

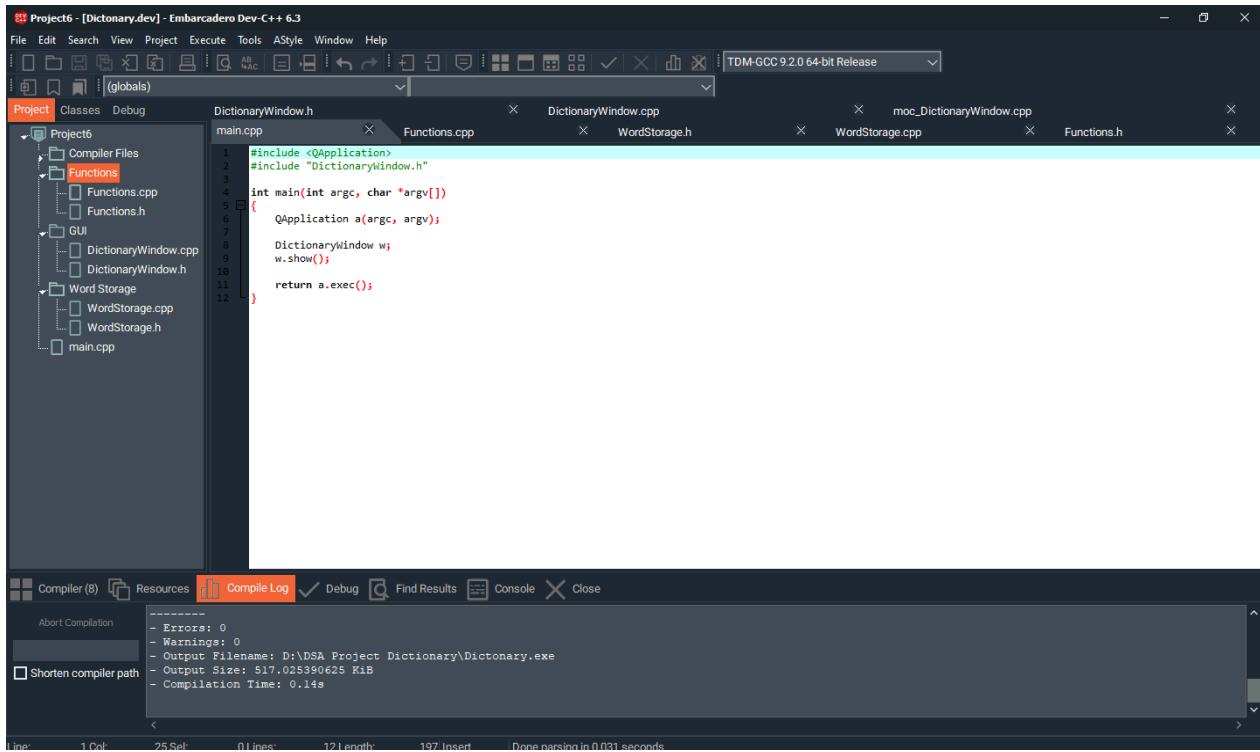
PROGRESS REPORT DSA PROJECT

DICTIONARY APP (Not Named Yet)

Lester Arvid P. Anastacio - Lead Developer

Code Progress Screenshots:

Overall Progress:

