KivaStats installation instructions

Thank you for downloading the server and client components for our KivaStats website. Our website runs on MongoDB and Node.js (cf. Appendix A.3.1). Our development team has created a front-end portal for the user to access data from the public Kiva and World Bank Developer APIs (cf. Appendix A.3.2).

Installation

All files (server & client) are contained within the kivaStats.zip included in the submission. All files need to be extracted and put into the following structure:

File Structure

- The kivaServer.js file should be located in the same directory as node.exe, and the content folder, as illustrated in Appendix A.1.1.

-The content folder contains the local client files. These include: (i) index.html, (ii) kivaClient.js, (iii) map.js, (iv) style.css, and (v) barGraph.png [logo] (cf. Appendix A.1.2).

- The application container folder contains the server files, and the MongoDB database structure/files (cf. Appendix A.1.1).

- The index.html page calls external files and libraries in the header including: (i) JQuery library, (ii) JQuery UI library, (iii) D3 library, (iv) client-side controller JS file, (v) jQuery UI Mint-Choc theme CSS file, (vi) external CSS file, (vii) title icon file, (vii) google maps JavaScript file, and (viii) the client-side map.js file.

Operability

To run our system, open two command prompts. The first prompt is to start the MongoDB database, by running `~/mongod --dbpath <mongodata-folder>`, where `<mongodata-folder>` is the location of the local MongoDB data folder. The second prompt is to run the server file by entering `node kivaServer.js`. This is illustrated in Appendix A.2.

The application is accessed by entering `http://localhost:8080/` into a web browser (tested in Firefox and Chrome). Note: The first call takes some time to process, as the kivaStats database must be created in MongoDB.

