

CSCI 132:

Basic Data Structures and Algorithms

Java file I/O

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Spring 2024

Announcements

Lab 2 due **tomorrow** at 11:59 PM

Program1 will be posted later this week

Schedule is changing a little bit



Public property

Private property
with public getter
and setter

ProgrammerHumor.io

Reading in a file in Java

```
FileReader file;
try {
    file = new FileReader("video_games.csv");

    Scanner inFile = new Scanner(file);

    inFile.nextLine();

    while(inFile.hasNext()) {
        String line = inFile.nextLine();
        System.out.println(line);

        String[] splitted_line = line.split(",");
        System.out.println(splitted_line[0]);
    } catch (IOException e) {
        // TODO Auto-generated catch block
        e.printStackTrace();
    }
```

Opening a reading a file must be done inside of a try/catch statement

Reading in a file in Java

Open a file with the
FileReader library

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Read contents of file
with Scanner

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Read headers of csv
file (discard them)

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Iterate through each
line of file

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Get each line and print
it out

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Get each line and print
it out

To print out the first column of the
file, we can split each line, and print
out the first column

"Reese, Susan, Spencer" *One long String*
↓
.split(",") → ["Reese", "Susan", "Spencer"]
Array of Strings

Writing to a file in Java

```
try {  
    BufferedWriter writer = new BufferedWriter(new FileWriter("output.txt"));  
    writer.write("Hello World! \n");  
    writer.write("-----\n");  
    writer.close();  
} catch (IOException e) {  
    // TODO Auto-generated catch block  
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Name of output file

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We write out contents to file using the `write()` method

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    e.printStackTrace();  
}
```

When writing to a file, it is very important to close the file when you are finished