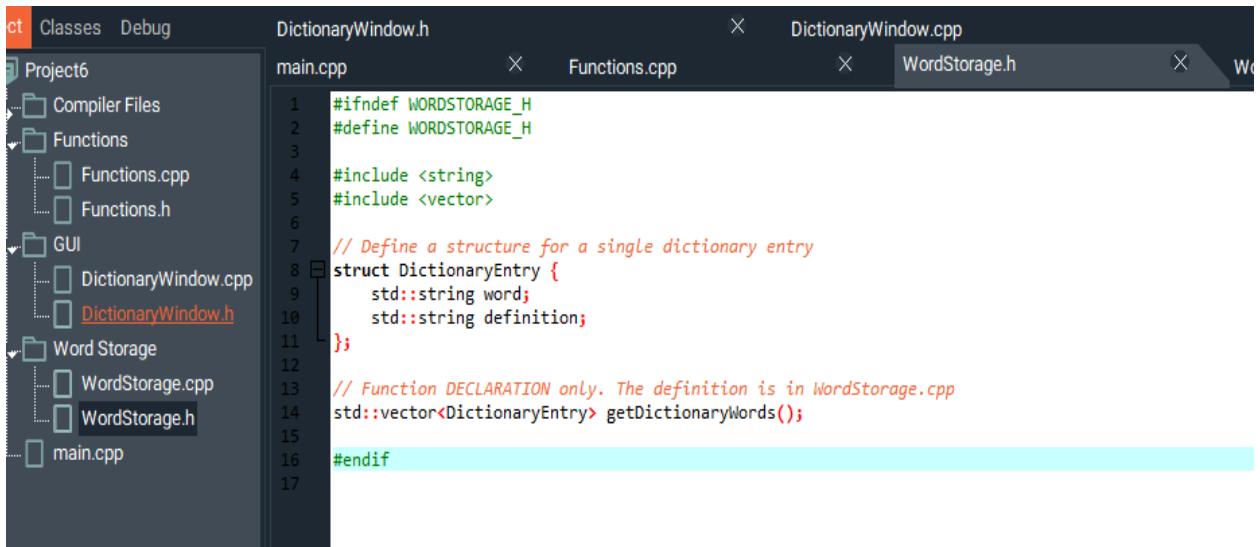


```
#include <QApplication>
#include "DictionaryWindow.h"

int main(int argc, char *argv[])
{
    QApplication a(argc, argv);
    DictionaryWindow w;
    w.show();

    return a.exec();
}
```

Word Storage Folder (Not Yet Finished)



```
#ifndef WORDSTORAGE_H
#define WORDSTORAGE_H

#include <string>
#include <vector>

// Define a structure for a single dictionary entry
struct DictionaryEntry {
    std::string word;
    std::string definition;
};

// Function DECLARATION only. The definition is in WordStorage.cpp
std::vector<DictionaryEntry> getDictionaryWords();

#endif
```

```
#include "WordStorage.h"

// Function DEFINITION: This is where the dictionary data resides.
std::vector<DictionaryEntry> getDictionaryWords() {
    // --- PLACEHOLDER FOR DICTIONARY WORDS START ---
    // The words below are just for testing

    std::vector<DictionaryEntry> dictionary = {
        {"Ephemeral", "Lasting for a very short time.(TESTING WORDS)"},  

        {"Serendipity", "The occurrence and development of events by chance in a happy or beneficial way.(TESTING WORDS)"},  

        {"Ubiquitous", "Present, appearing, or found everywhere.(TESTING WORDS)"},  

        {"Lethargy", "A lack of energy and enthusiasm.(TESTING WORDS)"},  

    // PLACEHOLDER: INPUT YOUR FUTURE WORDS HERE  

    // Example format: {"YourWord", "Your Definition"},  

};

return dictionary;

// --- PLACEHOLDER FOR DICTIONARY WORDS END ---

}
```

GUI Folder (Not Yet Finished)

```
#include "DictionaryWindow.h"
#include <QDebug>
#include <QGridLayout>

// Constructor: Initializes widgets and Loads data
DictionaryWindow::DictionaryWindow(QWidget *parent)
    : QMainWindow(parent)
{
    setWindowTitle("Dictionary App");

    // Load the dictionary data from your WordStorage.cpp file
    dictionaryData = getDictionaryWords();

    // Set up the visual elements and Layout
    setupUI();

    // Connect button clicks to the action method
    connectSlots();

    // Optionally set a minimum size
    setMinimumSize(400, 300);
}

DictionaryWindow::~DictionaryWindow() {
    // Qt takes care of deleting child widgets, so manual deletion
    // is usually not required unless you used 'new' without a parent.
}

void DictionaryWindow::setupUI() {
    // 1. Create central widget and Layout
    QWidget *centralWidget = new QWidget(this);
    setCentralWidget(centralWidget);
```

