

# eLyXer Test

Rainer Dorsch

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This is an elyixer test with an included program listing.

Listing 1: eLyXer LineReader Class

```
class LineReader(object):
    "Reads a file line by line"

    def __init__(self, filename):
        if isinstance(filename, file):
            self.file = filename
        else:
            self.file = codecs.open(filename, 'rU', 'utf-8')
        self.linenumber = 1
        self.lastline = None
        self.current = None
        self.mustread = True
        self.depleted = False
        try:
            self.readline()
        except UnicodeDecodeError:
            # try compressed file
            import gzip
            self.file = gzip.open(filename, 'rb')
            self.readline()

    def setstart(self, firstline):
        "Set the first line to read."
        for i in range(firstline):
            self.file.readline()
        self.linenumber = firstline

    def setend(self, lastline):
        "Set the last line to read."
        self.lastline = lastline

    def currentline(self):
```

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    "Get the current line"
    if self.mustread:
        self.readline()
    return self.current

def nextline(self):
    "Go to next line"
    if self.depleted:
        Trace.fatal('Read beyond file end')
    self.mustread = True

def readline(self):
    "Read a line from file"
    self.current = self.file.readline()
    if not isinstance(self.file, codecs.StreamReaderWriter):
        self.current = self.current.decode('utf-8')
    if len(self.current) == 0:
        self.depleted = True
    self.current = self.current.rstrip('\n\r')
    self.linenum += 1
    self.mustread = False
    Trace.prefix = 'Line ' + unicode(self.linenum) + ': '
    if self.linenum % 1000 == 0:
        Trace.message('Parsing')

def finished(self):
    "Find out if the file is finished"
    if self.lastline and self.linenum == self.lastline:
        return True
    if self.mustread:
        self.readline()
    return self.depleted

def close(self):
    self.file.close()

```