

BigData

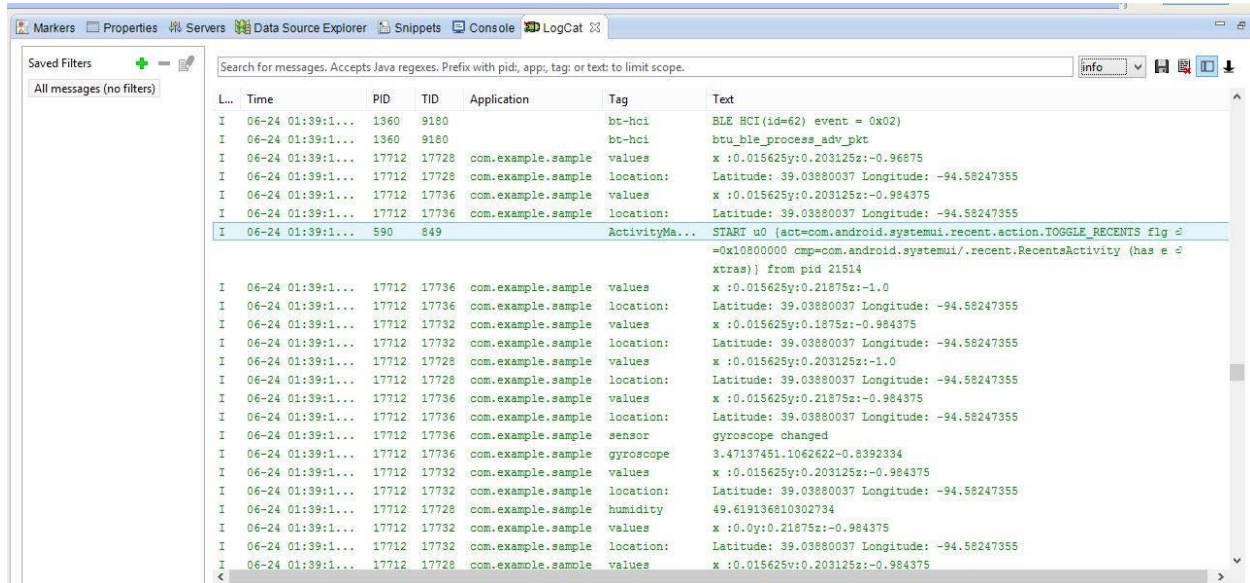
LAB – III

Submitted by
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16158759

Task1: Android application collecting data from sensors.

Here I uses location sensor, temperature, humidity and gyro sensor.

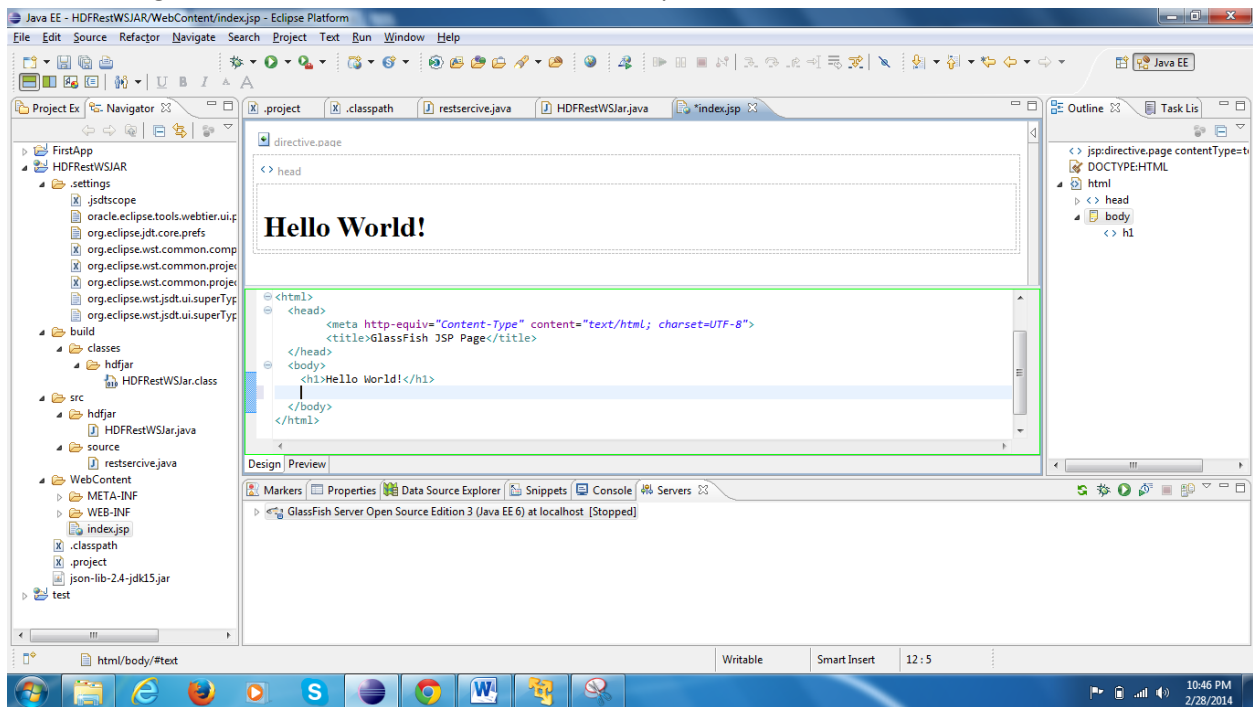
1. Running application on android device and collecting sensor data.



