

**Discipline of Computing and IT**  
**University of Newcastle**

**SENG1120/6120 – Semester 2, 2017**  
**Laboratory 5**

Video guide (Node/Linked List): [https://www.youtube.com/watch?v=SF6Z\\_n4bExQ](https://www.youtube.com/watch?v=SF6Z_n4bExQ)

This laboratory continues the tasks from lab 4 and aims at creating a linked list class.

1. Create a class `LinkedList` that uses some of the code you wrote in last week's lab, to implement a linked list-based container. The class should provide methods:

```
void addToHead(value_type)
void addToTail(value_type)
void addToCurrent(value_type)
value_type removeFromHead()
value_type removeFromTail()
value_type removeCurrent()
void moveToHead()
void moveToTail()
void forward()
void back()
value_type getCurrent(),
size_t size(),
```

and constructors. Private member variables should include `head`, `tail` and `current` pointers.

2. Write a program that demonstrates the features of your `LinkedList` class.

**Good Luck!**