**Instance Variables and Methods**

class Editor:

* **private** KeyEventHandler keyeventhandler
* **private** MouseEventHandler mouseeventhandler
* **private** intCursorX
* **private** intCursorY
* **private** intlineWidth

class TextBuffer:

* private String enteredText
* private int currentPos
* void addChar(char x):
* void deleteChar():
* char get(int i):
* int currentPos():

class KeyEventHandler(CursorX, CursorY):

* **private** stack PreviousAct
* **private** stack NextAct
* **private** TextBuffer temp\_buff
* **private** TextBuffer buff
* **private** int fontsize
* void wordwrapping(buff)
* void handleDownArrow()
* void handleUpArrow()
* void handleLeftArrow()
* void handleRightArrow()
* void shortkeyCopy()
* void shortkeyPaste()
* void shortkeySave()
* void shortkeyUndo()
* void shortkeyRedo()
* void shortkeyFontIncrease()
* void shortkeyFontDecrease()
* void shortkeyPrintCursorPos()
* void NewLine()

class MouseEventHandler:

* cursorChange()
* WindowResizing(buff)
* getCursorPos()

Runtime constraints:

* Inserting/deleting characters: Must be constant time.
* Changing cursor position with arrow keys: Must be constant time.
* Changing cursor position with clicks: Must be constant time.
* Rendering text: Must be linear time.

**Analysis: Insertion/Deletion**

**Analysis: Changing Cursor Position With Arrow Keys:**

**Analysis: Changing Cursor Position With Clicks:**

**Analysis: Rendering Text**