Software Engineering Group Project 09

Welsh Vocabulary Tutor Design Specification Standards

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# Introduction

## Purpose of this Document

The purpose of this documentation is to specify the design specification in the project. This version of the Design Specification standards is specific to CS22120 projects.

## Scope

This document specifies the necessary layout and content of a design specification.

This document contains a UML Diagram, a Sequence Diagram

## Objectives

The main objective is to aid the production of a design specification which is a complete and accurate translation of the client’s requirements into a description of the design elements necessary for the implementation phase. These will generally include the software structure, components, interfaces, and data. In a complete design specification, each requirement must be traceable to one or more design entities.

# decomposition description

**2.1 Programs in system**

*(write a brief sumary of programm we just have 1, maybe UI is separate)*

**2.2 Significant classes in each program**

2.2.1 -> Dictionary

2.2.2 -> App

2.2.3 -> Setting

2.2.4 -> Revise

*(write a few sentence to explain what there are and why there are significant classes)*

**2.3 Modules shared between programs N/A**

**2.4 Mapping from requirement to classes**

|  |  |
| --- | --- |
| *Requirement* | *Classes providing requirement* |
| FR1 | Dictionary, Word |
| FR2 | Comparator, Word, Dictionary, MyList |
| FR3 | Dictionary, Word |
| FR4 | MyList, Dictionary |
| FR5 |  |
| FR6 |  |
| FR7 |  |
| FR8 |  |
| FR9 |  |
| FR10 |  |

**3.DEPENDENCY DESCRIPTION**

**3.1 Component Diagrams**

**4. INTERFACE DESCRIPTION**

TBI - to be implemented

Classes and their relations

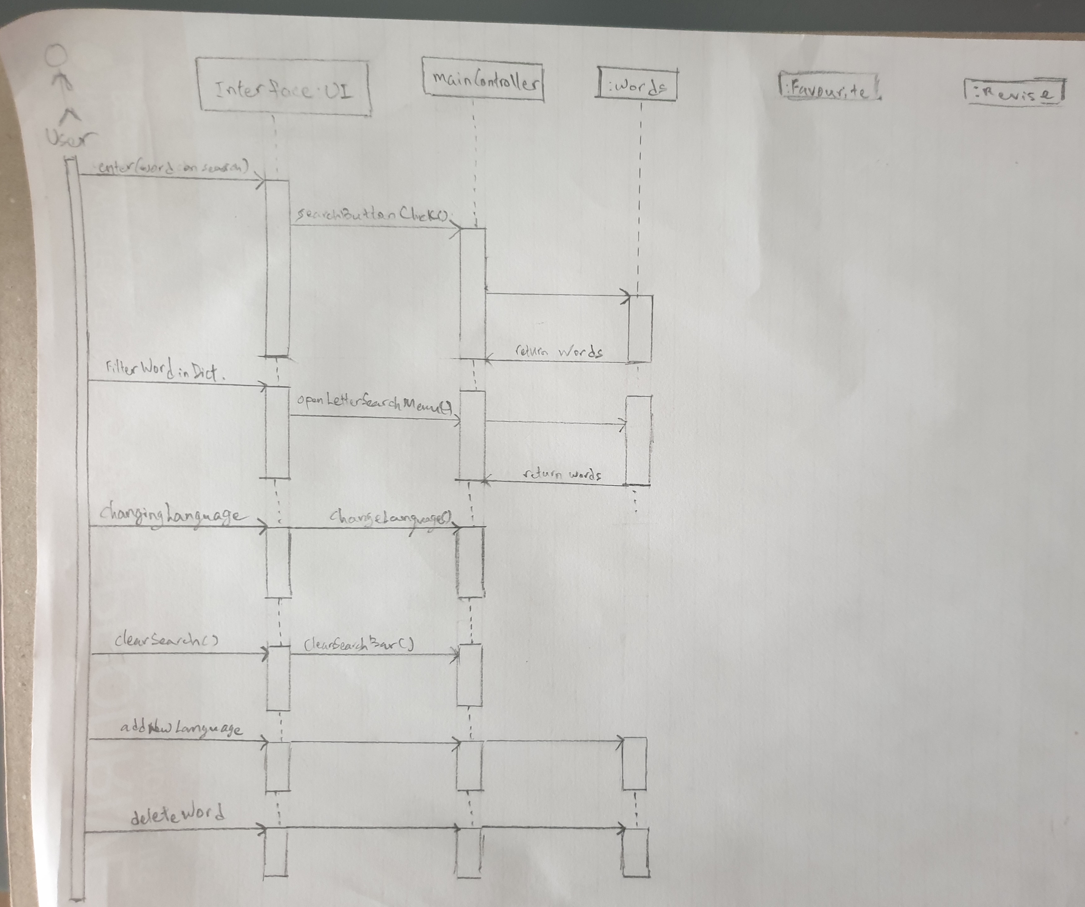
**5. Detailed Design**

**5.1 Sequence Diagrams**

A sequence diagram is an interaction diagram that shows the details on how operations are carried out. The purpose of sequence diagram is to model the interaction between objects within a collaboration that realizes an operation.

This is the sequence diagram:

(working on it)



**5.2 Significant Algorithms**

- TreeMap -> Get the most star from myList for learning

-

**5.3 Significant Data Structure**

- Binary Tree ->Dictionary

- Array List -> revise

-List -> Revise

*(write where we using them)*

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DOCUMENT HISTORY

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