**Link List Searching Application**

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**Application stored in my personal GitHub repository at**:

<https://github.com/billionayer/CardlyticsEvalCode/tree/master/LinkedListTester>

**Development Environment**: Visual Studio 2015 (Community Edition)

Development Language: C#

Application Structure:

1 Projects

* **LinkListTester** – This project houses the link list objects and the user interface to test the linked list.
  + **MyLinkListItem Class** – encapsulates the necessary logic for a single item in the list list. The class is written as a .NET generic whereby any data type can be stored in the Value property of the MyLinkListItem Class.
  + **MyLinkList Class –** encapsulte the necessary logic to store and manage a collection of MyLinkListItem objects as a single linked list.
    - Provides methods to push new items into the link list.
    - Provides methods to clear the link list
    - Provides methods to find a specific item in the list based on item location number and can be searched either in ascending or descending order.
  + **MainForm** – The main user interface window to test the application.

Care was taken to consider situations such as invalid data in the file, passing of null reference objects, and file handling expections should an I/O exception occurred. The application also attempt to handle situations where the files does not exists.