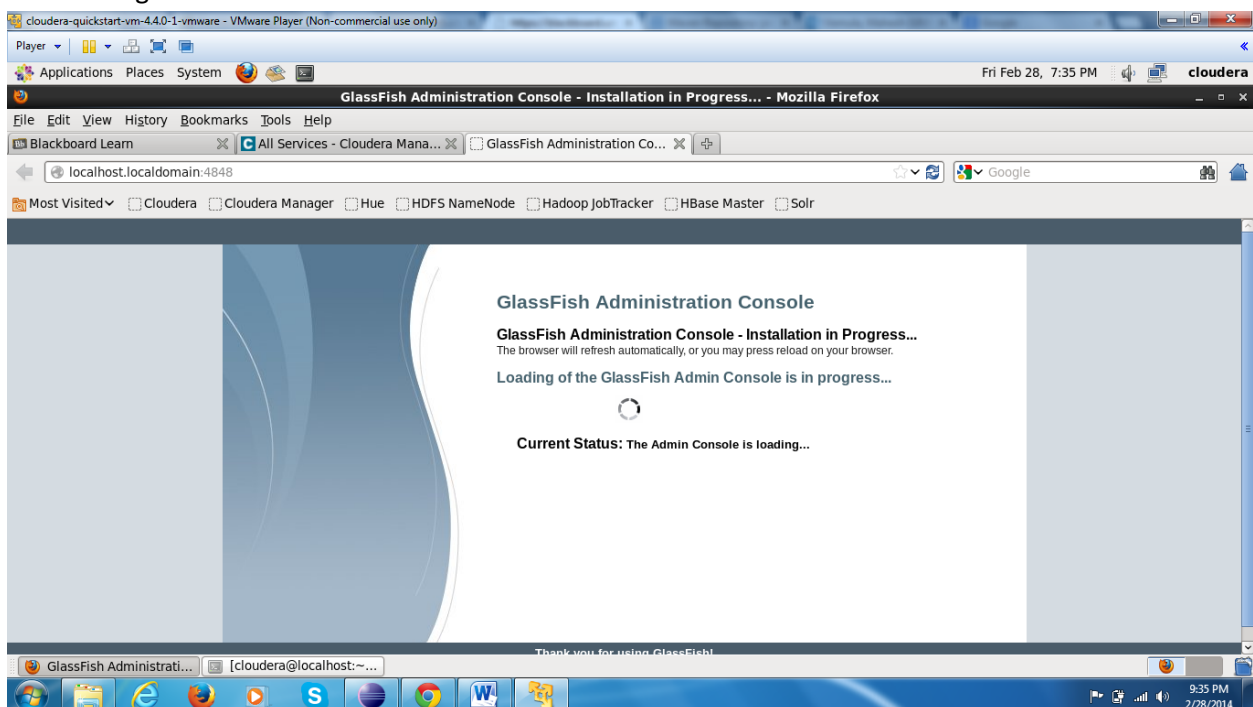
2. Sensor data is dumped to a file Data_M

