Apart from the given test cases, the below are some of the particular cases I tested:

CASE 1:

In TestSample.java, I added extra code at the end which disconnects from the server, reconnects to it and gets the file with key “chapter1.txt”. The main purpose is to check if even after reconnecting the server is able to retrieve a file put into it in the previous connection.

Commands:

java -jar ./target/RUStoreServer.jar 12345

java -jar ./target/TestSample.jar localhost 12345

Result:

Connecting to object server at localhost:12345...

Sucessfully established connection to object server.

Putting string "Hello World" with key "str\_1"

Successfully put string and key!

Getting object with key "str\_1"

Successfully got string: Hello World

Putting file "./inputfiles/dummysite.html" with key "chapter1.txt"

Successfully put file!

Getting object with key "chapter1.txt"

File contents are equal! Successfully Retrieved File

Deleting downloaded file.

Attempting to disconnect...

Sucessfully disconnected.

Connecting to object server at localhost:12345...

Sucessfully established connection to object server.

Getting object with key "chapter1.txt"

File contents are equal! Successfully Retrieved File

Deleting downloaded file.

Attempting to disconnect...

Sucessfully disconnected.

CASE 2:

Here I test the same case above, however the test application is run on a different server (kill) from the RUStoreServer (iLab2).

Commands:

java -jar ./target/RUStoreServer.jar 12345

java -jar ./target/TestSample.jar iLab2.cs.rutgers.edu 12345

Result:

Connecting to object server at iLab2.cs.rutgers.edu:12345...

Sucessfully established connection to object server.

Putting string "Hello World" with key "str\_1"

Successfully put string and key!

Getting object with key "str\_1"

Successfully got string: Hello World

Putting file "./inputfiles/dummysite.html" with key "chapter1.txt"

Successfully put file!

Getting object with key "chapter1.txt"

File contents are equal! Successfully Retrieved File

Deleting downloaded file.

Attempting to disconnect...

Sucessfully disconnected.

Connecting to object server at iLab2.cs.rutgers.edu:12345...

Sucessfully established connection to object server.

Getting object with key "chapter1.txt"

File contents are equal! Successfully Retrieved File

Deleting downloaded file.

Attempting to disconnect...

Sucessfully disconnected.

CASE 3:

Here I used the TestStringCLI test to check the following specific cases:

* Basic put, list, remove
* List when there are no keys
* Putting different kinds of values (including whitespace characters)
* Putting a key that already exists
* Getting a key that does not exist
* Forming 3 connections one after the other to make sure previous content is retained.

Commands:

java -jar ./target/RUStoreServer.jar 12345

java -jar ./target/TestStringCLI.jar

Result:

This little client utilizes a uses an RUClient to allow

you to send and store strings within an object store.

Usage:

connect <host> <port>

put <key> <string>

get <key>

remove <key>

list

disconnect

exit

> connect localhost 12345

Connecting to server at localhost:12345...

Connection established.

> put "key1" "Hello World"

Putting string: "Hello World" with key "key1"...

Successfully put key1

> put "key2" "Foo Bar"

Putting string: "Foo Bar" with key "key2"...

Successfully put key2

> put "key3" "CS417"

Putting string: "CS417" with key "key3"...

Successfully put key3

> list

Going to get object keys...

Successfully retrieved keys

Object Keys: key1, key2, key3

> remove "key2"

Removing object with key key2...

Successfully removed object with key key2

> list

Going to get object keys...

Successfully retrieved keys

Object Keys: key1, key3

> remove "key1"

Removing object with key key1...

Successfully removed object with key key1

> remove "key3"

Removing object with key key3...

Successfully removed object with key key3

> list

Going to get object keys...

No available keys

> put "1stKey" "dsfhsdefufjksfcslkdfi"

Putting string: "dsfhsdefufjksfcslkdfi" with key "1stKey"...

Successfully put 1stKey

> put "2ndkey" "abc"

Putting string: "abc" with key "2ndkey"...

Successfully put 2ndkey

> get "1stkey"

Getting string with key "1stkey"...

Failed to get string with key 1stkey (key does not exist)

> get "1stKey"

Getting string with key "1stKey"...

Successfully received string.

Received string: "dsfhsdefufjksfcslkdfi"

> put "2ndkey" "123"

Putting string: "123" with key "2ndkey"...

Failed to put 2ndkey. (key already exists)

> list

Going to get object keys...

Successfully retrieved keys

Object Keys: 1stKey, 2ndkey

> disconnect

Disconnecting from server...

Sucessfully disconnected from server.

> connect localhost 12345

Connecting to server at localhost:12345...

Connection established.

> list

Going to get object keys...

Successfully retrieved keys

Object Keys: 1stKey, 2ndkey

> get "2ndkey"

Getting string with key "2ndkey"...

Successfully received string.

Received string: "abc"

> put "3rdkey" "Bar 2"

Putting string: "Bar 2" with key "3rdkey"...

Successfully put 3rdkey

> disconnect

Disconnecting from server...

Sucessfully disconnected from server.

> connect localhost 12345

Connecting to server at localhost:12345...

Connection established.

> list

Going to get object keys...

Successfully retrieved keys

Object Keys: 1stKey, 3rdkey, 2ndkey

> get "3rdkey"

Getting string with key "3rdkey"...

Successfully received string.

Received string: "Bar 2"

> disconnect

Disconnecting from server...

Sucessfully disconnected from server.

> exit