**W03 Assignment: Explain Encapsulation**

**Kristin Lind; CSE210**

Encapsulation is the act of enclosing something like a capsule. A major component encapsulation in programming involves information hiding or controlling access to internal data when the program runs. If your program needs information, a class can encapsulate the behaviors which will hide the details of how they perform and making it so that the other code cannot see or manipulate the details. This benefit of encapsulation will allow the program to extract necessary data to perform tasks necessary for certain inputs but it won’t be able to reach the internal data but can rely on the methods provided.

Here is an example of an application of Encapsulation;

Public class Account

{

private List<int> \_transactions = new List<int>();

public void Deposit(int amount)

{

\_transactions Add(amount)

}

}

This is showing that the public will be able to view certain aspects of the class but there are certain things within the class that are kept private and which limits program to access variables in other parts of the program. Code with public in beginning of statement will access all allowed public data within the code. Code with private in beginning statement will not have access to all of the data, only that which is necessary to run program. Other classes should not know details of how the class stores information, instead, program should ask the class to perform tasks only related to that information through public method.