

Screenshots: PI connection and server:

```
Terminal - pi@raspberrypi: ~/Desktop/SER321/Assign3
File Edit View Terminal Tabs Help
akclifto@debian64:~$ ssh pi@192.168.137.128
The authenticity of host '192.168.137.128 (192.168.137.128)' can't be established.
ECDSA key fingerprint is SHA256:jX04HmkrU1Ui2IrSHechSegVX8BM7MC4BsbaTcZMFAE.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '192.168.137.128' (ECDSA) to the list of known hosts.
pi@192.168.137.128's password:
Linux raspberrypi 4.19.97-v7+ #1294 SMP Thu Jan 30 13:15:58 GMT 2020 armv7l

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Wed Apr  1 14:20:13 2020 from 192.168.137.1
pi@raspberrypi:~$ cd Desktop/SER321/Assign3/
pi@raspberrypi:~/Desktop/SER321/Assign3$ ant clean
Buildfile: /home/pi/Desktop/SER321/Assign3/build.xml

clean:
[delete] Deleting directory /home/pi/Desktop/SER321/Assign3/classes
[delete] Deleting directory /home/pi/Desktop/SER321/Assign3/javafx-sdk-13.0.1

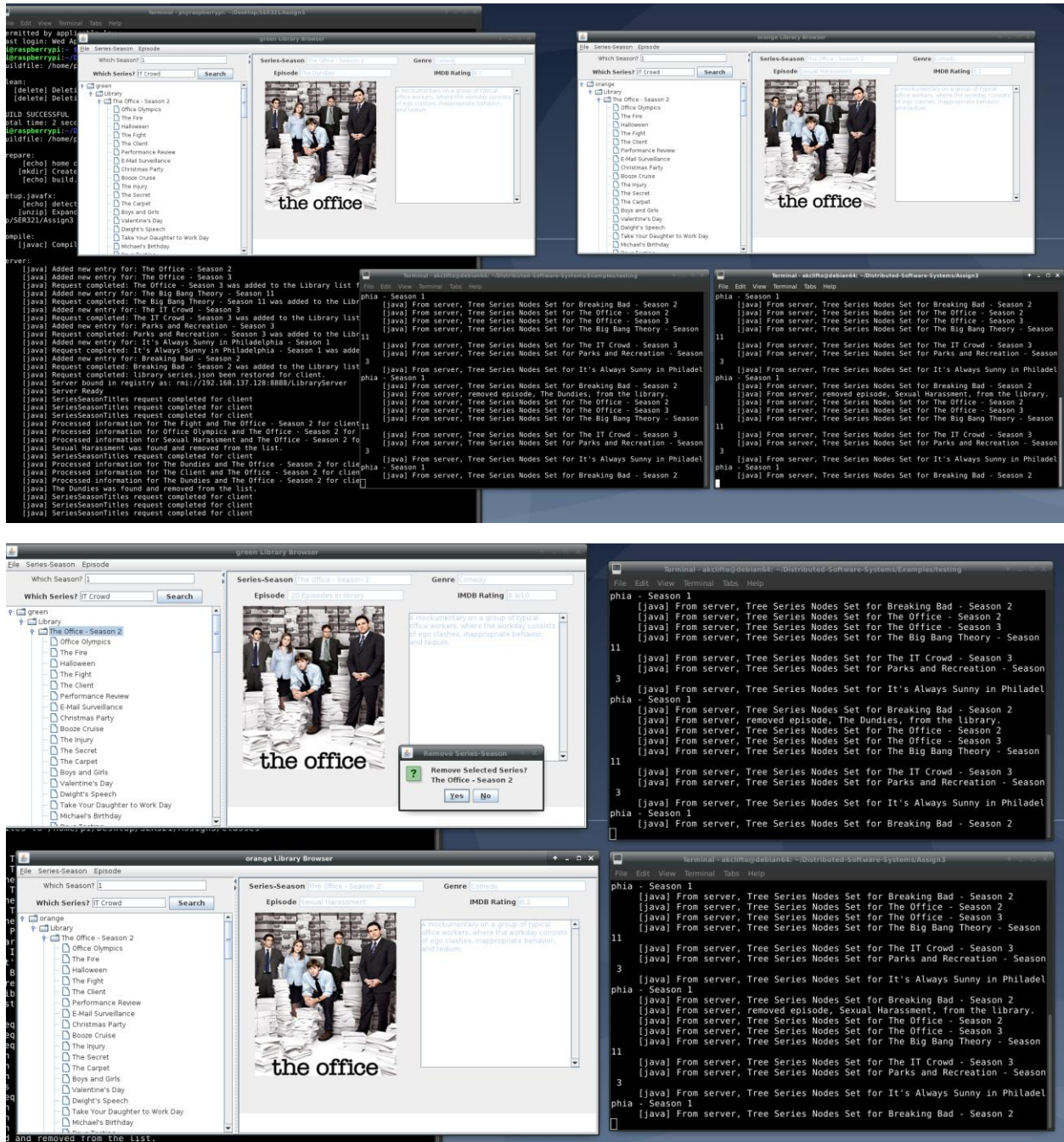
BUILD SUCCESSFUL
Total time: 2 seconds
pi@raspberrypi:~/Desktop/SER321/Assign3$ ant server -DhostId=192.168.137.128 -DregPort=8888
Buildfile: /home/pi/Desktop/SER321/Assign3/build.xml

prepare:
[echo] home defined as: /home/pi
[mkdir] Created dir: /home/pi/Desktop/SER321/Assign3/classes
[echo] build.host.platform is: linux

setup.javafx:
[echo] detected property islinux is set
[unzip] Expanding: /home/pi/Desktop/SER321/Assign3/openjfx-13.0.1_linux-x64_bin-sdk.zip into /home/pi/Desktop/SER321/Assign3

compile:
[javac] Compiling 7 source files to /home/pi/Desktop/SER321/Assign3/classes

server:
[java] Added new entry for: The Office - Season 2
[java] Added new entry for: The Office - Season 3
[java] Request completed: The Office - Season 3 was added to the Library list for
[java] Added new entry for: The Big Bang Theory - Season 11
[java] Request completed: The Big Bang Theory - Season 11 was added to the Library list for
[java] Added new entry for: The IT Crowd - Season 3
[java] Request completed: The IT Crowd - Season 3 was added to the Library list for
[java] Added new entry for: Parks and Recreation - Season 3
[java] Request completed: Parks and Recreation - Season 3 was added to the Library list for
[java] Added new entry for: It's Always Sunny in Philadelphia - Season 1
[java] Request completed: It's Always Sunny in Philadelphia - Season 1 was added to the Library list for
[java] Added new entry for: Breaking Bad - Season 2
[java] Request completed: Breaking Bad - Season 2 was added to the Library list for
[java] Request completed: library series.json been restored for client.
[java] Server bound in registry as: rmi://192.168.137.128:8888/LibraryServer
[java] Server Ready
[java] SeriesSeasonTitles request completed for client
[java] SeriesSeasonTitles request completed for client
[java] SeriesSeasonTitles request completed for client
```