Project Classes Debug

DictionaryWindow.h

```
2 #define DICTIONARYWINDOW_H
3
4 #include <QMainWindow>
5 #include <QLineEdit>
6 #include <QPushButton>
7 #include <QLabel>
8 #include <QVBoxLayout>
9 #include <QWidget>
10 #include <vector>
11 #include <string>
12
13 #include "Functions.h"
14 #include "WordStorage.h"
15
16 class DictionaryWindow : public QMainWindow {
17     Q_OBJECT
18
19 public:
20     // Constructor
21     explicit DictionaryWindow(QWidget *parent = nullptr);
22     // Destructor
23     ~DictionaryWindow();
24
25 private slots:
26     // This method will be called when the Search button is clicked
27     void handleSearchButtonClicked();
28
29 private:
30     // --- GUI Elements (Widgets) ---
31     QLineEdit *searchBox;
32     QPushButton *searchButton;
33     QLabel *resultLabel; // Used to display the definition
```

Functions Folder(Not Yet Finished)

Project Classes Debug

DictionaryWindow.h

main.cpp

DictionaryWindow.cpp

WordStorage.h

moc_DictionaryWindow.cpp

WordStorage.cpp

Functions.h

```
1 ifndef FUNCTIONS_H
2 define FUNCTIONS_H
3
4 #include <vector>
5 #include <string>
6 #include "WordStorage.h" // Needed for the DictionaryEntry struct
7
8 // DECLARATION of the function
9 DictionaryEntry searchWord(const std::vector<DictionaryEntry>& dictionary, const std::string& searchWord);
10
11 #endif
```

```

1 #include "Functions.h"
2 #include <algorithm>
3 #include <cctype>
4
5 // DEFINITION of the search function
6 DictionaryEntry searchWord(const std::vector<DictionaryEntry>& dictionary, const std::string& searchWord) {
7     // Note: This function uses a slow Linear search (O(n)).
8     // We will update this later for better performance!
9
10    std::string lowerSearchWord = searchWord;
11    std::transform(lowerSearchWord.begin(), lowerSearchWord.end(), lowerSearchWord.begin(),
12                  [](unsigned char c){ return std::tolower(c); });
13
14    for (const auto& entry : dictionary) {
15        std::string lowerEntryWord = entry.word;
16        std::transform(lowerEntryWord.begin(), lowerEntryWord.end(), lowerEntryWord.begin(),
17                      [](unsigned char c){ return std::tolower(c); });
18
19        if (lowerEntryWord == lowerSearchWord) {
20            return entry; // Word found
21        }
22    }
23
24    // Return an empty entry if the word is not found
25    return {"", ""};
26
27

```

Jason - (Documentation/Content Manager/Organizer)

Progress Screenshot:

English Dictionary

Alcantara:

1. Action - The process or state of acting or of being active
Synonyms: Operation, Movement,
Antonyms: Inactivity, rest, standing
Example: We need to take some **action** to solve the problem we are facing.
2. Abandon - To leave something or someone permanently
Synonyms: forsake, desert, quit
Antonyms: keep, maintain, continue
Example: She decided to **abandon** the old house after the storm.
3. Ability - The skill or power to do something.
Synonyms: talent, capability, competence
Antonyms: inability, weakness
Example: He has the **ability** to solve complex math problems easily.
4. Absurd - Ridiculously unreasonable or silly.
Synonyms: ridiculous, foolish, preposterous
Antonyms: sensible, reasonable
Example: The idea that pigs can fly is **absurd**.
5. Abundant - Existing in large quantities; more than enough.
Synonyms: plentiful, ample, copious
Antonyms: scarce, limited
Example: The garden was full of **abundant** flowers in spring.
6. Accurate - Correct and without mistakes.
Synonyms: exact, precise, correct
Antonyms: inaccurate, wrong
Example: Her report was both **accurate** and well-researched.
7. Admire - To respect or look up to someone or something.
Synonyms: respect, appreciate, adore
Antonyms: despise, dislike
Example: I **admire** his dedication to helping others.
8. Adversity - A difficult or unpleasant situation.
Synonyms: hardship, misfortune, struggle
Antonyms: prosperity, success
Example: She showed great strength in the face of **adversity**.
9. Affection - A gentle feeling of love or liking.
10. Agile - Able to move quickly and easily.
Synonyms: nimble, quick, flexible
Antonyms: clumsy, sluggish
Example: The cat was so **agile** it could jump over the fence with ease.
11. Ambitious - Having a strong desire to achieve success.
Synonyms: aspiring, determined, driven
Antonyms: lazy, unmotivated
Example: She's an **ambitious** student who dreams of becoming a doctor
12. Ample - More than enough; abundant.
Synonyms: sufficient, plenty, generous
Antonyms: insufficient, scarce
Example: There was **ample** space for everyone at the picnic.

