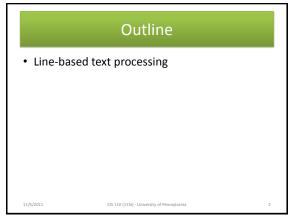
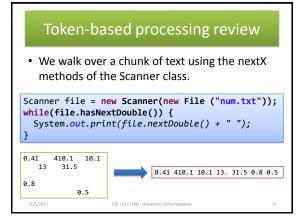
CIS 110: Introduction to Computer Programming Lecture 15 Process them lines (§ 6.3-6.4)



Line-based text processing (Live demo, ReceiptMethods.java)



Files with lines of text • Many files use each line to represent an individual record of a data set. Lastname Firstname weight year ppg Allen Lavoy 225 R 0.0 Brackins Craig 230 R 2.7 Brand Elton 254 11 15.0 • Token-based processing throws away line information which makes it unsuitable for these kinds of situations

```
Line-based processing template

// while file has lines left to process
// process the line using token-based processing

• We can decompose processing a file into

1. Reading in each line of a file

2. Processing an individual line
```

Tokenizing individual lines

· Once we have a line, how do we tokenize it?

```
Scanner line = new Scanner("Hello world!");
```

- · Scanners can made over Strings!
 - e.g., the line Scanner above tokenizes
 "Hello world!" into two tokens

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Line-based processing template expanded

```
Scanner file = new Scanner(new File("file.txt"));
// While file has lines left to process
while (file.hasNextLine()) {
   // Process the line using token-based processing
   Scanner line = new Scanner("Hello world!");
   // token-based processing here...
}
```

- Idiom: one scanner for file, one for each line
- · Follow this pattern for the homework!

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