videos and users and any type of properties except the other admin's ones. The teachers would modify the courses' properties. All user types would show sign videos by lessons (categories), create/modify/delete own courses (with selected signs).

User Performance

The users may want to test their knowledge. They would like to make multi-choice quizzes from the courses they created. More number of quiz types would be discussed during the project to enhance teaching performance of the system. The user performance statistics will be saved and could be reported. Apart, there will be quizzes involving larger number of signs and the best performing students will be shown on homepage!

Teacher/Students Relationship

One can need this system to create own courses and use it to teach her students. So, the teachers will be able to create courses and her students would enroll into the course. The teacher can prepare quizzes for her students and want to see their performance.

More Web 2.0

The mainpage will have some parts such as a random video, latest news, most active users, latest comments, most visited videos, etc. It will be available to embed the sign videos in other sites similar to Youtube's embed video option. Subscribing to the web page will be available through RSS. There will be "3 random signs of the day" and "latest news" subscriptions.

Additional Requirements

Some minor additional requirements can be added throughout the project period or some properties would be seen as unnecessary.

Versions

Roughly (may change):

TidKS v0.1

- Preparation of project's source code repository, issue tracking system, wiki
- Rough user interface (how will it look like)
- User module (login/logout/creation, user types)
- Switchable languages (default: Turkish)

- An example video that can be played in browser

TidKS v0.2

- Database filled with pre-recorded videos.
- The admin can create/modify/delete the courses involving the videos.

TidKS v0.3

- Users can contribute/personalize
- Some fancy boxes on the homepage are ready such as most viewed signs, a random sign, etc.
- Latest news
- RSS
- Embeddable sign

TidKS v0.4

- Better teaching performance with different types of quizzes and reporting.
- Best performing students on homepage.

TidKS v0.5

- Teacher/Students membership
- Remaining minor features.

TidKS v1.0

- Users can contribute own videos using the browser.

Contact Person

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