User-Documentation.md 2024-01-16

# **Linear Search Application**

Welcome to the Linear Search Application! This simple console program allows you to read a list of elements from a file, normalize them, and perform a linear search to find a specific element.

# **Getting Started**

### Installation

- Ensure that you have Visual Studio 2010 Ultimate installed on your system.
- Download the source code project 210101117\_Assignment1B.
- Open the project in Visual Studio and compile the code.

## Usage

- Run the compiled executable in Visual Studio by clicking the Run button or F5.
- Make sure that you have a file named input.txt in the same directory as the source code containing
  the elements of the list in each line.
- Enter an element to be searched when prompted and get the result in the console.

#### Results

• The program will perform a linear search and inform you whether the element is found and, if so, at which index.

# Example

```
The elements of the list are: 1.5, 2, 3.5, 4, 5.5
Enter the element to be searched: 3.5
Element found at index 2
```

#### Note

- The implementation gives the first index of occurence of the target if found.
- The implementation considers the case while matching string elements. Eg: Hello and hello are treated different.
- Feel free to see the inline comments for more detailed explanation.