Programming Languages and Techniques (CIS120)

Lecture 31
April 4, 2012

Histogram demo
• HW09: Spellchecking is due next Wednesday at 11:59:59pm.

• …but HW 10 will be available early next week.

• Midterm 2 is available with Laura Fox in Levine 308
  – Check your scores online
  – Solutions available online
Midterm 2 stats

• Exam stats:
  median 85
  avg  83.25714286
  min  33
  max  99
  stddev 11.49812085

• Rough letter grade:
  >= 90 A
  75-89 B
  65-74 C
  <65 D-F
Design Example: Histogram.java

A design exercise using java.io and generic collections libraries.
Problem Statement

• Write a command-line program that, given a filename for a text file as input, calculates the frequencies (i.e. number of occurrences) of each distinct word of the file. The program should then print the frequency distribution to the console as a sequence of “word: freq” pairs (one per line).

Histogram result:
The : 1
Write : 1
a : 4
as : 2
calculates : 1
command : 1
console : 1
distinct : 1
distribution : 1
e : 1
each : 1
file : 2
filename : 1
for : 1
freq : 1
frequencies : 1
frequency : 1
given : 1
i : 1
input : 1
line : 2
number : 1
occurrences : 1
of : 4
one : 1
pairs : 1
per : 1
print : 1
program : 2
sequence : 1
should : 1
text : 1
that : 1
the : 4
then : 1
to : 1
word : 2

CIS 120 / Spring 2012
Interactive Demo

Histogram.java and WordScanner.java