Appendix
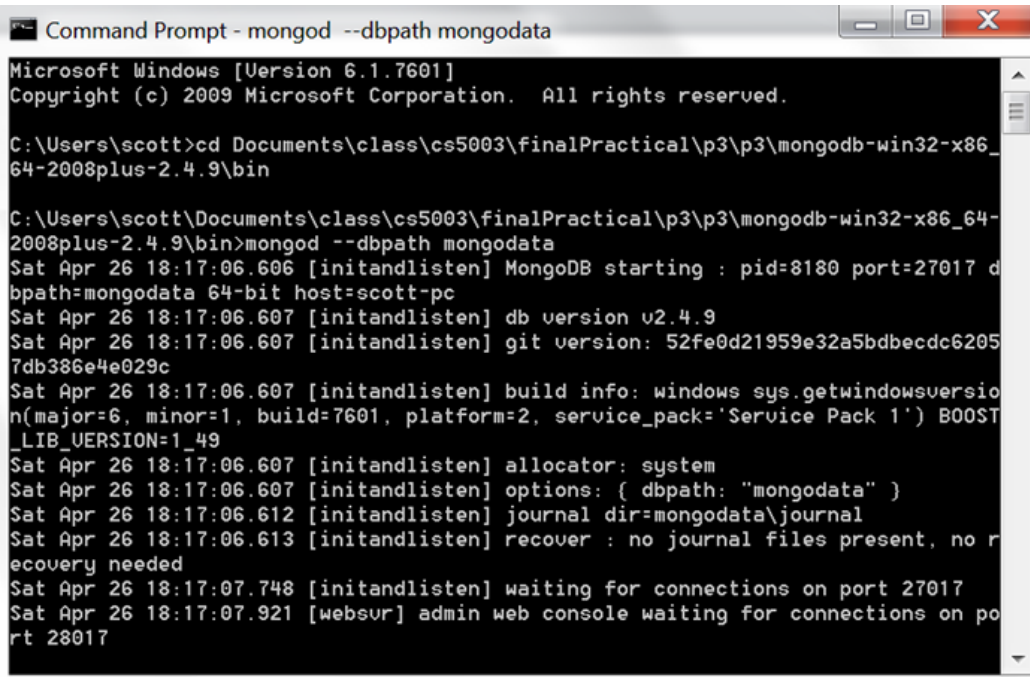
A.1 File structure

A.1.1 Application container folder

Name	Date modified	Type	Size
archive	29/04/2014 16:54	File folder	
content	30/04/2014 13:44	File folder	
mongodata	30/04/2014 13:48	File folder	
mongodb	26/03/2014 11:39	File folder	
node_modules	02/04/2014 11:14	File folder	
curl.exe	16/10/2013 03:22	Application	1,601 KB
kivaServer.js	30/04/2014 13:31	JScript Script File	12 KB
node.exe	26/02/2014 12:11	Application	6,769 KB
npm.cmd	16/02/2014 20:38	Windows Comma...	1 KB

A.1.2 *content* folder

Name	Date modified	Type	Size
barGraph.png	30/04/2014 13:31	PNG image	1 KB
index.html	30/04/2014 13:31	HTML Document	4 KB
kivaClient.js	30/04/2014 13:31	JScript Script File	24 KB
map.js	30/04/2014 13:31	JScript Script File	14 KB
style.css	30/04/2014 13:31	Cascading Style S...	3 KB

