# CIS7 Project Documentation Guide

In the documentation, provide at least 2 pages (single-space) that contains the following components of your course project:

Our project Team members consist of two only. Our names are Dilmar Fuentes, and Wen. We also have our team name as Cipher Noob. The project we chose is Case 3 Vigenere Cipher. The project will demonstrate how Vigenere Cipher works in the simplest form it can be.

Project information and details

The problem we are solving for is the way we have to encrypt our code secretly without having anyone know what we are saying. The world is evolving fast where everything is digitalize. Foreign enemies or cypher criminal’s become more common as they can interfere with sensitive data. Vigenere Cipher is one of the ways to protect certain data. In the project we come across the issue where we take a certain theorem where we need to implant them in the code. We also want to appeal to the user with how the system interacts, and that will be a menu that will call the function’s with what we need to do. So the solution that we have figure out was the help of a switch, and my partner’s code with the call function’s. We have also added a do while loop for keeping the function going. The decryption function deals with an initialize string that will shift letters with the ASCII information. The encryption function deals the similarity of the decryption, but with shifting work being modify with the signs being switched to do the opposite of the decryption. The bool function operates with returning true statements with a 1 or 0 if not true. Furthermore, the program main objective is to show that the algorithm for Vignere Cipher is at work. The program itself interacts with the user as a welcoming, and then it goes into the options of what you want to do whether to encrypt or decrypt. Depending on what the user will do will determine what the program will do. The discrete structure in the program is the way with the function of the decrypt and encrypt function. They both contain the algorithm that is based on how all the project operates to get the result. Overall, the limitation’s of the program is how we can have a part where the spaces are not counted for in the code. If you want to write “ I love you” it will cut the program. It must be as “Iloveyou” in order for the program to work. The other limitation is that when putting a random letter that does not comply for the ending of the do while loop, it closes everything which is fine but it had a condition. The recommendation to improve on the program is having to create a struct.h. The struct will be separating the code and making it easier to just call functions on main.cpp. Also having to create a header for only decryption and encryption to make it easier to code with organization.

Pseudocode and Flowchart

A picture containing sky, indoor

Description automatically generated