

VIDEOMAILER

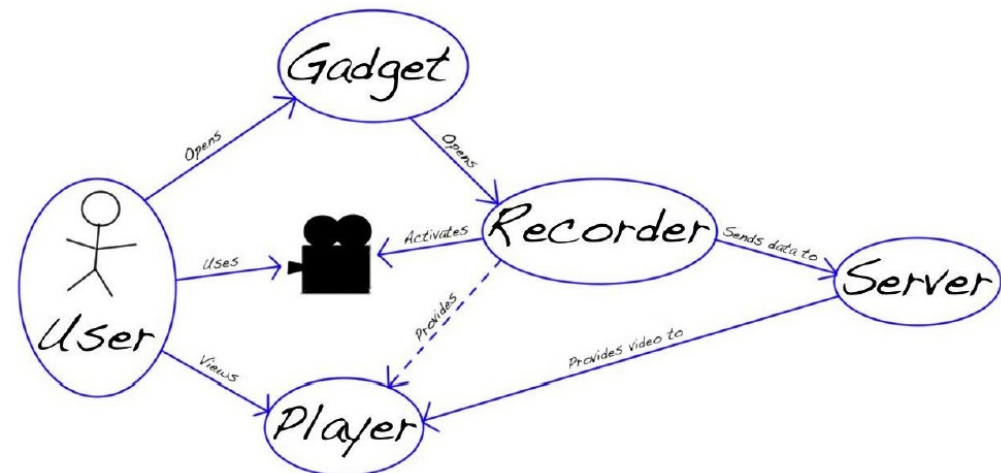
A SIGN LANGUAGE MAILING INTERFACE

An important part of communication among students, teachers and co-workers not only at Masaryk University is based on email. This of course is valid for persons with all kind of disability as well but can cause difficulties for persons not using the written language as their primary language of communication and therefore could create misunderstandings.

Masaryk University accommodates the highest amount of hearing impaired students in the Czech Republic and employs more than 10 hard of hearing or deaf teachers and coworkers.

Students and colleagues with hearing impairment and those who use sign language as communication until now have to combine more platforms to maintain conversations in written and sign. This leads to disorganisation. Further, the different standard video sharing portals used for exchange of signed correspondence is not ready for discussions or cooperations on academic topics.

The task within the SS12 project was it to analyse the current situation of communication for the deaf and hard of hearing. Based on those findings, an integrated solution to combine written correspondence with sign language communication was created.



We concluded to consider 2 types of communication needs in sign language:

- a. The need of exchanging informal information or comments among students or coworkers
- b. Distribution of official information and announcements

The difference in needs for both types is the required quality in both, the language and technical image quality. While the informal correspondence is done similar as a written email by simply starting to sign the information, official information are linguistically pre prepared and checked for understandability in language and content.

Therefore, those information are recorded in higher quality and in several shots.

For our project, because of the requirements and short time, we concluded to concentrate on sign conversations and informal contacts requiring a fast and easy video shot.

The following criteria were mentioned as crucial:

- An Video resolution of minimal 320×240 with 25fps
- Integration to current email environment, minimally use of a common address book
- Compatibility to common work environment (Windows 7, Google Chrome, installed webcam)
- Up to 5min recorded video
- Storage outsourced and independant on inbox capacities
- combination of of video and text/attachments

The requirements and analysis concerning the work environment led to an integration of video recording into Gmail as it is used by internal sign users and gives the possibility for all users to migrate even with other providers. The video will be stored on a server not to fill the users inbox with sign videos.