```
Initial Setup of Spring Boot web application using Maven - completed (#...
gitignore ...
                                                                                                      a month ago
README.md
                              updated the demo related info
                                                                                                   20 seconds ago
III README.md
   Task Process Manager / ProcessOnitor / ProcesSanager
```

### Objective • To implement the classic task manager application. It must contain the following components: metrics collection, database

# storage, and a user interface.

BUILD STATUS FAILED

## Project Working Demo (all demo files location: link)

• [Video Link](to be updated) [Working Demo - PDF sheet](to be updated)

## Tech Usage Info

- Version 1: Java, Spring Boot, Maven, GitHub, Semaphore CI, Apache Derby, Sigar, Log4j

Working Functionality Pictures Demo

**Features** 

#### System memory statistics: total, free, shared o CPU statistics: load averages, user cpu, system cpu

environment, open file descriptors

View System Level info (aimed as of now)

- o File system level statistics: local and remote mounted file systems (NTFS, ext, SMB, NFS, etc), capacity, utilization
- o Network interface level statistics: all available network interfaces detected and monitored for bytes received/transmitted, packets received/transmitted, collisions, errors, dropped packets
- Monitor the processes in an intuitive way (Charts, Graphs) **Future Enhancements** 
  - Note: The version will be updated whenever necessary to include more enhancements (will update these later)

o Process level statistics: process arguments, memory consumption, cpu consumption, credential info, state,

Using SIGAR for educational purpose only. (disclaimer made to avoid licensing issues with SIGAR)

# Instructions to run this project in your machine:

run following command

o mvn clean install

for 6.971)

goto url http://localhost:8080/

clone this repo

using you!!" in the web page

• Used: IDE: IntelliJ | OS: Windows, Linux

### To run the Web App (few recent changes made. will be updating this soon)

Note

 Windows: https://www.mkyong.com/maven/how-to-install-maven-in-windows/ Linux: for maven - https://www.youtube.com/watch?v=i8hSPwXZ0UI

proceed only after you receive "BUILD SUCCESS" confirmation O java -jar target\process-monitor-0.0.1-SNAPSHOT.war

· setup java & maven env in your local machine.

download project Refer the release branch with tag v1.0

- make sure you got something similar to this line in the log INFO 10672 --- [ main] c.t.p.p.ProcessMonitorApplication : Started ProcessMonitorApplication in 6.17 seconds (JVM running
- Note: in the unzipped folder -> navigate to the pom.xml file such that you end up similar to this location ..\TaskProcessManager-master\version1\maven\_use\eclipse\_processmonitor\_ver1\spring-boot\processmonitor

To run a pgm & retrieve low level system info

• Eclipse IDE used for this project being downloaded eclipse from here - Eclipse IDE for Java EE Developers - 64 bit zip link: https://spring.io/tools3/eclipse

• setup the java https://www.mkyong.com/java/how-to-set-java\_home-on-windows-10/ and maven

https://www.mkyong.com/maven/how-to-install-maven-in-windows/ dependencies in your system

o verify whether you received this "Hello Spring Boot World! Will be deploying a Process Monitoring Application soon

o git clone https://github.com/vivekVells/TaskProcessManager.git • open eclipse and open the proejct located in this location: .\TaskProcessManager\version1\maven\_use \eclipse\_processmonitor\_ver1

• add the sigar.jar file to the project "processmonitorver1" by going to its properties (right click on project -> Properties ->

Java Build Path on left pane -> Libraries tab on right pane -> Add External JARs button and add the sigar.jar file in this

project properties of "processmonitorver1" by going to its properties - right click on project -> Properties -> Java Build

localhost:8080/cpu

CO

JSON Raw Data Headers

time":0, "nice time":0, "sys time":6}}}

Save Copy Pretty Print

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Save Copy Pretty Print

JSON Raw Data Headers

① localhost:

① localhost:8080/

"UtilityPack.getUnkownIfValueNotPresent(\"\"): ": "unknown",

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Quick Access

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{"Total Cpu Usage Info":{"idle time":98,"wait time":0,"user time":1,"combined":2,"irq time":0,"nice time":0,"sys time":2},"Cpu Machine Info":{"operating at":2394,"vendor":\*Intel","total cores":4,"cores per socket":16,"model":"Core(TM) i5-4210U CPU @ 1.70GHz","total sockets":4},"Individual Tpu Usage Info":{"idle time":65,"wait

time":0, "user time":19, "combined":35, "irq time":0, "nice time":0, "sys time":16), "1":("idle time":66,"wait time":0,"user time":16,"combined":34,"irq time":0,"nice time":0,"sys

time":19},"2":{"idle time":75,"wait time":0,"user time":16,"combined":25,"irq time":0,"nice time":0,"sys time":9},"3":{"idle time":75,"wait time":0,"user time":19,"combined":25,"irq

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• optional: if eclipse shouts error stating "Project is missing required library: ", then remove that one by - navigating to

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## Application Screenshots So Far(wanna avoid scrolling a lot, use above pdf sheet)

Path on left pane -> Libraries tab on right pane -> remove any unused or errored jar file

location .\TaskProcessManager\prototype\hyperic-sigar-1.6.4\sigar-bin\lib\sigar.jar

← → C û ① localhost:8080/w ∨ ··· ☑ ☆ Q Search Welcome to Spring Boot World! You going to rock on!!!

(i) localhost

Version Info Screen - http://localhost:8080/version

① localhost:8080/version

"java vm home": "C:\\Program Files\\Java\\jdk1.8.0\_144\\jre"

version info Screen

JSON Raw Data Headers

"fqdn": "192.168.56.1", "host name": "kev", "java version info": {

"os name": "Win32", "os arch": "x64",

"username": "Vivek-Pc"

Utility Screen

localhost:8080/utility

← → C @

JSON Raw Data Headers Save Copy Pretty Print

① localhost:8080/utility

"UtilityPack.getUnkownIfValueNotPresent(\"Value Present\"): ": "Value Present",

"UtilityPack.getUnkownIfValueNotPresent(\"\"): ": "unknown",

"UtilityPack.getFormattedDecimal(5.145968, 2): ": 5.146, "UtilityPack.getFormattedDecimal(3.145968, 2): ": 3.15

Old versions screenshots below.

Hello Spring Boot World! Will be deploying a Process Monitoring Application soon using you!!

Version 1 - Web UI

← → C ① localhost:8080

Initial Setup

"os machine": "unknown", "os patch level": "unknown", "os data model": "64", "os version": "10.0", "os cpu endian": "little"

"sigar version info": (
"sigar build date": "04/28/2010 04:26 PM",

"sigar archlib": "sigar-amd64-winnt.dll", "sigar native scm version": "4b67f57", "sigar java version": "1.6.4.129"

"java vm vendor": "Oracle Corporation", "fava vm version": "25.144-b01",

"os version info": {
 "os description": "Microsoft \f",

"os vendor code name": "unknown",

"sigar native version": "1.6.4.128", "sigar scm version": "4b67f57",

"sigar native build date": "04/28/2010 04:26 PM",

localhost:8080/version

← ) → C' @

Save Copy Pretty Print

localhost:8080/welcome

localhost:8080/version

"sigar scm version": "4b67f57"

"fqdn": "192.168.56.1", "host name": "kev",

"sigar archlib": "sigar-and64-winnt.dll",

"sigar native scm version": "4b67f57", "sigar java version": "1.6.4.129"

