



## SignLex.org detailed description

[www.SignLex.org](http://www.SignLex.org) is the online sign language lexicon of IT related terms.



Fig. 1: Startscreen

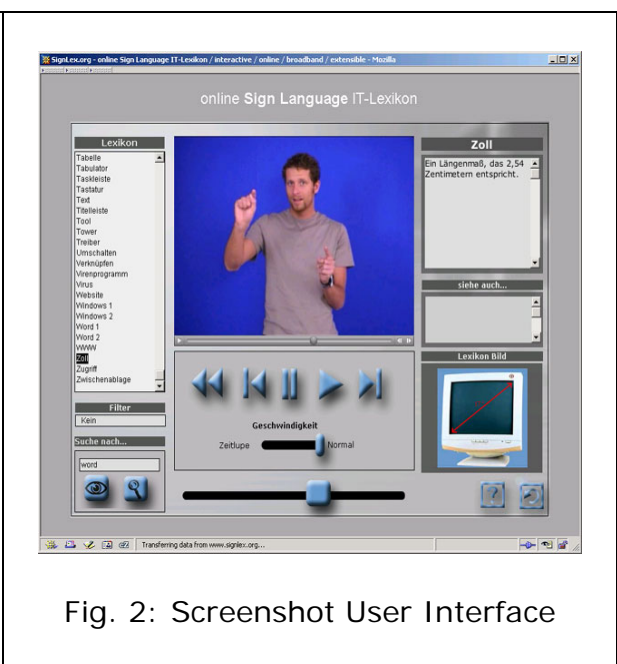


Fig. 2: Screenshot User Interface

### Key points and technical issues

'SignLex.org' wants to be a connection between the world of the hearing and the deaf. It is a broadband application for teaching sign languages, using interactive video. It contains more than 150 different videos and each movie explains one term of the sign language. The terms are ordered thematically, one can on the one hand search for arbitrary terms or, on the other hand select from a list of terms. This library is designed in such a way that it is easily configurable and extendable.

Through the streaming video interface it is possible to serve each consumer's individual needs. The quality of the video adapts itself depending on the bandwidth of the internet connection. Moreover, it is possible to navigate freely back and forth in the video to study difficult gestures more closely. Every gesture has an additional picture attached to it, to improve the learning curve even more.



Fig. 3: Some online gestures

In general, the product is to substantially improve the possibilities in online learning for deaf people, it is considered to make learning sign languages more efficient. It can be a valuable support for teachers and students alike. The goal of this project is to build up a community and an information platform for deaf people.

One key aspect of this application is its extensibility. Everyone with the proper access rights can update the internal database with new videos and term definitions, without the need of having any knowledge of programming or computers. The only pre - requisite necessary is a basic knowledge of internet browsing. By exploiting the possibilities of a central resource we can imagine the potential of this application. For example, there is a cooperation between different institutes for deaf people. Moreover, one can post videos of special terms which are characteristic of a certain region or an individual problem to the online repository.

This rich media web application was realized at the FH JOANNEUM, degree programme Information Management.

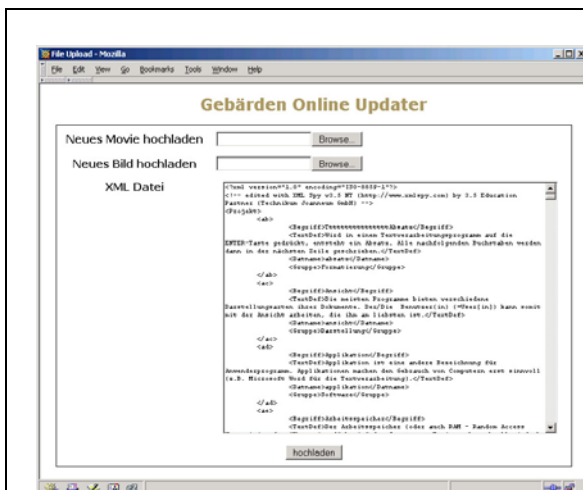


Fig. 4: Upload Module

## Features

- Rich media web application
- Visual learning environment
- Quicktime Streaming
- High bandwidth
- Thematically ordered terms
- over 150 videos
- online update of videos
- online community
- open concept (XML)

## Background information

'SignLex.org' was created with the aim of creating a better communication between the deaf and the hearing. It is to provide means to ease learning sign languages in general. There is a strong need for such an application since at present there live 8.000 deaf people in Austria, and at about 10.000 are hard of hearing [1]. In Germany, 80.000 people suffer from not hearing anything at all.

There have been political discussions, but the situation of deaf people in our society is very difficult. Society doesn't want to cope with problems of this kind, they are being marginalised. This is also the core motivation of this project i.e. to show people that this problem exists and it is one of the many issues our society has to deal with.

'SignLex.org' was created for a better communication between deaf and hearing people. Especially for the latter this project should offer some kind of bridging, it should minimize fears of contact between the disabled and the non-disabled. Through its visual presentation this project eases the learning, and makes some aspects of sign language and its various dialects clearer. It is very important that disabled people use the internet for their benefit, and this piece of software should be one small step towards that development.

A major part of our educational system is based on spoken communication, hence useless for deaf people. The result is that many deaf people do not get the right form of education and they remain far behind their possibilities. Using new media technologies we should try to minimize the disadvantages deaf people encounter in the educational sector. The start of using the internet was already a giant leap in the right direction, using broad band technologies could support the disabled even more. This project wants to be part of and basis for it.

Rough estimates tell us that in Europe there are about half a million people who use sign language on a regular basis for conversing with others. In seven EU member countries sign languages have the status of being a 'minority language', but not in Austria.

People using a sign language have created their own culture, detached from the main stream, they have created their own world. Leaving every day's problems aside, modern computer terms are often a problem for deaf people, regarding the sheer amount of new words created by the industry. There is a whole mass of technical terms that can be a major barrier for using new technologies. This software application tries to fill a gap in the education by providing a visual learning environment.