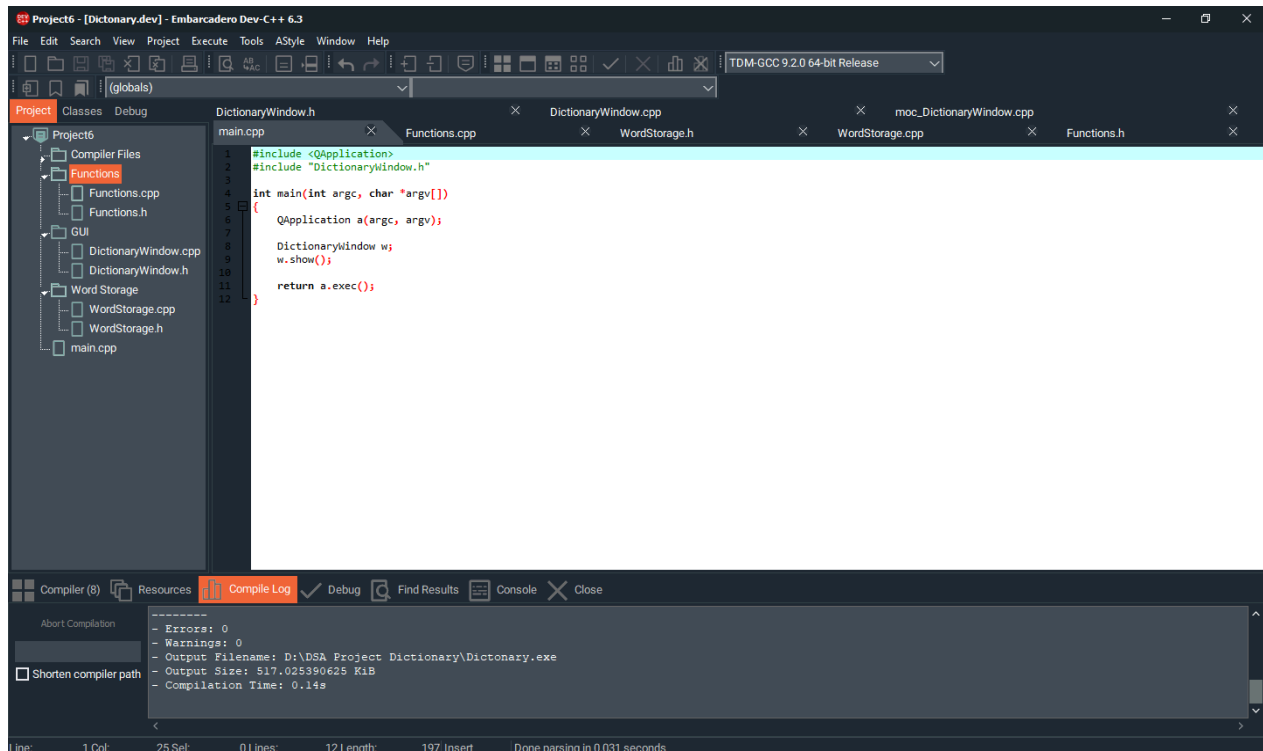


PROGRESS REPORT DSA PROJECT

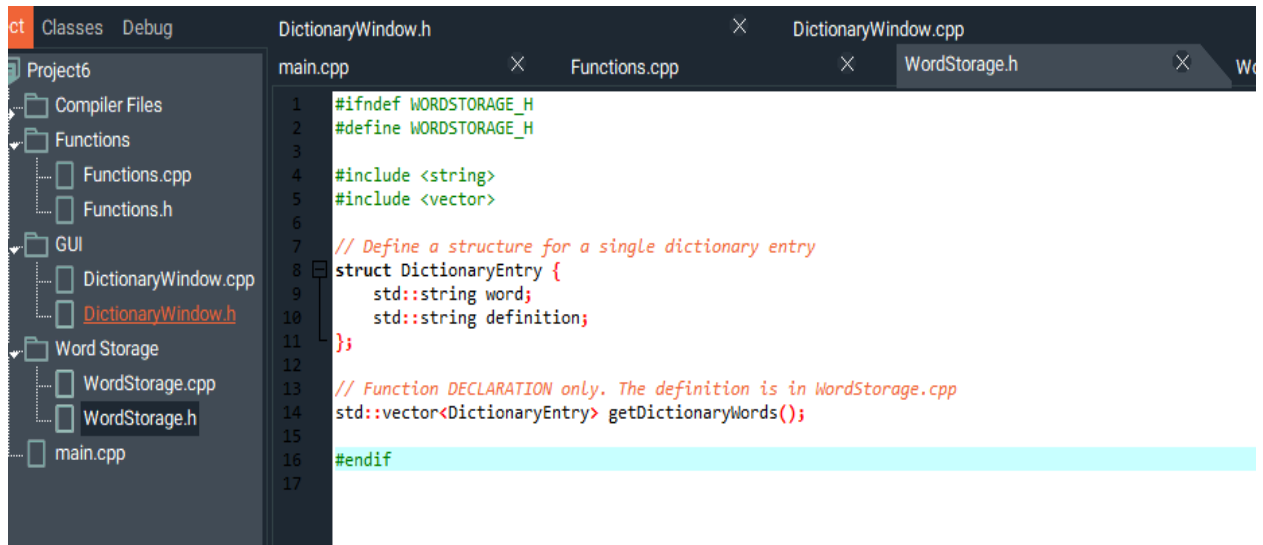
DICTIONARY APP (Not Named Yet)