→ C 0

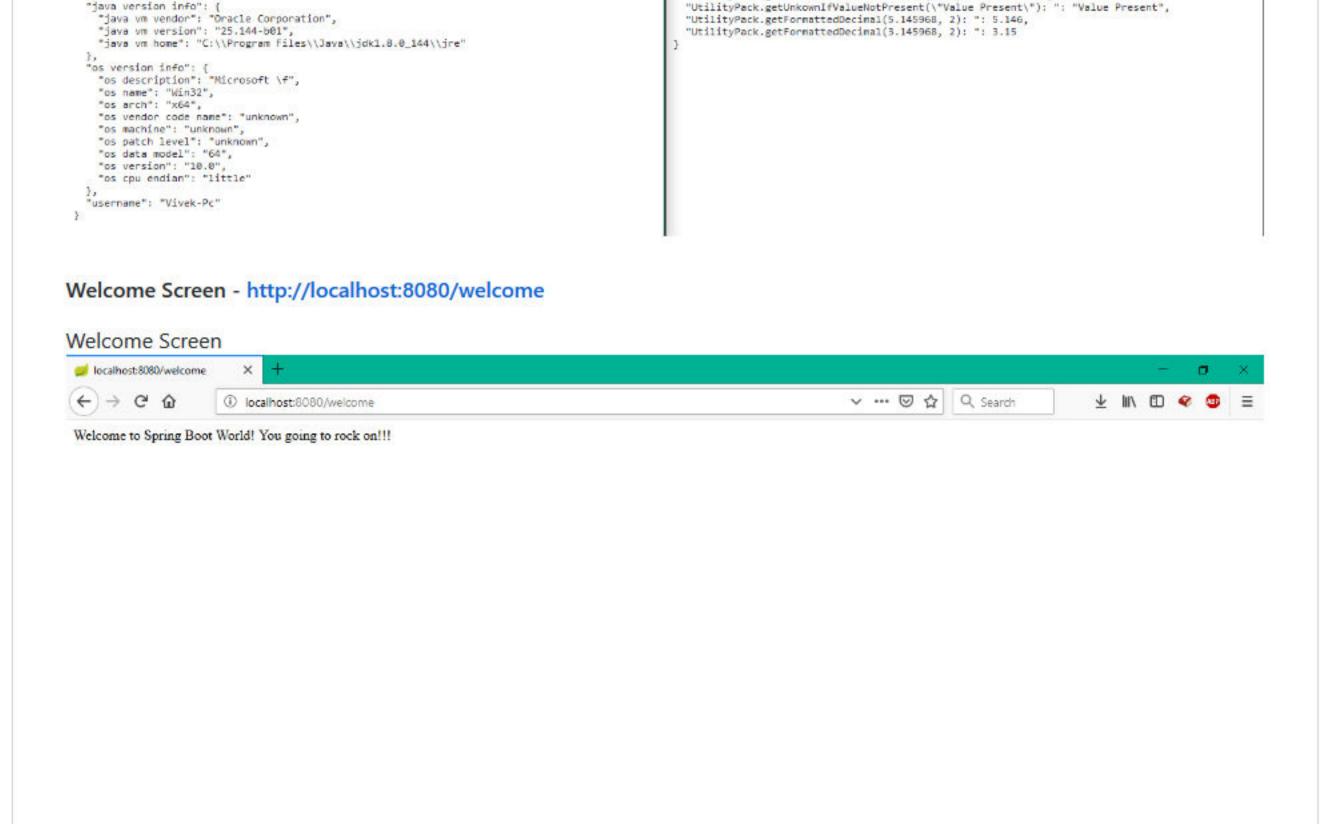
JSON Raw Data

Beware of the lots of scrolling to come :P

Ver 1.1 Screenshots accordingly

Save Copy Pretty Print "sigar version info": { localhost:8080/utility "sigar build date": "84/28/2010 84:26 PM", "sigar native build date": "84/28/2818 84:26 PM", "sigar native version": "1.6.4.128",

Collage - Screen: Welcome, Version Info, CPU Usage info, Utility Info



```
Cpu Usage Screen - http://localhost:8080/cpu
Cpu Usage Screen
 localhost:8080/cpu

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  ← > C @
                               (i) localhost:8080/qpu
  JSON Raw Data Headers
 Save Copy Pretty Print
 {"Total Cpu Usage Info":{"idle time":98,"wait time":0,"user time":1,"combined":2,"irq time":0,"sys time":2},"Cpu Machine Info":{"operating at":2394,"vendor":"Intel","total
 cores":4, "cores per socket":16, "model":"Core(TM) i5-4218U CPU @ 1.70GHz", "total sockets":4}, "Individual Cpu Usage Info":{"8":{"idle time":8, "user time":19, "combined":35, "irq time":8, "nice time":8, "sys time":16}, "1":{"idle time":66, "wait time":8, "user time":16, "combined":34, "irq time":8, "sys time":19}, "2":{"idle time":75, "wait time":8, "user time":16, "combined":25, "irq time":8, "nice time":8, "nice time":8, "sys time":8}}
Utility Info Screen - http://localhost:8080/utility
```

Version 1 - Verifying the system level info System Related Information

the system related information on request

\* systeminfo package will be the service to provide all

📝 Appujava 📝 Cpulnfoujava 📝 Versionujava 🔀

File Edit Source Refactor Navigate Search Project Bun Window Help

∨ 👸 > processmonitorver1 (TaskProcessManager version1)

