# Assignment Description

For this assignment we will be writing a program that pulls information from files and can display information. We will also create a program that will build a structure containing information and pull information from structure and users request.

# 1 Readme Documentation

The first program will open a file of words and read the string words pulling out duplicates and then return them to the user in a ascending order.

The second program will pull information from a txt.file about states and store them in a container with a struct as an organization method. Then prompt the user for a state’s abbreviation and return the state name, governor and state flower.

# 2 Flowchart Screen Shots

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# 3 UML and Use Case Diagrams

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

1. Write a program that reads words from a text file and displays all the non-duplicate words. Use a set container to accumulate non-duplicate words and display a list of the unique words in ascending order at the end of your program.

Good Programming Practices

Introductory (Minimal) Standards for Acceptable Software Development are:

Consistent and meaningful variable names,

Consistent spacing and indentation for code readability,

Abundant but appropriate internal documentation (comments),

Testing against an appropriate set of test data and other performance criteria

Always keep these in mind - even in our introductory course.  You're not just coders, you are developers.

Variable names:  in addition to information in your text, you can search online for terms like camelCase, Hungarian notation, etc. to learn about some common conventions.  In the 'real world' any organization you work with will have it's own standards; for our course (unless your instructor has more specific requirements) you simply need to have a consistent approach.  For example, you can use meaningful multiword names with the first word in lowercase, and the remaining words capitalized - so that totalHotDogs would be your variable name for the integer value that holds the total number of hot dogs sold, or finalBill would be the real number value holding the final amount owed.  You won't call them just X and Y, or intentionally misleading names like hamburgersAreFun or lifeIsAHighway.

Internal Documentation (Comments):

As part of Good Programming Practices, please put at the top of all your C++ code the following block comments, modified to include your specific assignment information. Plus, additional one-line comments and / or function (functions will come later in the course) comments as necessary.

/\*

Author:  Student Name

Date written: mm/dd/yy

Assignment:   Module# exercise# part# (1 or 2), etc.

Short Desc:   xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

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**Code with comments goes here**

1. Write a programming to store pairs of each state (two letter abbreviation) with a structure containing its long name, current Governor, and state flower in a map. At startup your program should read the abbreviations, long name, and governor's name for each state from a text file and store the values in a map. Your program should then prompt the user to enter a state's two-letter abbreviation and display the corresponding long name, Governor and flower for that state, looping until a sentinel value is entered. An appropriate non-fatal error message should be displayed for any invalid state abbreviation entered.

**Code with comments goes here**

# 5 Three Use Case Screen Shots

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A computer screen with white text

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