Software Engineering Group Project (G17)

User Interface Specifications Use Case Document

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# Introduction

This document is the standard for the user interface of the software. The software will need different sections, with a similar graphic layout, but different functionalities:

* Learning platform
* Practice platform
* Dictionary
* “My words” section

Similar graphic objects, such as buttons, background items and icons will be instantiated multiple times in different parts of the software, so to give an impression of consistency to the user and save time in production.

An online presentation showing the functionalities and the overall graphic interface can be downloaded from the server and visualized with PowerPoint, as well as a UML and Use-Case diagrams, available also in this document.

## Purpose of this Document

The purpose of this document is to describe the user interface specifications for the Welsh Learning Desktop App that we will be creating, in accordance with the User Interface Specification Standards [1].

## Scope

This document will describe typical users of the application, and how they are going to interact with the interface with use-cases. It will also lay out the possible errors that may occur when interacting with the interface and how they shall be dealt with.

## Objectives

The objective of this document is to aid the development of the Welsh Learning Desktop App, by considering the typical users we can build the interface to be more user-friendly towards them. Also, by identifying and planning how to deal with potential errors we are aiding the development of the application.

# Typical users

Example user 1

John is an English student who wishes to learn Welsh, he is not studying the language professionally and will use this platform in order to memorize all the Welsh words.

Solution: **Learning platform**

The application will use a simple algorithm that will show some words, that can be saved as “My Words”.

Example user 2

Jennifer works in a Welsh company and is taking Welsh courses, she already knows some of the language, but she wants to practice more.

Solution: **Practicing platform**

The practice consists in a simple quiz that will show the possible translations of a word. Points are scored based on the answers that the user gives to the questions in the quiz.

Example user 3

Ffion is Welsh student who is proficient in Welsh.

She still needs to look up in the dictionary sometimes, so she will be able to use this app as a dictionary.

Solution: **Dictionary**

This will be a simple dictionary that will display the list of words, with the possibility of searching for a pattern of characters, adding new words, showing the properties of a selected word and saving words in a list.

# USe-Cases

See below the use-case diagram I have created. This diagram describes the general paths that a user may take when using the application. Since there are no ‘user levels’ in this all of the users can take the same paths. From the main menu the user may take 3 paths.

A close up of text on a white background

Description automatically generated

## Use-Case 1 – Open Dictionary

The first path that I will discuss is the dictionary section of the application. The user will press a button on the main menu to take them to this section. The list of words will be displayed, and a search bar so they can search for specific words and they will be able to toggle which language they search in. The user will also be able to add new words to the dictionary and could add them to a special list of their own.

## Use-Case 2 – Practice Words

In this part of the program the user will be able to test their skills on some of the words that they have added to their list. A word from their list will be displayed at the top of the interface and they will have 4 options to choose from. One of these options will be the correct translation and the other three will be random words from the dictionary. The application will keep track of their score throughout the test and let them know how they performed at the end.

## Use-Case 3 – Open ‘My Words’ list

This part of the application will be where the user can view the words that they have added to the list they want to learn. It will display the English and Welsh of each word and let the user remove them from the list if they desire.

# Errors

In terms of errors for the application, there is not a lot of user-input that isn’t just pressing buttons. There is one part that requires a more complex user-input though, which is where the user can add a new word to the dictionary.

In adding a new word there will be three fields that the user will have to fill out for it to be a valid ‘Word’ in the program. The fields for the English word and its Welsh equivalent should not be empty or contain invalid characters. The field for to describe the type of word should not be empty or contain an invalid input. If an empty or invalid field is detected then the program should flag this up to the user with an error message, telling them that one of the fields is empty or contains and invalid character.

## Attempting to add an empty word

In the application, there is a possibility for the user to add new words to the dictionary, where they must write the English word, its Welsh translation and the word type. Leaving the fields where the words are supposed to go would cause issues for the dictionary if it were allowed, so we must not allow the user to do this. To prevent this from happening, if the user attempts to add a word with a field empty then a pop up error will appear telling them the issue.

## Attempting to add a word with illegal characters

If the user types anything in the fields required that is considered an illegal character and try and submit it, then the application will show an error message to the user. The error message will tell them that they are attempting to use illegal characters in a field.

REFERENCES

*[1] Software Engineering Group Projects – User Interface Specification Standards / 1.2 (Release)*

DOCUMENT HISTORY

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