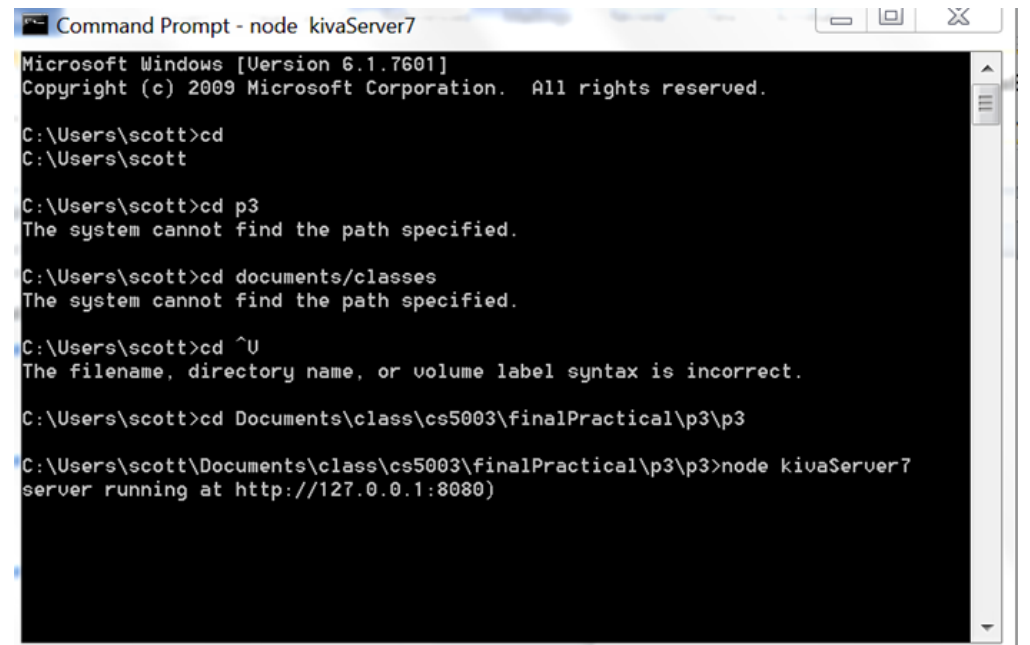## A.2 Command prompts

A.2.1 Running MongoDB

```
Command Prompt - mongod --dbpath mongodata

Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation.  All rights reserved.

C:\Users\scott>cd Documents\class\cs5003\finalPractical\p3\p3\mongodb-win32-x86_
64-2008plus-2.4.9\bin

C:\Users\scott\Documents\class\cs5003\finalPractical\p3\p3\mongodb-win32-x86_64-
2008plus-2.4.9\bin>mongod --dbpath mongodata
Sat Apr 26 18:17:06.606 [initandlisten] MongoDB starting : pid=8180 port=27017 d
bpath=mongodata 64-bit host=scott-pc
Sat Apr 26 18:17:06.607 [initandlisten] db version v2.4.9
Sat Apr 26 18:17:06.607 [initandlisten] git version: 52fe0d21959e32a5bdbecdc6205
7db386e4e029c
Sat Apr 26 18:17:06.607 [initandlisten] build info: windows sys.getwindowsversio
n(major=6, minor=1, build=7601, platform=2, service_pack='Service Pack 1') BOOST
_LIB_VERSION=1_49
Sat Apr 26 18:17:06.607 [initandlisten] allocator: system
Sat Apr 26 18:17:06.607 [initandlisten] options: { dbpath: "mongodata" }
Sat Apr 26 18:17:06.612 [initandlisten] journal dir=mongodata\journal
Sat Apr 26 18:17:06.613 [initandlisten] recover : no journal files present, no r
ecovery needed
Sat Apr 26 18:17:07.748 [initandlisten] waiting for connections on port 27017
Sat Apr 26 18:17:07.921 [websvr] admin web console waiting for connections on po
rt 28017
```

A.2.2 Running kivaServer

```
Command Prompt - node  kivaServer7

Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation.  All rights reserved.

C:\Users\scott>cd
C:\Users\scott

C:\Users\scott>cd p3
The system cannot find the path specified.

C:\Users\scott>cd documents/classes
The system cannot find the path specified.

C:\Users\scott>cd ^U
The filename, directory name, or volume label syntax is incorrect.

C:\Users\scott>cd Documents\class\cs5003\finalPractical\p3\p3

C:\Users\scott\Documents\class\cs5003\finalPractical\p3\p3>node kivaServer7
server running at http://127.0.0.1:8080)
```
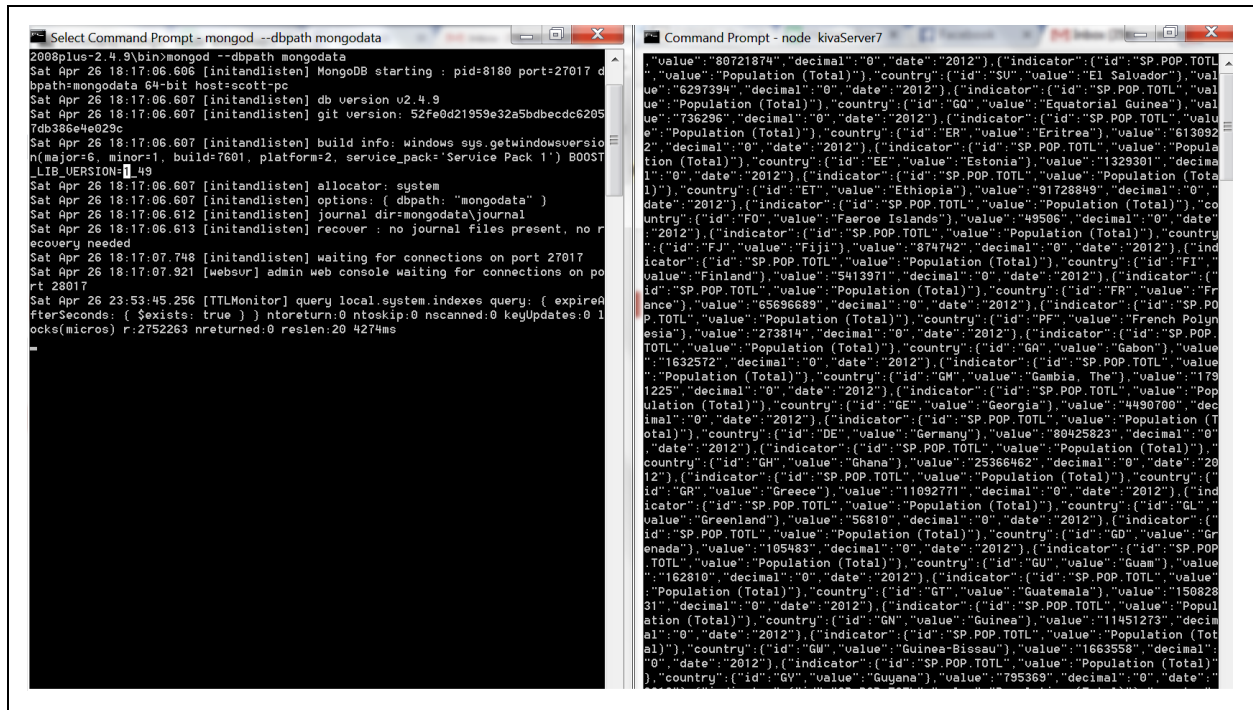
A.2.3

