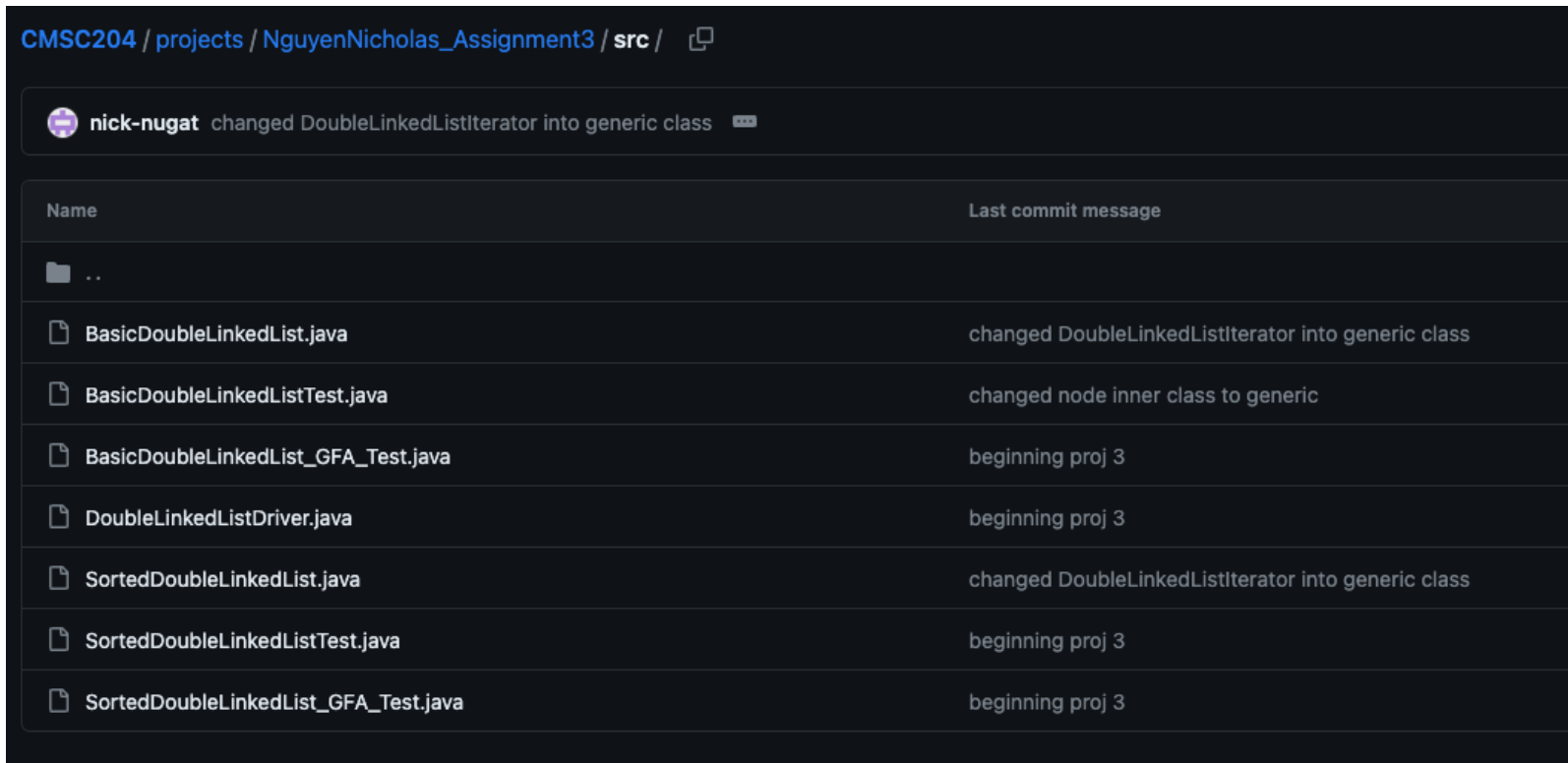


Final Assignment 3 Design

- Nicholas Nguyen
 - [CMSC204 GitHub Repository](#)
 - [Note on website](#)
-

GitHub screenshot



CMSC204 / projects / NguyenNicholas_Assignment3 / src /	
nick-nugat changed DoubleLinkedListIterator into generic class	
Name	Last commit message
..	
BasicDoubleLinkedList.java	changed DoubleLinkedListIterator into generic class
BasicDoubleLinkedListTest.java	changed node inner class to generic
BasicDoubleLinkedList_GFA_Test.java	beginning proj 3
DoubleLinkedListDriver.java	beginning proj 3
SortedDoubleLinkedList.java	changed DoubleLinkedListIterator into generic class
SortedDoubleLinkedListTest.java	beginning proj 3
SortedDoubleLinkedList_GFA_Test.java	beginning proj 3

Learning experience

I felt that this project was pretty difficult, honestly. However, sitting down and taking the time to finally understand the concepts made things a lot easier when implementing my code.

I think I had the most trouble understanding where to point nodes to in certain situations, as well as what that meant in the context of the list. I also was confused about how I would implement the `add()` method in the `SortedDoubleLinkedList<T>` class.

I feel like this project taught me more about linked list—especially doubly linked lists—and how they can be used.

Initial

Pseudocode

- generic class `BasicDoubleLinkedList<T>` that implements `Iterable` interface
 - inner class `Node`
 - generic inner class `DoubleLinkedListIterator<T>` that implements `ListIterator<T>` (from the `java.util` library)
 - other methods and fields of a doubly linked list implementation
- generic class `SortedDoubleLinkedList<T>` that extends `BasicDoubleLinkedList<T>`

UML diagram

