CMSI 3510
Detailed Design Document
Professor Johnson

**Note: we had to pivot our project from creating a branching dialogue in the terminal to a CPU usage logger.

Preliminary

- 1.1 – Description of modification/addition to Linux
  For this project we will list the resource usages of all processes that the current login user can see. However, sometimes, we would like to periodically log the resource usage, such as CPU usage, of a specific process.

- 1.2 – Rationale
  We often need to get or monitor resource usage by currently running processes in the Linux command line. When we're facing this kind of requirement, two handy commands may come up: the *ps* command and the *top* command. However, sometimes, we would like to periodically log the resource usage, such as CPU usage, of a specific process.

- 2.1 – Detailed list of Linux modules that will be modified/affected
  No linux modules will be affected. We will be using shell scripting to add new functionalities to the existing shell using the ps Command.

- 2.2 – Detailed list of any new modules that you will produce [or 'Not Applicable' if there are none]
  - Not applicable

- 2.3 – Class diagram showing affected modules [and any new modules] and how they related to one another
  - No linux modules will be affected.

- 2.4 – List or table of explanations of all command line options that will be implemented
  rlog cpu - logs the process's CPU usage
  rlog ram - logs the process's memory usage

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rlog dsk - logs the process's disk usage
rlog net - logs the process's network usage
rlog all - logs all of the above
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