Lester Arvid P. Anastacio - Lead Developer
Code Progress Screenshots:

Overall Progress:



Word Storage Folder (Not Yet Finished)



The screenshot shows the Qt Creator IDE with the 'Project6' project open. The file explorer on the left shows the project structure: Compiler Files, Functions (Functions.cpp, Functions.h), GUI (DictionaryWindow.cpp, DictionaryWindow.h), Word Storage (WordStorage.cpp, WordStorage.h), and main.cpp. The main editor displays the implementation of the `getDictionaryWords` function in `DictionaryWindow.cpp`. The function is a `std::vector<DictionaryEntry>` that returns a list of words and their definitions. The code includes comments indicating it's a placeholder for testing data.

```

1 #include "WordStorage.h"
2
3 // Function DEFINITION: This is where the dictionary data resides.
4 std::vector<DictionaryEntry> getDictionaryWords() {
5     // --- PLACEHOLDER FOR DICTIONARY WORDS START ---
6     // The words below are just for testing
7
8     std::vector<DictionaryEntry> dictionary = {
9         {"Ephemeral", "Lasting for a very short time.(TESTING WORDS)"},
10        {"Serendipity", "The occurrence and development of events by chance in a happy or beneficial way.(TESTING WORDS)"},
11        {"Ubiquitous", "Present, appearing, or found everywhere.(TESTING WORDS)"},
12        {"Lethargy", "A lack of energy and enthusiasm.(TESTING WORDS)"},
13        // PLACEHOLDER: INPUT YOUR FUTURE WORDS HERE
14        // Example format: {"YourWord", "Your Definition"},
15    };
16
17    return dictionary;
18
19    // --- PLACEHOLDER FOR DICTIONARY WORDS END ---
20 }
21

```

GUI Folder (Not Yet Finished)

The screenshot shows the Qt Creator IDE with the 'Project6' project open. The file explorer on the left shows the project structure: Compiler Files, Functions (Functions.cpp, Functions.h), GUI (DictionaryWindow.cpp, DictionaryWindow.h), Word Storage (WordStorage.cpp, WordStorage.h), and main.cpp. The main editor displays the implementation of the `DictionaryWindow` class in `DictionaryWindow.cpp`. The code includes the constructor, which initializes the window title and loads dictionary data, and the `setupUI` method, which sets up the visual elements and layout.

```

1 #include "DictionaryWindow.h"
2 #include <QDebug>
3 #include <QGridLayout>
4
5 // Constructor: Initializes widgets and loads data
6 DictionaryWindow::DictionaryWindow(QWidget *parent)
7     : QMainWindow(parent)
8 {
9     setWindowTitle("Dictionary App");
10
11    // Load the dictionary data from your WordStorage.cpp file
12    dictionaryData = getDictionaryWords();
13
14    // Set up the visual elements and layout
15    setupUI();
16
17    // Connect button clicks to the action method
18    connectSlots();
19
20    // Optionally set a minimum size
21    setMinimumSize(400, 300);
22 }
23
24 DictionaryWindow::~DictionaryWindow() {
25     // Qt takes care of deleting child widgets, so manual deletion
26     // is usually not required unless you used 'new' without a parent.
27 }
28
29 void DictionaryWindow::setupUI() {
30     // 1. Create central widget and layout
31     QWidget *centralWidget = new QWidget(this);
32     setCentralWidget(centralWidget);
33

```

The screenshot shows the Qt Creator IDE with the 'Project' tab selected. The project structure on the left includes 'Project6' with subfolders 'Compiler Files', 'Functions', 'GUI', and 'Word Storage'. The 'GUI' folder contains 'DictionaryWindow.cpp' and 'DictionaryWindow.h'. The 'Word Storage' folder contains 'WordStorage.cpp' and 'WordStorage.h'. The 'main.cpp' file is also listed. The 'DictionaryWindow.h' file is open in the editor, showing the following code:

```
1 #ifndef 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)

The screenshot shows the Qt Creator IDE with the 'Project' tab selected. The project structure on the left is the same as the previous screenshot. The 'Functions' folder contains 'Functions.cpp' and 'Functions.h'. The 'Functions.h' file is open in the editor, showing the following code:

```
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 <ctype>
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.
Synonyms: fondness, warmth, devotion
Antonyms: hatred, indifference
Example: The mother showed great **affection** for her child.
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:

- 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.
- 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.
- Alon** - Galaw ng tubig na tila sumasayaw sa hangin.
Kasingkahulugan: agos, daluyong
Kasalungat: katahimikan, kawalang-galaw
Halimbawa: Ang alon sa dagat ay tila musika sa kanyang kaluluwa.
- 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.
- Alituntunin** - Batas o gabay na sinusunod upang mapanatili ang kaayusan.
Kasingkahulugan: tuntunin, patakaran
Kasalungat: kalituhan, kawalang-batas
Halimbawa: Ang bawat mag-aaral ay dapat sumunod sa alituntunin ng paaralan.
- Alindog** - Kagandahan o karisma na nakahahalina sa paningin o damdamin.
Kasingkahulugan: karikitan, ganda
Kasalungat: kapangitan, kabastusan
Halimbawa: Nabighani siya sa alindog ng dalagang kanyang nasilayan.

