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## File Input and Output Summary

- Reading Text Files
  - o Simplest method: Scanner class
  - File Class describes disk files and directories
  - Reading files with Scanners works like lists, but you can't move backward.
  - Use while() loops to cycle through text files
  - CLOSE SCANNER OBJECTS!!!
- Writing Text Files
  - PrintWriter
    - Creates a new file if one does not exist.
    - If a file is already made, it will remove the contents and rewrite over it.
    - Is of the PrintStream class, and allows use of: print(), println(), and printf()

## <u>CLOSE PRINTWRITER OBJECTS!!!</u>

- Exception Handling
  - Use try-catch blocks anytime accessing/creating a file.
  - Declare the objects used outside the Try blocks.
  - Instantiate the objects within the try blocks.
- JFileChooser
  - $\circ$   $\;$  When using a GUI, this will allow the user to choose a file from their directories
  - Implentation:
    - JFileChooser chooser = new JFileChooser();
    - Scanner in = null;

if(chooser.showOpenDiaglog(null) == JFileChooser.APPROVE\_OPTION){

File selectedFile = new chooser.getSelectedFile();

- in = new Scanner(selectedFile);
- // Rest of code here.

}

- File Class
  - o Java API: http://download.oracle.com/javase/6/docs/api/java/io/File.html
  - Lots of useful methods on the Java API
  - createNewFile() creates a new file
  - delete() deletes a file
  - o renameTo(File dest) renames a file to the given parameter
- Scanner Class Methods
  - Java API: http://download.oracle.com/javase/6/docs/api/java/util/Scanner.html
  - next() reads the next word (anything between white space)
  - nextLine() reads the next line
  - nextInt() reads the next integer
  - nextDouble() reads the next double
  - nextChar() reads the next character