

Project Name

PAPAĞAN

Project Definition

PAPAĞAN is a 3D virtual environment for sign language education.

Project Scope

According to Türk İşaret Dili (TİD) website¹, UNESCO reports that there are more than 2.5 millions deaf people in Turkey. Despite this huge number, there is a big insufficiency in deaf education. One important deficiency here is the absence of institutions and material for Turkish Sign Language education. TİD is not being taught at related schools since 1953 and the efforts to make it widespread are not efficient.

In this project we aim to obviate this deficiency providing a competent utility for sign language education and communication. To achieve this goal, PAPAĞAN will constitute a comprehensive education tool and a communication medium for TİD in 3D environment.

¹<http://turkisaret dili.ku.edu.tr/>

Project Description

A Friendly User Interface

PAPAĞAN shall support an easy-to-use and concise graphical interface to meet the needs of its users. This interface will consist of three parts; main interface, lessons/games and text-to-sign language translator. Users will be able to access lessons, educational games and text-to-sign language translator by using main interface. Lessons, educational games and text-to-sign language translator parts are described in the following sections.

Lessons and Games

PAPAĞAN will contain several basic lessons, entertaining games and pre-determined scenarios in order to create more appealing education atmosphere. Especially we will focus on the building-blocks of daily speech such as colors, adverbs, vehicles, feelings, occupations during these activities.

Text Based Education Tool

PAPAĞAN is an education tool that has the capability of generating sign language and lip motions in a 3D environment from a given text. Input data will be obtained either interactively from the user or from a current text file. With these outstanding features PAPAĞAN will be an indispensable tool for lip reading and sign language education.

A Flexible Database

PAPAĞAN will have a flexible database with easy update features. With only downloading the new database from internet, users shall be able to reach the new animations, courses and games. Furthermore, a tool will be designed for developers to facilitate the administration of PAPAĞAN.

Literature Review

During this short period, we were able to examine some products related with sign language education. First of all, we should state that; there is not any software tool doing this job in Turkey. Most of the products are about American Sign Language (ASL) and based on videos rather than 3D interactive animations. On the other hand, system requirements are very high such that; one of the demos we have installed has a usage up to %99 CPU and 200 MB of RAM.

In most of the countries, sign language education begins at early ages so majority of the target audience are children. Because of this fact, products are easy to use with friendly and cute user interfaces. Also the characters used in animations are modeled either from charming toys or teenagers.

Project Team

Company Name

KORSAN YAZILIM

Project Members

Name	Student ID	E-mail
İbrahim Taşyurt	1347970	ibrahim.tasyurt[at]ceng.metu.edu.tr
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Team Organization

KORSAN YAZILIM has a Democratic Decentralized team structure. There is not any permanent leader; instead, every month one of the team members with required qualifications will be the leader according to the agenda.

Ground Rules

1. The project team will be gathering twice in a week on Tuesday and Friday at 10pm to 12pm. In case of a change or an additional meeting, it will be announced at the prior meeting.
2. If a project member can not attend a meeting, he should explain his reason at least one hour before the meeting to the project leader. Furthermore, if two or more project member can not attend a meeting, that meeting will be brought forward to a suitable time.
3. The project agenda will be recorded by project leader at each meeting. It will include meeting topics, minutes, tasks and meeting summary.
4. All topics for the next meeting will be decided at the prior meeting. Hot topics will be considered at beginning of the meeting and in the case of necessity, they will be added to the meeting topics.
5. All project members will have weekly tasks. These will be described, and assigned at the meetings by the result of the collaborative and democratic work with the maximum possible number of project members.
6. Tasks will be tried to be assigned by considering candidate or reluctant project members at the meetings.
7. Every project member will be informed about the work of other project members at the meetings.
8. An absent project member for a meeting will have the responsibility to catch the current project status and inform other members about his work for that meeting.