Data_M.txt										
39.03880037	-94.58247355	Tue Jun 24 01:38:39 CDT 2014	-0.015625	0.0625	-1.015625	50.52705001831055	28.343659667968744			
39.03880037	-94.58247355	Tue Jun 24 01:38:40 CDT 2014	-0.015625	0.0625	-1.015625	50.52705001831055	28.343659667968744			
39.03880037	-94.58247355	Tue Jun 24 01:38:40 CDT 2014	-0.109375	0.03125	-1.484375	50.52705001831055	28.343659667968744			
39.03880037	-94.58247355	Tue Jun 24 01:38:40 CDT 2014	-1.046875	-1.484375	-1.234375	50.52705001831055	28.343659667968744			
39.03880037	-94.58247355	Tue Jun 24 01:38:40 CDT 2014	0.46875 0.453125		-0.96875	50.52705001831055	28.343659667968744			
39.03880037	-94.58247355	Tue Jun 24 01:38:40 CDT 2014	0.984375	0.0	1.65625 50.52705001831055	28.343659667968744				
39.03880037	-94.58247355	Tue Jun 24 01:38:40 CDT 2014	-1.890625	0.75	-0.96875	50.52705001831055	28.343659667968744			
39.03880037	-94.58247355	Tue Jun 24 01:38:40 CDT 2014	1.59375 -0.703125		-0.515625	50.6567497253418	28.343659667968744			
39.03880037	-94.58247355	Tue Jun 24 01:38:40 CDT 2014	1.1875 -0.703125		1.265625	50.6567497253418	28.343659667968744			
39.03880037	-94.58247355	Tue Jun 24 01:38:40 CDT 2014	-1.953125	1.09375	-0.875 50.6567497253418	28.343659667968744				
39.03880037	-94.58247355	Tue Jun 24 01:38:41 CDT 2014	1.984375	-2.0	-0.453125	50.6567497253418	28.343659667968744			
39.03880037	-94.58247355	Tue Jun 24 01:38:41 CDT 2014	0.5625 0.265625		1.484375	50.6567497253418	28.343659667968744			
39.03880037	-94.58247355	Tue Jun 24 01:38:41 CDT 2014	-0.859375	1.09375	-1.75 50.6567497253418	28.343659667968744				
39.03880037	-94.58247355	Tue Jun 24 01:38:41 CDT 2014	1.984375	-2.0	0.703125	50.6567497253418	28.343659667968744			
39.03880037	-94.58247355	Tue Jun 24 01:38:41 CDT 2014	0.25 -0.078125		0.640625	50.6567497253418	28.343659667968744			
39.03880037	-94.58247355	Tue Jun 24 01:38:41 CDT 2014	1.140625	-0.78125	0.015625	50.6567497253418	28.343659667968744			
39.03880037	-94.58247355	Tue Jun 24 01:38:41 CDT 2014	0.8125 -0.765625		-0.109375	50.6567497253418	28.343659667968744			
39.03880037	-94.58247355	Tue Jun 24 01:38:41 CDT 2014	0.28125 -0.5	-0.265625		50.6567497253418	28.343659667968744			
39.03880037	-94.58247355	Tue Jun 24 01:38:41 CDT 2014	0.75 -0.4375	-0.34375		49.48180389404297	28.343659667968744			
39.03880037	-94.58247355	Tue Jun 24 01:38:41 CDT 2014	0.875 -0.234375		-1.25	49.48180389404297	28.343659667968744			
39.03880037	-94.58247355	Tue Jun 24 01:38:41 CDT 2014	0.34375 -0.484375		0.21875	49.48180389404297	28.343659667968744			
39.03880037	-94.58247355	Tue Jun 24 01:38:42 CDT 2014	1.0625 -0.109375		-0.90625	49.48180389404297	28.343659667968744			
39.03880037	-94.58247355	Tue Jun 24 01:38:42 CDT 2014	0.878125	-0.15625	-1.0625	49.48180389404297	28.343659667968744			
39.03880037	-94.58247355	Tue Jun 24 01:38:42 CDT 2014	0.0625 -0.078125		-1.109375	49.48180389404297	28.343659667968744			
39.03880037	-94.58247355	Tue Jun 24 01:38:42 CDT 2014	0.203125	-0.390625	-1.0	49.48180389404297	28.343659667968744			
39.03880037	-94.58247355	Tue Jun 24 01:38:42 CDT 2014	0.878125	-0.234375	-1.046875	49.48180389404297	28.343659667968744			

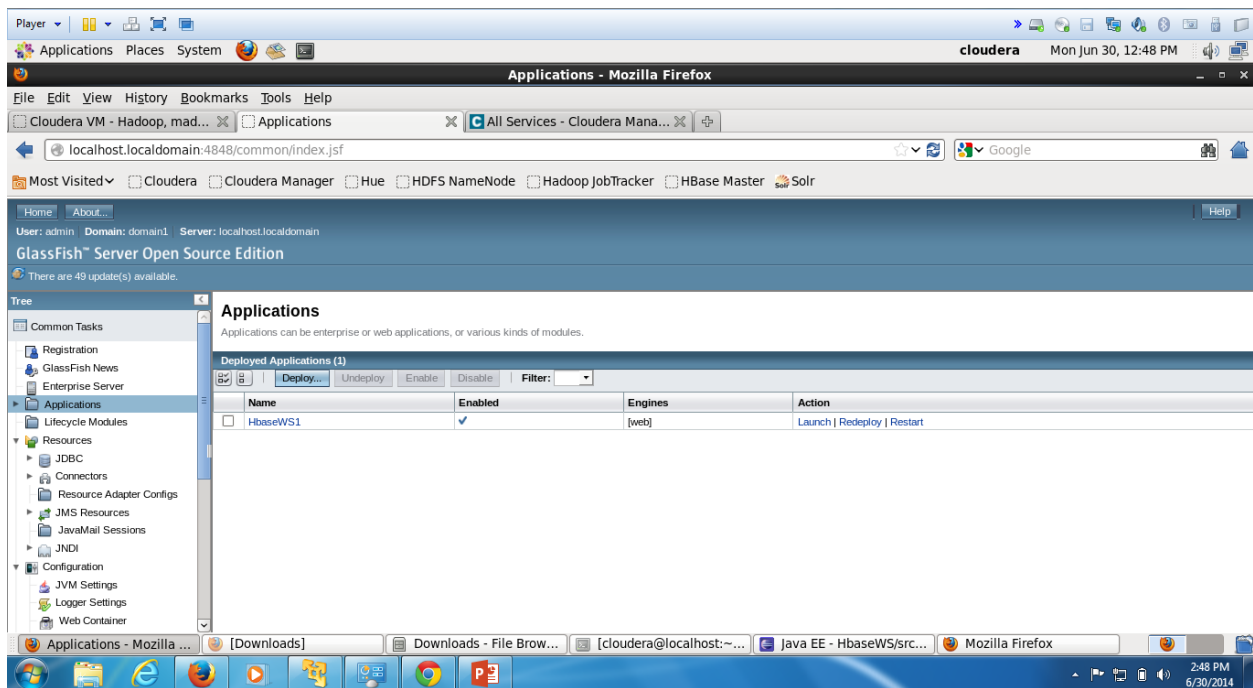
Now creating a rest server: Install Glassfish and add require libraries and start the server



