CS113 Basic Data Structures + Algorithms
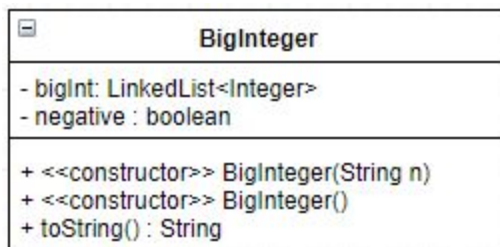## *Group Project #0*

Assignment (X HW points)

The following problem should be done in a group of two over the course of two weeks. Solutions must be in your group's github repository by x date.

Sprint 0 -

User Story : As a user I want to be able to be able to represent numbers of any size, negative or positive, so that I can use them for elementary operations.
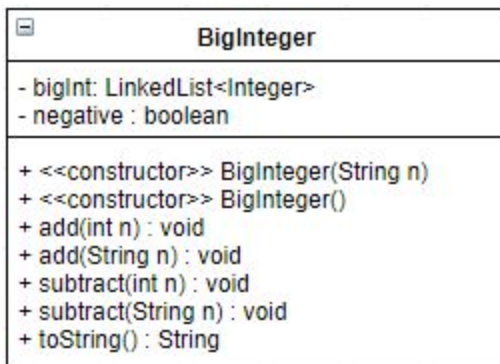
UML :

```
┌─────────────────────────────────────────┐
│ ⊟              BigInteger                │
├─────────────────────────────────────────┤
│ - bigInt: LinkedList<Integer>            │
│ - negative : boolean                     │
├─────────────────────────────────────────┤
│ + <<constructor>> BigInteger(String n)   │
│ + <<constructor>> BigInteger()           │
│ + toString() : String                    │
└─────────────────────────────────────────┘
```

Completeness : Pass all toString JUnit tests.

Sprint 1 -

User Story : As a user I want to be able to be able to add and subtract numbers of any size, negative or positive, so that I can do operations on huge numbers.

UML :

```
┌─────────────────────────────────────────┐
│ ⊟              BigInteger                │
├─────────────────────────────────────────┤
│ - bigInt: LinkedList<Integer>            │
│ - negative : boolean                     │
├─────────────────────────────────────────┤
│ + <<constructor>> BigInteger(String n)   │
│ + <<constructor>> BigInteger()           │
│ + add(int n) : void                      │
│ + add(String n) : void                   │
│ + subtract(int n) : void                 │
│ + subtract(String n) : void              │
│ + toString() : String                    │
└─────────────────────────────────────────┘
```

Completeness : Pass JUnit tests and implement a driver which solves Problem 13 of Project Euler. This can be seen here : https://projecteuler.net/problem=13.