The screenshots illustrate the 'orange Library Browser' application and its interaction with a server. The application shows a list of series and seasons, with 'The Office - Season 2' selected. The terminal windows show the underlying Java code and network requests for managing the library.

orange Library Browser (Top Left): Shows the 'The Office - Season 2' episode selected. The 'Which Series?' dropdown is set to 'IT Crowd'. The 'Genre' is 'Comedy'. The 'IMDB Rating' is 8.0/10. The 'Episode' is 'A Benhania Christmas'. The 'Library' list shows 'The Office - Season 3' and 'The Office - Season 2'.

orange Library Browser (Bottom Left): Shows the 'The Office - Season 2' episode selected. The 'Which Series?' dropdown is set to 'IT Crowd'. The 'Genre' is 'Comedy'. The 'IMDB Rating' is 8.0/10. The 'Episode' is 'A Benhania Christmas'. The 'Library' list shows 'The Office - Season 3' and 'The Office - Season 2'.

Terminal - akclifto@debian4: ~ (Distributed-Software-Systems/Examples/testing) (Top Right): Shows the following output:

```
[java] From server, Tree Series Nodes Set for Breaking Bad - Season 2
[java] From server, removed episode, The Dunder, from the library.
[java] From server, Tree Series Nodes Set for The Office - Season 2
[java] From server, Tree Series Nodes Set for The Office - Season 3
[java] From server, Tree Series Nodes Set for The Big Bang Theory - Season
11 [java] From server, Tree Series Nodes Set for The IT Crowd - Season 3
3 [java] From server, Tree Series Nodes Set for Parks and Recreation - Season
3 [java] From server, Tree Series Nodes Set for It's Always Sunny in Philadel
phia - Season 1
11 [java] From server, Tree Series Nodes Set for Breaking Bad - Season 2
3 [java] From server, Tree Series Nodes Set for The Office - Season 3
[java] From server, Tree Series Nodes Set for The Big Bang Theory - Season
11 [java] From server, Tree Series Nodes Set for The IT Crowd - Season 3
3 [java] From server, Tree Series Nodes Set for Parks and Recreation - Season
3 [java] From server, Tree Series Nodes Set for It's Always Sunny in Philadel
phia - Season 1
[java] From server, Tree Series Nodes Set for Breaking Bad - Season 2
[java] From server, removes The Office - Season 2 from the library.
```

