SOFTWARE GUILD

Java Basics Unit

Lesson 9 - Simple File I/O

Objectives

- Write to a file using PrintWriter
- Read from a file using Scanner

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Overview

- We already know how to:
  - Read from the Console
  - Write to the Console
- This is great but not persistent
- We can use files to store data between program executions

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Writing to a File

- We'll use PrintWriter

- Easy to use — similar to System.out for the console

```java
PrintWriter out = new PrintWriter(new FileWriter("OutFile.txt"));
    out.println("this is a line in my file...");
    out.println("a second line in my file...");
    out.println("a third line in my file...");
    out.flush();
    out.close();
```

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Working Directory

- Each NetBeans project has a **Working Directory**

- The working directory is the place where your program will start looking for files and folders

- The default value for the working directory is the main folder for the project

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Reading a File

- We'll use Scanner, which we already know
- Only difference is the input stream that it reads
- Make sure that the specified file exists in the working directory

```java
Scanner sc = new Scanner(
    new BufferedReader(new FileReader("OutFile.txt")));
// go through the file line by line
while (sc.hasNextLine()) {
    String currentLine = sc.nextLine();
    System.out.println(currentLine);
}
```

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