

GW Technical English SS 2016

Vocabulary Collector

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1) The Abstract

Reading a non-native language text can take a lot of time and be hard just because of unknown vocabulary and finding a translation for each word takes time. If there would be a software, which translates the unknown words automatically and lists them in order, the vocabulary learning phase could be easier and faster and it would be a great way to learn vocabulary by reading the translated words list.

The purpose of our project was to translate the texts which were marked by user, from English to German. The user can mark the text which are needed to be translated, by copying them in the clipboard (Ctrl + C). The software will translate the texts and list them in order. If a physical list would be necessary, the user can print it directly from the software.

2) Feasibility Study Report

1) Problem

Translating the words in a text one by one costs lots of time, therefore a translator which translates the words automatically in the background, would be more efficient and listing the unknown words is an another task which is needed to be done separately.

2) Objectives

User-related objectives:

- To make reading a text process faster.
- To save time / resources.

Computer-related objectives

- To create a wordlist
- Easy accessing of translated words

3) Solution

A translator software, which is using an API to translate the words online and lists the translations in an order, would be efficient and fast.

4) Evaluation of Solution

The translator software has some advantages and disadvantages.

Advantages:

- Time efficient.
- Easy to use.

Disadvantages:

- Needs a reliable database instead of using an API.

3) Introduction

Vocabulary Collector is a translator, which gets the texts from clipboard to translate them. The software was development on Windows workspace by using Qt 5.6.0 and Visual Studio 2015.

4) Concept

The aim of this project is to make the translation easy and fast just by marking the texts, which are needed to be translated. The software reads the clipboard and adds it as input then sends the input to the translator via Internet and receives the translation of input and writes both inputs in a list and separates them into two language columns.

5) Tests

1) Adding words and translations manually

The words and the translations can be added manually by user. The software lists them in right order.

2) Translator API

The translator API uses a HTTP protocol and it still needs improvements. The connection between client and server is not stable.

6) Software components

C++ Source Code, Qt 5.6.0 for GUI, Visual Studio 2015 for compiling

7) Project Log

1st of ^{May} 2016:

Planned project
Researched online translator APIs
Decided on online translation service
Chose third party libraries to use
Chose license
Began implementation
Designed GUI
Implemented manual insertion of vocabulary
Implemented editing of vocabulary
Added online lookup
Integrated reading from clipboard
Added export to file functionality

Added printing capability

Removed useless code

Fixed bugs

5th of May 2016:

Added to-do list

10th of May 2016:

Fixed bugs

Made things look nicer

Added remove entry functionality

Added import from file functionality

Turned online lookup off by default