CSC 357 Program 4 Test Plan

This is an input/output test plan for programming assignment 4. Each case runs the sfind program with different arguments. The path argument is one of the following paths on falcon/hornet:

\begin{itemize}
  \item \text{path1} = /home/gfisher/classes/357/labs/2
  \item \text{path2} = /home/gfisher/work/fmsl
  \item \text{path3} = /home/gfisher/classes/357/labs/2/javadoc
  \item \text{path4} = /home/gfisher/projects/CVS/fmsl/subprojects/eclipse/documentation/latex
\end{itemize}

In all cases, the sfind program should produce results identical to those produced by UNIX find, running on falcon/hornet. To ensure consistent results, the expected output files are generated automatically, by running UNIX find, each time the test script is executed.

The implementation of his plan is in two testing scripts -- \texttt{run.csh} and \texttt{run-find.csh}. Copy both of these scripts into a directory containing an implementation of sfind and execute \texttt{run.csh}. The script will create output and diffs directories, if necessary, and compare the output of sfind to the expected output from UNIX /bin/find.

<table>
<thead>
<tr>
<th>Case</th>
<th>Command</th>
<th>Output File</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>sfind path1</td>
<td>default.out</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>sfind path1 -print</td>
<td>print.out</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>sfind path2 -atime 1</td>
<td>atime-1.out</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>sfind path2 -atime 2</td>
<td>atime-2.out</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>sfind path2 -atime 3</td>
<td>atime-3.out</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>sfind path2 -atime 50</td>
<td>atime-50.out</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>sfind path2 -ctime 0</td>
<td>ctime-0.out</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>sfind path2 -ctime 9</td>
<td>ctime-9.out</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>sfind path2 -ctime 85</td>
<td>ctime-85.out</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>sfind path2 -ctime 10</td>
<td>ctime-10.out</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>sfind path2 -mtime 1</td>
<td>mtime-1.out</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>sfind path2 -mtime 2</td>
<td>mtime-2.out</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>sfind path2 -mtime 3</td>
<td>mtime-3.out</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>sfind path2 -mtime 50</td>
<td>mtime-50.out</td>
<td>1</td>
</tr>
</tbody>
</table>
sfind path3 -user gfisher
sfind path4 -user jenglert
sfind path2 -user root

sfind path3 -group faculty
sfind path4 -group cscstd
sfind path2 -group root

sfind path1 -newer Makefile
sfind path1 -newer javadoc
sfind path1 -newer path1/../index.html

sfind path1 -type d
sfind path1 -type f
sfind path1 -type l
sfind path1/images -type l

sfind path1 -size 1
sfind path1 -size 2
sfind path1 -size +10
sfind path1 -size -2

sfind path1 -name GeneralList.java
sfind path1 -name '*.html'
sfind path1 -name 'G*.*'
sfind path1 -name 'G*.*1'
sfind path1 -name '??'
sfind path1 -name '*.o'
sfind path1/../solutions/labs/2 -name '??'
sfind path1/../solutions/labs/2 -name '?e*e*.o'
sfind path2 -name '*.doc'
sfind path2 -name '??'

sfind path1 -exec ls -sal {} 

sfind path1 -exec grep -n newGeneralList {} 

sfind path1 -exec grep -n newGeneralList {} > grep.out \\

45  `sfind path1 ! -newer Makefile`  not-newer-Makefile.out 2
46  `sfind path1 ! -name Makefile`  not-name-Makefile.out 2
47  `sfind path1 ! -type f`  not-type-f.out 2
48  `sfind path1 ! -size +10`  not-size+10.out 2

49  `sfind path1 -newer Makefile -name '*.c'`  multiple-1.out 4
50  `sfind path1 -name '*.c' -newer Makefile`  multiple-2.out 4
51  `sfind path1 -exec grep -n newGeneralList {} \; -print`  multiple-3.out 4
52  `sfind path1 -exec grep -n newGeneralList {} \; -exec ls -sal {} \;`  multiple-4.out 4
53  `sfind path1 ! -newer Makefile -type f -size +10 grep -nl swap {} \;`  multiple-5.out 4
54  `sfind path2 -atime 0 -ctime 0 -mtime 0 -user gfisher`  multiple-6.out 4
55  `\! -group cscstd -newer $p/administration/LOG -type d -size -20`  
56  `\! -name CVS -exec find {} -name 's*.c' \;`