Java Programming @ The department of Computer Science

File Input Utility

Requirements

Extend the Java file output utility created earlier so that it also facilitates file input to produce a general purpose file handling utility. One idea is to input everything to a simple string array from where it cam be accessed and retrieved by other suitable defined Java classes. The `JFileChooser` class in the `javax.swing.*` package can be used to select the desired file. We will also need an application class with which to test out utility.
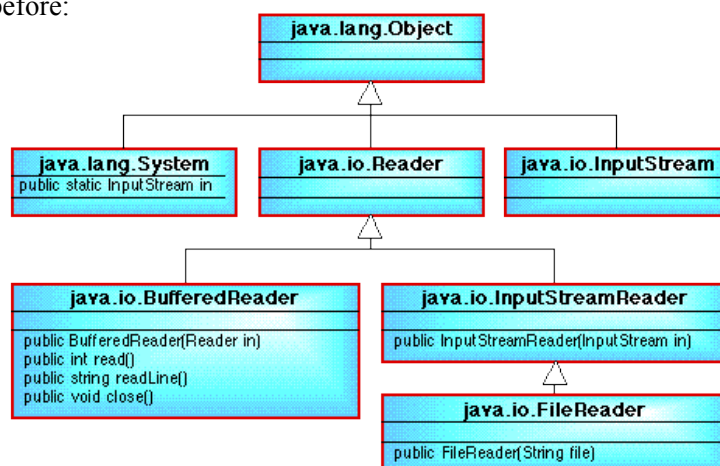
Notes

Before we can read from or write to a file we must first open the file. To open a file for reading we can use the following constructor contained in the `FileReader` class:

```
FileReader file =
     new FileReader("HelloWorld.txt");
```

This creates a stream object, called file, to read from a file called `HelloWorld.txt`. Note that if the named file cannot be opened a `FileNotFoundException` is generated. We can now use the file object to create an instance of the `BufferedReader` class as before:

```
BufferedReader fileInput =
     new BufferedReader(file);
```

The `BufferedReader` constructor requires its argument to be an instance of the class `Reader` (or a sub-class of the class `Reader`), both the `InputStreamReader` and the `FileReader` classes are sub-callses of Reader and will therefore suffice. A class diagram illustrating the connections between these different classes is presented below.

Frans Coenen

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