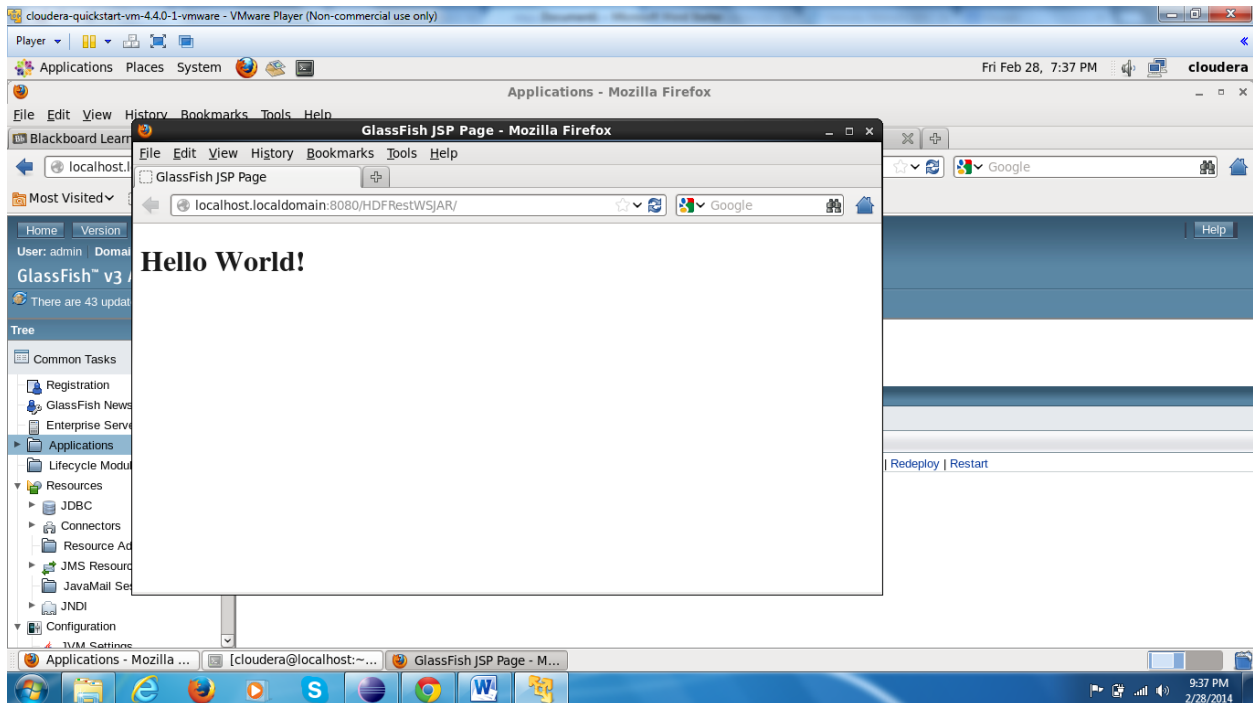
Download glassfish server in cloudera and start it