Terminal - akclifto@debian4: ~ (Distributed-Software-Systems/Assign3) (Bottom Right): Shows the following output:

```
[java] From server, Tree Series Nodes Set for It's Always Sunny in Philadel
phia - Season 1
[java] From server, Tree Series Nodes Set for Breaking Bad - Season 2
[java] From server, removed episode, Sexual Harassment, from the library.
[java] From server, Tree Series Nodes Set for The Office - Season 2
[java] From server, Tree Series Nodes Set for The Office - Season 3
[java] From server, Tree Series Nodes Set for The Big Bang Theory - Season
11 [java] From server, Tree Series Nodes Set for The IT Crowd - Season 3
3 [java] From server, Tree Series Nodes Set for Parks and Recreation - Season
3 [java] From server, Tree Series Nodes Set for It's Always Sunny in Philadel
phia - Season 1
11 [java] From server, Tree Series Nodes Set for Breaking Bad - Season 2
3 [java] From server, Tree Series Nodes Set for The Office - Season 3
[java] From server, Tree Series Nodes Set for The Big Bang Theory - Season
11 [java] From server, Tree Series Nodes Set for The IT Crowd - Season 3
3 [java] From server, Tree Series Nodes Set for Parks and Recreation - Season
3 [java] From server, Tree Series Nodes Set for It's Always Sunny in Philadel
phia - Season 1
[java] From server, Tree Series Nodes Set for Breaking Bad - Season 2
[java] From server, removes The Office - Season 2 from the library.
```

Terminal - gngn@berry: ~ (Distributed-Software-Systems/Assign3) (Bottom Left): Shows the following output:

```
[java] Request completed: The Office - Season 3 was added to the Library list for
[java] Added new entry for: The Big Bang Theory - Season 11
[java] Request completed: The Big Bang Theory - Season 11 was added to the Library list for
[java] Added new entry for: The IT Crowd - Season 3
[java] Request completed: The IT Crowd - Season 3 was added to the Library list for
[java] Added new entry for: Parks and Recreation - Season 3
[java] Request completed: Parks and Recreation - Season 3 was added to the Library list for
[java] Added new entry for: It's Always Sunny in Philadelphia - Season 1
[java] Request completed: It's Always Sunny in Philadelphia - Season 1 was added to the Library list for
[java] Added new entry for: Breaking Bad - Season 2
[java] Request completed: Breaking Bad - Season 2 was added to the Library list for
[java] Request completed: library series.json been restored for client.
[java] Server bound in registry as: rmi://192.168.137.128:8888/LibraryServer
[java] Server Ready
[java] SeriesSeasonTitles request completed for client
[java] SeriesSeasonTitles request completed for client
[java] Processed information for The Fight and The Office - Season 2 for client.
[java] Processed information for Office Olympics and The Office - Season 2 for client.
[java] Processed information for Sexual Harassment and The Office - Season 2 for client.
[java] Sexual Harassment was found and removed from the list.
[java] SeriesSeasonTitles request completed for client
[java] Processed information for The Dunder and The Office - Season 2 for client.
[java] Processed information for The Client and The Office - Season 2 for client.
[java] Processed information for The Dunder and The Office - Season 2 for client.
[java] The Dunder was found and removed from the list.
[java] SeriesSeasonTitles request completed for client
[java] SeriesSeasonTitles request completed for client
[java] SeriesSeasonTitles request completed for client
[java] SeriesSeasonTitles request completed for client
[java] Processed information for Grief Counseling and The Office - Season 3 for client.
[java] Processed information for Grief Counseling and The Office - Season 3 for client.
[java] SeriesSeasonTitles request completed for client
[java] The Office - Season 3 was not found in the SeriesSeason list!
[java] SeriesSeasonTitles request completed for client
[java] SeriesSeasonTitles request completed for client
[java] Processed information for Time Capsule and Parks and Recreation - Season 3 for client.
[java] Processed information for Time Capsule and Parks and Recreation - Season 3 for client.
[java] Added new entry for: The Office - Season 2
[java] Added new entry for: The Office - Season 3
[java] Request completed: The Office - Season 3 was added to the Library list for
[java] Added new entry for: The Big Bang Theory - Season 11
[java] Request completed: The Big Bang Theory - Season 11 was added to the Library list for
[java] Added new entry for: The IT Crowd - Season 3
[java] Request completed: The IT Crowd - Season 3 was added to the Library list for
[java] Added new entry for: Parks and Recreation - Season 3
[java] Request completed: Parks and Recreation - Season 3 was added to the Library list for
[java] Added new entry for: It's Always Sunny in Philadelphia - Season 1
[java] Request completed: It's Always Sunny in Philadelphia - Season 1 was added to the Library list for
[java] Added new entry for: Breaking Bad - Season 2
[java] Request completed: Breaking Bad - Season 2 was added to the Library list for
[java] Request completed: library series.json been restored for client.
[java] SeriesSeasonTitles request completed for client
[java] SeriesSeasonTitles request completed for client
[java] Processed information for Office Olympics and The Office - Season 2 for client.
[java] Processed information for Office Olympics and The Office - Season 2 for client.
[java] SeriesSeasonTitles request completed for client
[java] SeriesSeasonTitles request completed for client
```