

Marc Beitchman  
CSE P 552  
Assignment 2  
Instructions to Run My Project

I implemented my 2-phase commit replicated data store in Ruby. Specifically, I used Ruby 1.9.3 on Mac OS X 10.7.5. The only non-standard Ruby library I used is the `sqlite3` gem, which I installed from a cmd prompt by running: *gem install sqlite3*.

All ruby files should be in the same directory and the scripts can be run from a command prompt using the ruby interpreter.

I implemented a few automated tests which create master and replica processes, run commands from the client and then spin down the replica. Due to time constraints, I was not able to implement all my tests cases in this automation.

To run the automated tests, run the following from a cmd prompt:

*ruby client.rb <testid>*

example: *ruby client.rb 1*

test cases:

- 1: put and get functionality
- 2: delete and get functionality
- 3: replica timeout in vote phase while put value

The cluster can be run in interactive mode as well.

Run the following to launch the master:

*ruby master.rb <replicaname1> <replicaport1> <replicaname2> <replicaport2>  
<replicanameN> <replicaportN>*

Run the following to run replicas:

*ruby replica.rb <replicaname> <replicaport>*

*\* the master is hard coded to run on port 1234 so that should be avoided by replicas \**

Run the following to launch the client in interactive mode.

*ruby client.rb --I*