Load the rest service created into the server



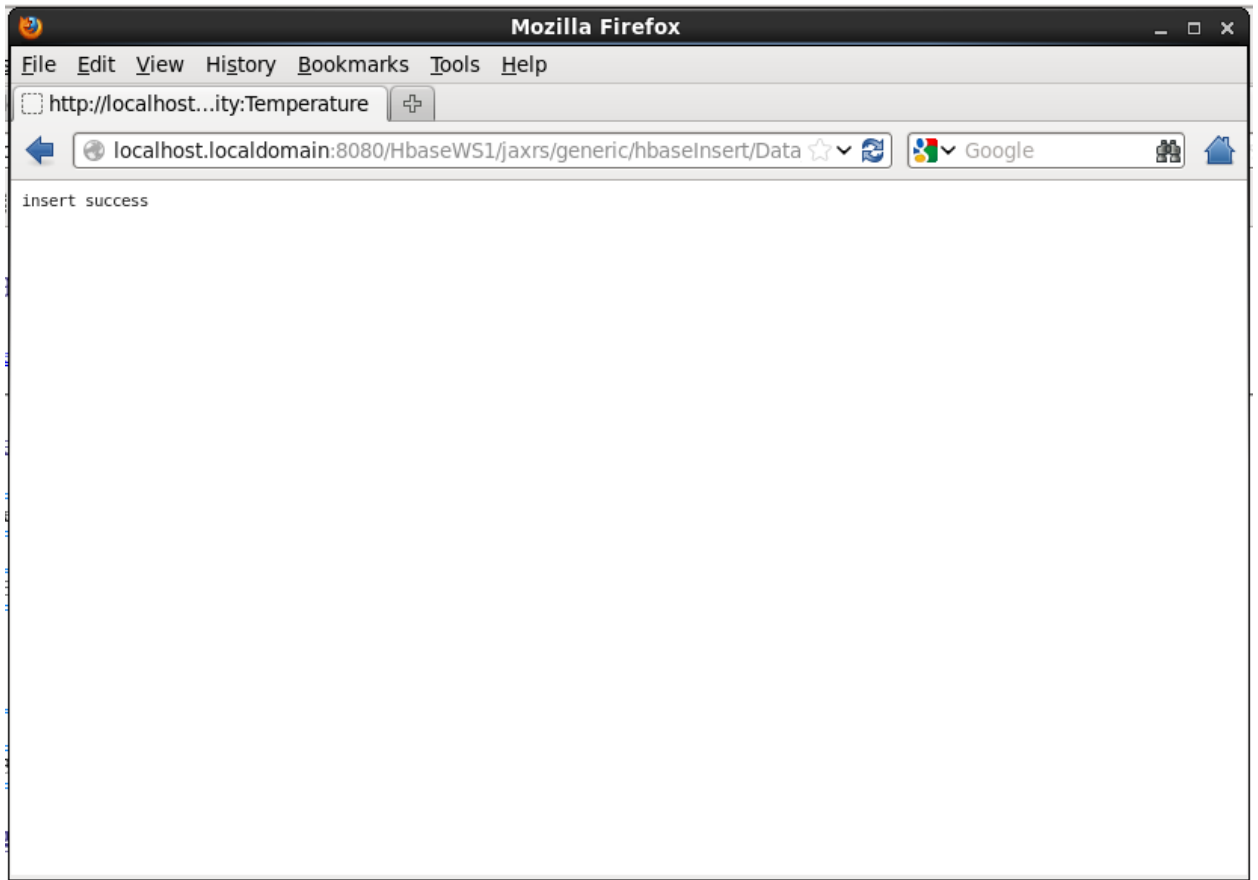
Launch the server



3. This data is stored in Hbase. For this firstly create a hbase table



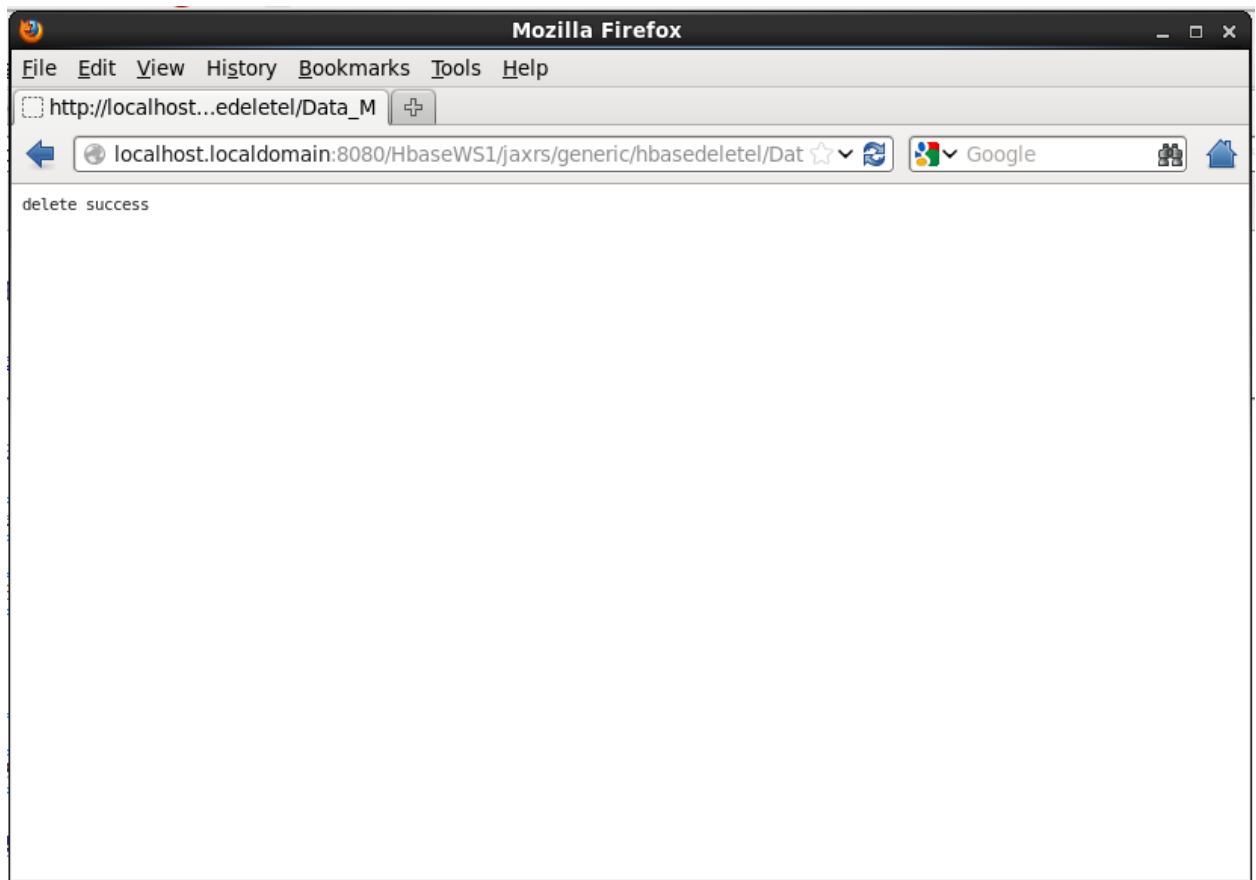
4. Insert the data into the table



5. To check data insertion we retrieve data



