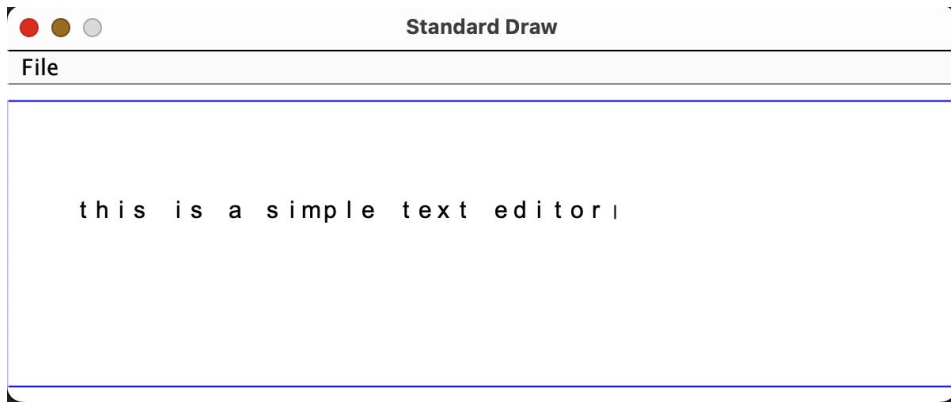# COMP 160
Object-oriented Programming

Lab 9

Simple Text Editor

We will implement a simple text editor using a linked list, focusing on implementing basic text editing functionalities such as typing, deleting characters, and moving the cursor accordingly.

Implementing LinkedList Class

LinkedList<T>
- head: Node<T> - size: int
+ insert(int, T): void + remove(int): void + getHead(): Node<T>

Node<T>
+ data: T + next: Node<T>

TextEditor

Create a 600x200 canvas.

```java
private static final double TEXT_X = 0.08; // X-coordinate for text
private static final double TEXT_Y = 0.6; // Y-coordinate for text
private static final double CHAR_WIDTH = 0.02;
private static final Font TEXT_FONT = new Font("Arial", Font.PLAIN, 15); // Font for text
```

You can use this values if you set X and Y scale as (0,1).

... or whatever looks beautiful to you.

TextEditor UML

Store each character in a
LinkedList and update it
according to the
incoming input character.

Note: cursorVisible is used for toggling the cursor visibility,
i.e. making the cursor visible for 0.5 seconds and invisible
for the next 0.5 continually

TextEditor
- textList: LinkedList<Character> - cursorPosition: int - cursorVisible: boolean
- drawText(): void - drawCursor(): void - checkInput(): void - drawBorder(): void