# Assignment Description

For this assignment, you will gather information from the user for their next five calendar events. You will ask for the event name, the month, the day, and the year of the event.  You will calculate a reminder date by subtracting 1 from the day (to make things easier, there will be no events that fall on the first of the month). You will then output a table to a file with the event information in it.

# GitHub URL (optional)

[https://github.com/wesleyhixon/Programming-Assignments/tree/8654972e5e604769f1c3be83f11967fd0c9ec320/M02%20Programming%20Assignment%202](https://github.com/wesleyhixon/Programming-Assignments/tree/8654972e5e604769f1c3be83f11967fd0c9ec320/M02 Programming Assignment 2)

# Readme Documentation

Input Information: Input is 5 calendar event names and dates (month/day/year)

Output Information: Output is a table containing all 5 calendar events along with

# Flowchart Screen Shots (optional)

Screen shot(s) here

# UML and Use Case Diagrams (optional)

Screen shot(s) here

# Source Code of All files (.h, .cpp)

#include <iostream>

#include <fstream>

#include <string>

#include <iomanip>

using namespace std;

/\* Program name: Calendar Events

\* Author: Wesley Hixon

\* Date last updated: 06/12/2024

\* Purpose: Prompts user for 5 calendar event names and dates. Outputs events to an output file along with a reminder date.

\*/

void tableHeader(ofstream& outputFile){

// Generate Table Header

outputFile << left;

outputFile << "|" << setw(50) << setfill('-') << "-" << "|" << endl;

outputFile << setfill(' ');

outputFile << "| " << setw(19) << "Event Name" << "| " << setw(11) << "Event Date" << "| " << setw(15) << "Reminder Date" << "| " << endl;

outputFile << "|" << setw(50) << setfill('-') << "-" << "|" << endl;

}

void getEvent(string sequence, ofstream& outputFile){

// Initializing Variables

int day, month, year;

string eventDate, reminderDate, eventName;

// Prompting for event name

// This uses getline() to accommodate for more than one word event names

cin.ignore();

cout << "\n" << "Enter the " + sequence + " event name: ";

getline(cin, eventName);

// Prompting for month

cout << "\n" << "Enter the month of the event: ";

cin >> month;

// Prompting for day

cout << "\n" << "Enter the day of the event: ";

cin >> day;

// Prompting for year

cout << "\n" << "Enter the year of the event: ";

cin >> year;

// Creating date string in month/day/year format

eventDate = to\_string(month) + "/" + to\_string(day) + "/" + to\_string(year);

// Creating reminder day one day before event day

int reminderDay = day - 1;

reminderDate = to\_string(month) + "/" + to\_string(reminderDay) + "/" + to\_string(year);

// Creating header for each event entry

tableHeader(outputFile);

// Outputting event information to file

outputFile << setfill(' ') << "| " << setw(19) << eventName << "| " << setw(11) << eventDate << "| " << setw(15) << reminderDate << "| " << endl;

outputFile << "|" << setw(50) << setfill('-') << "-" << "|" << endl;

return;

}

int main()

{

// Open Output File

ofstream outputFile;

outputFile.open("output.txt");

// Prompt User for next 5 calendar events

cout << "This program will prompt you for your next 5 calendar events \n";

cout << "These events will be put into a table, along with a reminder eventDate \n";

// Calling function to prompt for 5 calendar events

getEvent("first", outputFile);

getEvent("second", outputFile);

getEvent("third", outputFile);

getEvent("fourth", outputFile);

getEvent("fifth", outputFile);

outputFile.close();

return 0;

}

# Three Use Case Screen Shots