6. Finally delete table



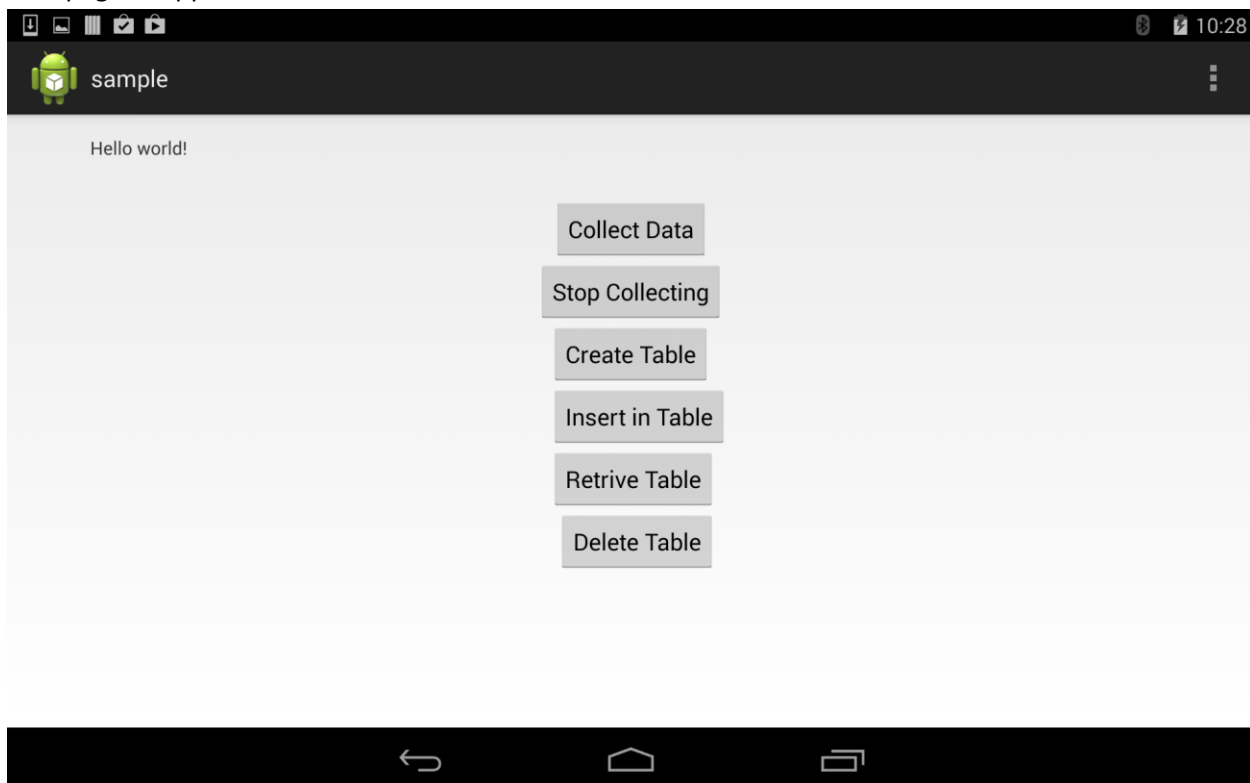
Task 3: Creating Android Application including following tasks

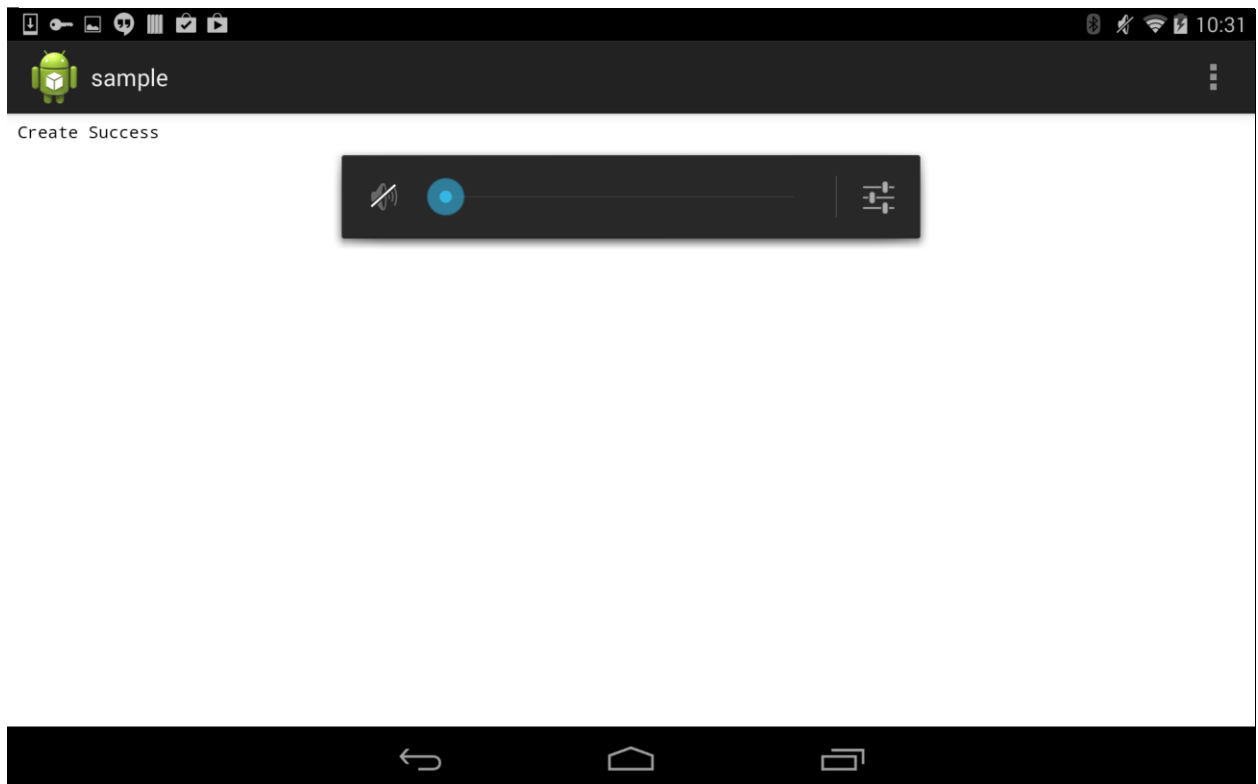
1. Collection of data from sensors(done in task1)
2. Upload data file to Server
3. HBase operation

