

5ACW – Session 16 – Linked Lists – Assessable Lab Exercise

Lab 01 – Research Topic

Use a word document to record the following details

Examine the .NET API documentation of the LinkedList class and document the following:

1. How is it implemented? Single or Doubly LinkedList?
2. List what methods are available to call and does it differ from your implementations of the list.
3. What is the main advantage of using a Doubly Linked List over its Single link option?

Lab 02 – Using your Linked List

Create a new project in Visual Studio to complete the following requirements.

1. Use the Doubly Linked List you created in the earlier Labs and the Student class you created in your earlier assessable labs to perform the following tasks:
 - a. Create an instance of the Doubly Linked List and Add several Student instances to the List.
 - b. Enumerate through the list and display each of the Student node values
 - c. Add a Student instance to the end of the list and enumerate through list to ensure it was added at the end.
 - d. Using the appropriate method in the list find if a particular student instance is found in the list.
 - e. Remove a Student instance from the beginning of the list and test if it worked.
 - f. Remove a Student from the end of the list and test if it worked.

Upload your project and word document in a single folder using the appropriate upload link