Select Command Prompt - mongod --dbpath mongodata

2008plus-2.4.9\bin>mongod --dbpath mongodata
Sat Apr 26 18:17:06.606 [initandlisten] MongoDB starting : pid=8180 port=27017 d
bpath=mongodata 64-bit host=scott-pc
Sat Apr 26 18:17:06.607 [initandlisten] db version v2.4.9
Sat Apr 26 18:17:06.607 [initandlisten] git version: 52fe0d21959e32a5bdbecdc6205
7db386e4e029c
Sat Apr 26 18:17:06.607 [initandlisten] build info: windows sys.getwindowsversio
n(major=6, minor=1, build=7601, platform=2, service_pack='Service Pack 1') BOOST
_LIB_VERSION=1_49
Sat Apr 26 18:17:06.607 [initandlisten] allocator: system
Sat Apr 26 18:17:06.607 [initandlisten] options: { dbpath: "mongodata" }
Sat Apr 26 18:17:06.612 [initandlisten] journal dir=mongodata\journal
Sat Apr 26 18:17:06.613 [initandlisten] recover : no journal files present, no r
ecovery needed
Sat Apr 26 18:17:07.748 [initandlisten] waiting for connections on port 27017
Sat Apr 26 18:17:07.921 [websvr] admin web console waiting for connections on po
rt 28017
Sat Apr 26 23:53:45.256 [TTLMonitor] query local.system.indexes query: { expireA
fterSeconds: { $exists: true } } ntoreturn:0 ntoskip:0 nscanned:0 keyUpdates:0 l
ocks(micros) r:2752263 nreturned:0 reslen:20 4274ms

Command Prompt - node kivaServer7

"value":"80721874","decimal":"0","date":"2012"},{"indicator":{"id":"SP.POP.TOTL
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e":"Population (Total)"),"country":{"id":"ER","value":"Eritrea"),"value":"613092
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tion (Total)"),"country":{"id":"EE","value":"Estonia"),"value":"1329301","decima
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untry":{"id":"FO","value":"Faeroe Islands"),"value":"49506","decimal":"0","date"
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,"date":"2012"},{"indicator":{"id":"SP.POP.TOTL","value":"Population (Total)"),"
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"value":"Greenland"),"value":"56810","decimal":"0","date":"2012"},{"indicator":{"
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enada"),"value":"105483","decimal":"0","date":"2012"},{"indicator":{"id":"SP.POP
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ation (Total)"),"country":{"id":"GN","value":"Guinea"),"value":"11451273","decim
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}),"country":{"id":"GY","value":"Guyana"),"value":"795369","decimal":"0","date":

A.3 Installation Requirements

A.3.1 Technologies
Node.js : http://nodejs.org/download/
MongoDB : https://www.mongodb.org/downloads

A.3.2 APIs
Kiva : http://build.kiva.org/api
World Bank : http://data.worldbank.org/developers/api-overview