13. Anxious - Feeling worried or uneasy about something.

Synonyms: worried, nervous, apprehensive

Antonyms: calm, relaxed

Example: He felt **anxious** before his job interview.

14. Appeal - To make a serious or heartfelt request.

Synonyms: plead, request, petition

Antonyms: demand, refuse

Example: The charity **appealed** for donations after the flood.

15. Arrogant - Having an exaggerated sense of one's own importance.

Synonyms: conceited, proud, haughty

Antonyms: humble, modest

Example: His **arrogant** attitude made it hard for others to work with him.

Avila - (Documentation/Content Manager)

Progress Screenshot:

Tagalog Dictionary:

Avila:

1. **Aksyon** - Paggawa o pagkilos upang maisagawa ang isang bagay.

Kasingkahulugan: kilos, galaw, hakbang

Kasalungat: walang galaw, pagtigil

Halimbawa: Kailangan nating gumawa ng aksyon upang maresolba ang problema.

2. **Alaala** - Isang gunita o bagay na nagpapaalala ng nakaraan.

Kasingkahulugan: gunita, memorya

Kasalungat: paglimot, pagwawaglit

Halimbawa: Ang lumang larawan ay nagbigay ng matatamis na alaala sa kanyang puso.

3. **Alon** - Galaw ng tubig na tila sumasaway sa hangin.

Kasingkahulugan: agos, daluyong

Kasalungat: katahimikan, kawalang-galaw

Halimbawa: Ang alon sa dagat ay tila musika sa kanyang kaluluwa.

4. **Alab** - Matinding damdamin o apoy ng hangarin at pagmamahal.

Kasingkahulugan: sigla, ningas

Kasalungat: lamig, pagkawalang-gana

Halimbawa: Ang alab ng kanyang puso ang nagtulak sa kanya upang magtagumpay.

5. **Altintunun** - Batas o gabay na sinusunod upang mapanatili ang kaayusan.

Kasingkahulugan: tuntunin, patakaran

Kasalungat: kaitahan, kawalang-batas

Halimbawa: Ang bawat mag-aaral ay dapat sumunod sa altintunun ng paaralan.

6. **Alindog** - Kagandahan o karisma na nakahahalina sa paningin o damdamin.

Kasingkahulugan: kariktan, ganda

Kasalungat: kapangitan, kabastusan

Halimbawa: Nabighani siya sa alindog ng dalagang kanyang nasilayan.

7. **Agham** - Sistematiskong pag-aaral ng kalikasan batay sa ebidensya at pagsusuri.

Kasingkahulugan: siyensa, karunungan

Kasalungat: pamahiin, kamangmangan

Halimbawa: Ang agham ang nagbibigay-linaw sa mga hiwaga ng mundo.

8. **Aninaw** - Kalinawan ng bagay na nakikita sa ibabaw ng tubig o salamin.

Kasingkahulugan: malinaw, liwanag

Kasalungat: labo, dilim

Halimbawa: Nakita niya ang aninaw ng buwan sa tahimik na lawa.

9. **Agimat** - Bagay na pinaniniwalaang may taglay na kapangyarihan o proteksyon.

Kasingkahulugan: anting-anting, orasyon

Kasalungat: kawalang-lakas, kahinaan

Halimbawa: Dala niya ang agimat na minana pa mula sa kanyang ninuno.

10. **Aklas** - Pag-aalsa laban sa pamahalaan o kapangyarihan.

