***Application Performance Monitoring System.***

**COMPONENTS:**   
1) GUI

2) Performance Collection Component

3) Analytics Engine

4) Persistence component [Knowledge base]

**COMPONENT DIAGRAM:**

[Grab your reader’s attention with a great quote from the document or use this space to emphasize a key point. To place this text box anywhere on the page, just drag it.]

USER i/p: selected process/Perfmonace metrics

***Performance Collection Component***

(rest apis built on the top of perfmon/sigar)

***Analytics Engine***

***Persistence Component***

MySQL DB (3NF)

DISPLAY ALL PROCESSES ***USER Interface*** CHARTS/GRAPHS/Recommendations

**DB Design:**

Table 1: Process Table.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ID(primary key)(System generated) | Name | Type | Cpu ID | Mem ID | i/0 | …… |

Table 2: Thread Table

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ID(primary key)(System generated) | Thread\_id | Parent\_Process\_ID | CPU ID | MemID | ……. |  |

Table 3: CPU Info Table

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ID(primary key)(System generated) | CPU Core Number | CPU frequency | …………. |  |  |

Table 4: Memory Info table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ID(primary key)(System generated) | Shared Memory | Resident Memory | Size of memory | ……… |

**Source Code Design:**

--Interface Process:

|  |
| --- |
| Variables :  -Name  -Pid  -CPU  -Memory  -User  -I/O  -Threads  -Type |
| Methods:  kill()  watch()  gather()  getters()  setters() |

--Class SystemProcess implements Process

--Class UserProcess implements Process

--Interface Thread

--Class UserThread implements Thread

--Class SystemThread implements Thread

--Class ProcUtil()

|  |
| --- |
| Variables: |
| Methods:  -getAll()  -getSingle(int pid) |

--Class ProcessDAO

|  |
| --- |
| Variables: |
| Methods:  -store()  -retrieve() |

--Class ThreadDAO

|  |
| --- |
| Variables: |
| Methods:  -store()  -retrieve() |