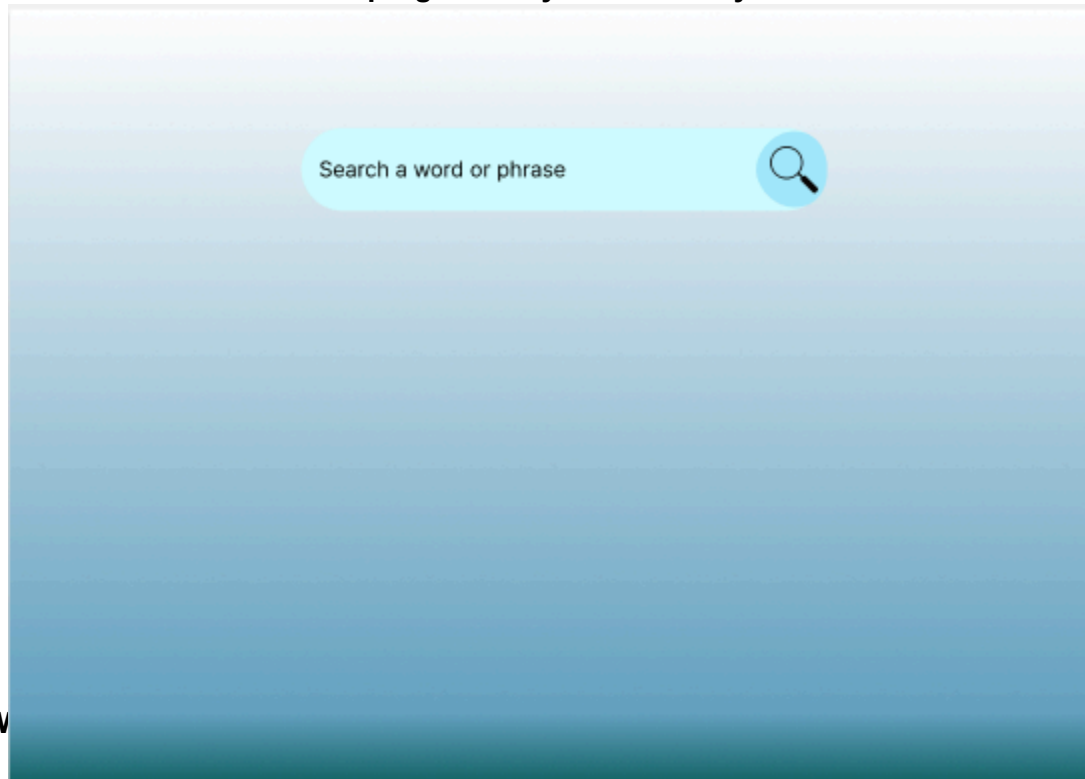
- Agham** - Sistematikong pag-aaral ng kalikasan batay sa ebidensya at pagsusuri.
Kasingkahulugan: siyensya, karunungan
Kasalungat: pamahiin, kamangmangan
Halimbawa: Ang agham ang nagbibigay-linaw sa mga hiwaga ng mundo.
 - Aninaw** - Kalinawan ng bagay na nakikita sa ibabaw ng tubig o salamin.
Kasingkahulugan: malinaw, liwanag
Kasalungat: labo, dilim
Halimbawa: Nakita niya ang aninaw ng buwan sa tahimik na lawa.
-
- 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.
 - 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.

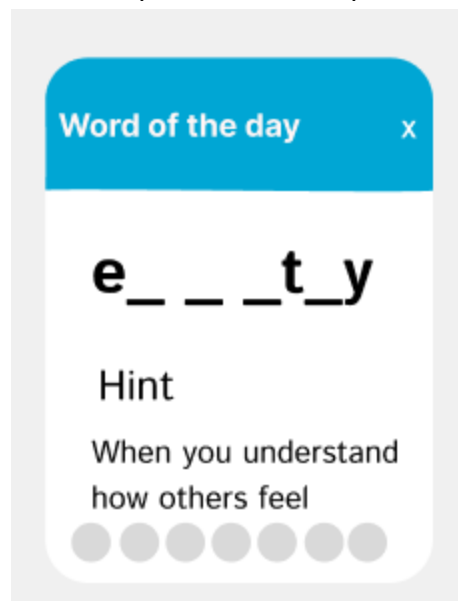
Kerwin - (Assistant Designer/Documentation/Organizer)

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.



Dictionary System Screen:

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