Kasingkahulugan: rebelyon, pag-aaklas

Kasalungat: pagsunod, katahimikan

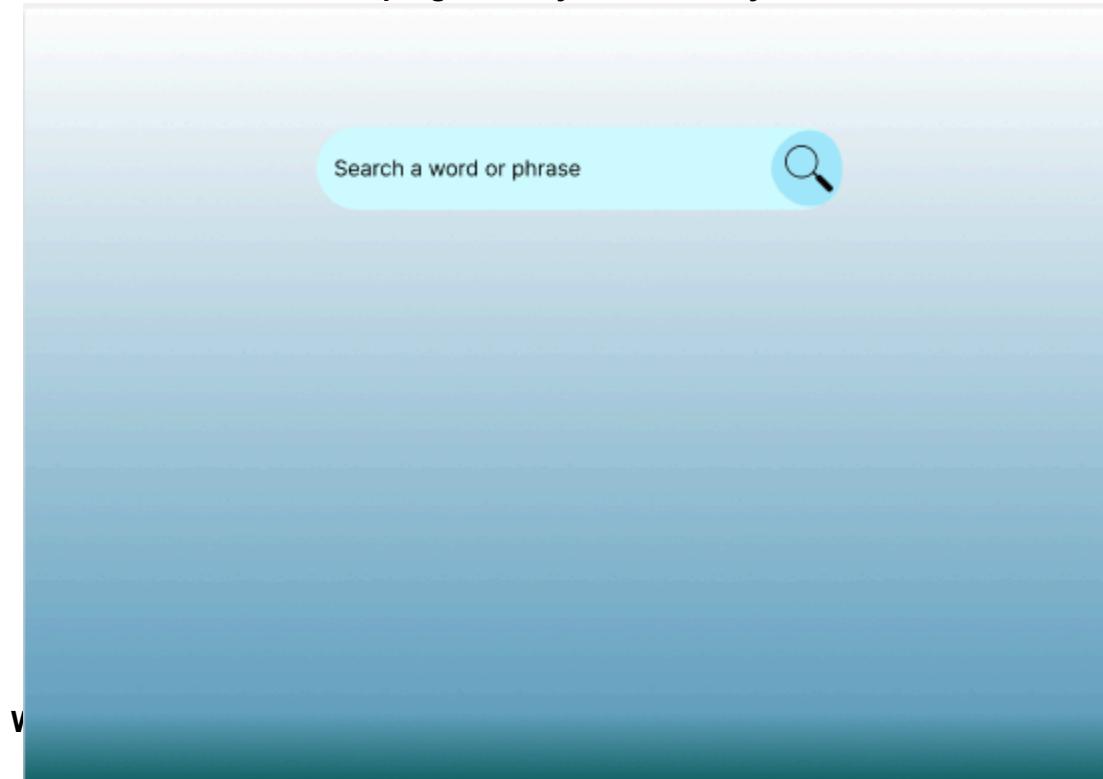
Halimbawa: Nagkaroon ng aklas ang mga manggagawa para sa katarungan.

11. **Amihan** - Malamig na hanging nagmumula sa hilagang-silangan, karaniwang sa taglamig.
Kasingkahulugan: simoy, hangin
Kasalungat: habagat, init
Halimbawa: Ramdam ang amihan sa mga umagang puno ng hamog.
12. **Anyo** - Panlabas na kaanyuan o porma ng isang bagay o nilalang.
Kasingkahulugan: hugis, kaanyuan
Kasalungat: kawalang-anyo, deformidad
Halimbawa: Ang anyo ng ulap ay tila isang lumilipad na ibon.
13. **Araw** - Bituin sa gitna ng ating sistemang solar na nagbibigay-liwanag at init.
Kasingkahulugan: liwanag, sikat
Kasalungat: gabi, dilim
Halimbawa: Ang araw ay sumisimbolo ng pag-asa at bagong simula.
14. **Alapaap** - Ulap o mga bahaging nasa himpapawid.
Kasingkahulugan: ulap, langit
Kasalungat: lupa, dagat
Halimbawa: Ang eroplano ay dahan-dahang naglaho sa alapaap.
15. **Adhika** - Malalim na pagnanais o mithiin ng puso.
Kasingkahulugan: pangarap, layunin
Kasalungat: kawalang-layunin, pagwawalang-bahala
Halimbawa: Ang kanyang adhika ay makatulong sa mga nangangailangan.

Kerwin - (Assistant Designer/Documentation/Organizer)

Progress Screenshot

Main Menu Screen: Still in progress / layout not final yet.



Needs improvement will update the design and layout for better interaction and display.

Word of the day x

e___t_y

Hint

When you understand
how others feel

Dictionary System

Search

Home

History

Dictionary System Screen:
Not yet done still adding more element
and improving the layout for the search
and the definition section.