Uploading datafile to server

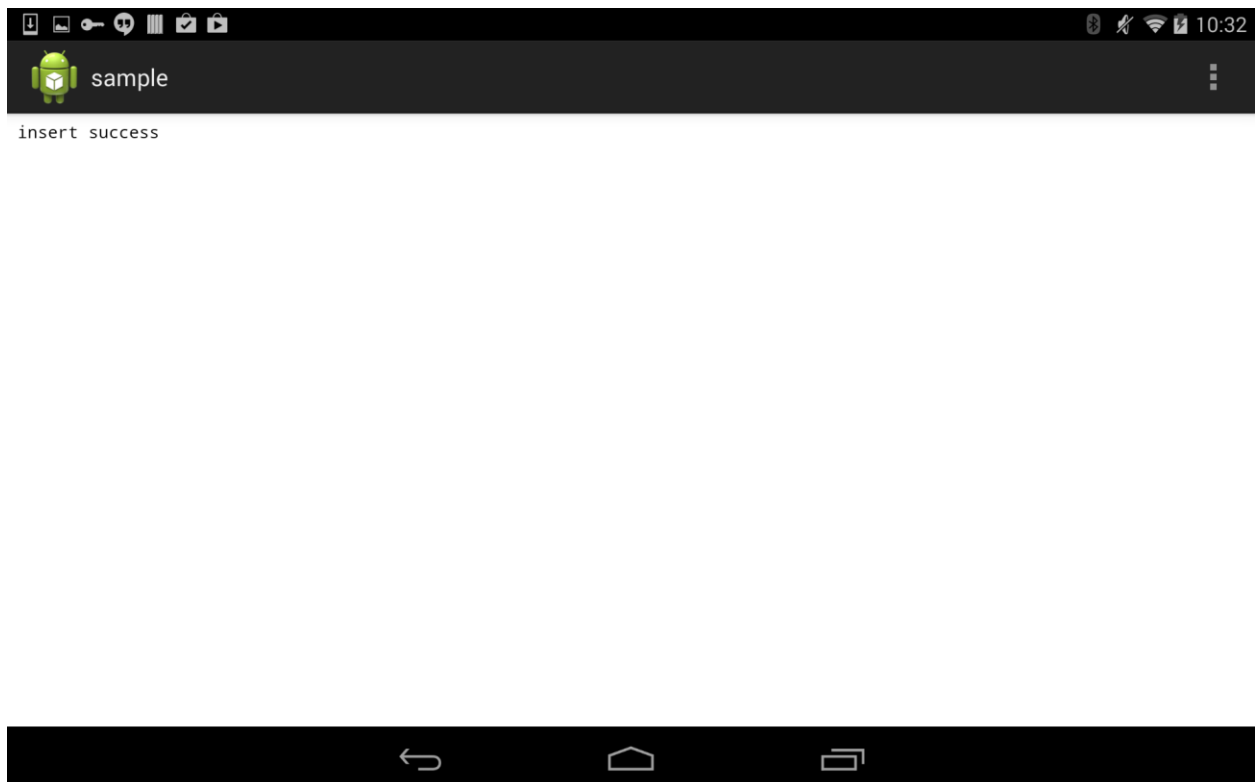
```
Problems @ Javadoc Declaration Console Progress LogCat Error Log Outline LogCat (deprecated)
<terminated> Operations [Java Application] C:\Program Files (x86)\Java\jre7\bin\javaw.exe (Jun 26, 2014, 4:14:50 PM)
SSExec initializing ...
Session initialized and associated with user credential group5
SSExec initialized successfully
SSExec trying to connect group5@134.193.136.127
SSH connection established
Ready to transfer local file 'C:\Users\Nandu\Desktop\umkc\BD\tutorials\Data_M.txt' to server directory '/home/group5/'
Connection channel established successfully
Start to upload
Upload success
channel disconnect
SSH connection shutdown
```

First page of application:





Insert data into table



Retrive Data:

```
row1 Accelerometer:col10 10006 -1.890625,0.75,-0.96875/nrow1 Accelerometer:col100 10096 -0.265625,0.4375,-1.984375/nrow1
Accelerometer:col101 10097 -0.421875,1.078125,0.296875/nrow1 Accelerometer:col102 10098 0.0625,-2.0,0.328125/nrow1
Accelerometer:col103 10099 0.046875,-1.90625,0.234375/nrow1 Accelerometer:col104 10100 -0.359375,-0.75,-0.78125/nrow1
Accelerometer:col105 10101 -0.1875,-0.234375,0.5/nrow1 Accelerometer:col106 10102 -0.1875,-0.234375,0.390625/nrow1
Accelerometer:col107 10103 0.765625,-0.3125,-0.015625/nrow1 Accelerometer:col108 10104 0.734375,-0.734375,0.0/nrow1
Accelerometer:col109 10105 0.75,-0.6875,0.0625/nrow1 Accelerometer:col11 10007 1.59375,-0.703125,-0.515625/nrow1
Accelerometer:col110 10106 0.78125,-0.671875,0.046875/nrow1 Accelerometer:col111 10107 0.828125,-0.703125,0.015625/nrow1
Accelerometer:col112 10108 0.8125,-0.734375,0.078125/nrow1 Accelerometer:col113 10109 0.765625,-0.71875,0.078125/nrow1
Accelerometer:col114 10110 0.71875,-0.625,0.171875/nrow1 Accelerometer:col115 10111 0.734375,-0.546875,0.203125/nrow1
Accelerometer:col116 10112 0.734375,-0.546875,0.1875/nrow1 Accelerometer:col117 10113 0.75,-0.5625,0.203125/nrow1
Accelerometer:col118 10114 0.75,-0.609375,0.328125/nrow1 Accelerometer:col119 10115 0.78125,-0.609375,0.3125/nrow1
Accelerometer:col12 10008 1.1875,-0.703125,1.265625/nrow1 Accelerometer:col120 10116 0.75,-0.671875,0.375/nrow1
Accelerometer:col121 10117 0.75,-0.640625,0.390625/nrow1 Accelerometer:col122 10118 0.703125,-0.65625,0.375/nrow1
Accelerometer:col123 10119 0.65625,-0.609375,0.421875/nrow1 Accelerometer:col124 10120 0.65625,-0.65625,0.453125/nrow1
Accelerometer:col125 10121 0.65625,-0.65625,0.46875/nrow1 Accelerometer:col126 10122 0.625,-0.625,0.453125/nrow1
Accelerometer:col127 10123 0.640625,-0.59375,0.453125/nrow1 Accelerometer:col128 10124 0.640625,-0.59375,0.453125/nrow1
Accelerometer:col129 10125 0.640625,-0.625,0.421875/nrow1 Accelerometer:col13 10009 -1.953125,1.09375,-0.875/nrow1
Accelerometer:col130 10126 0.59375,-0.578125,0.390625/nrow1 Accelerometer:col131 10127 0.515625,-0.59375,0.359375/nrow1
Accelerometer:col132 10128 0.484375,-0.53125,0.59375/nrow1 Accelerometer:col133 10129 0.15625,-0.671875,0.96875/nrow1
Accelerometer:col134 10130 0.078125,-0.234375,0.78125/nrow1 Accelerometer:col135 10131 0.796875,-0.25,0.375/nrow1
Accelerometer:col136 10132 1.0,-0.0625,0.21875/nrow1 Accelerometer:col137 10133 1.265625,-0.078125,-0.125/nrow1
Accelerometer:col138 10134 1.0,0.0625,-1.078125/nrow1 Accelerometer:col139 10135 1.171875,0.9375,-0.703125/nrow1
Accelerometer:col14 10010 1.984375,-2.0,-0.453125/nrow1 Accelerometer:col140 10136 0.578125,0.0625,-1.0625/nrow1
Accelerometer:col141 10137 0.015625,0.21875,-1.0/nrow1 Accelerometer:col142 10138 0.015625,0.21875,-0.984375/nrow1
Accelerometer:col143 10139 0.0,0.203125,-0.96875/nrow1 Accelerometer:col144 10140 0.015625,0.21875,-0.984375/nrow1
Accelerometer:col145 10141 0.015625,0.203125,-1.0/nrow1 Accelerometer:col146 10142 0.015625,0.203125,-1.0/nrow1
Accelerometer:col147 10143 0.015625,0.21875,-0.984375/nrow1 Accelerometer:col148 10144 0.0,0.203125,-0.984375/nrow1
Accelerometer:col149 10145 0.015625,0.203125,-0.984375/nrow1 Accelerometer:col15 10011 0.5625,0.265625,1.484375/nrow1
Accelerometer:col150 10146 0.015625,0.21875,-0.96875/nrow1 Accelerometer:col151 10147 0.015625,0.21875,-0.984375/nrow1
Accelerometer:col152 10148 0.0,0.203125,-0.984375/nrow1 Accelerometer:col153 10149 0.015625,0.203125,-0.984375/nrow1
Accelerometer:col154 10150 0.015625,0.203125,-0.984375/nrow1 Accelerometer:col155 10151 0.015625,0.21875,-0.96875/nrow1
```

Delete Table



END of REPORT